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Management of Cultural Landscapes for Sustainable Development: the Case of Takht-e Soleyman World Heritage Site in Iran Settore Scientifico Disciplinare SECS-P/08

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# 1 Introduction and research specifications

# 1.1 Introduction

This research is conducted in order to make contribution to fostering sustainable development in cultural landscapes which are remained marginalized although having rich cultural and natural heritage. This aim is fulfilled by investigating the ways through which the management system of such areas can be improved. The value-driven approach that leads the path of this research integrate the values in cultural landscapes among which the entangled values of cultural and natural feature are remarkable.

It is not more than fifty years since the linkages between cultural and natural heritage have been officially considered in the Convention Concerning the Protection of the World Cultural and Natural Heritage (UNESCO, 1972). History shows that the natural environment had been always a medium that embodied human thoughts and ideas. The evolutions in historical ages have connections with the typologies of exploitation of natural resources by human being. The natural environment not only have fulfilled the demands of human being but also have inspired his creative mind in many ways. The global considerations about the preservation of environment and cultural diversity made cultural landscapes strategic places where both values are strongly interdependent. These considerations along with the emphasis on localizing global policies for sustainable development suggest a specific approach to development of the cultural landscapes through integrating different values and unlocking their economic, social, cultural and environmental potentials rather than considering them exclusively territories of cultural values.

This issue becomes more important in virtue of preserving cultural diversities in the process of development plans. The new model of development "is likely to see pluralism, not uniformity, as an essential component; in particular an acknowledgement that human development begins at a local level where cultural diversity within and between communities is a vital manifestation of civilized human existence" (Throsby, 2001). This is highlighted, once more in the Convention on the Protection and Promotion of the Diversity of Cultural Expressions (UNESCO, 2005) that "cultural diversity is a rich asset for individuals and societies. The protection, promotion, and maintenance of cultural diversity are an essential requirement for sustainable development for the benefit of present and future generations."

Despite the ongoing debate on considering culture as a dimension of sustainable development, there is a consensus that culture has positive impact in the discourse of sustainable development. At the same time, highlighting the role of culture in fostering sustainable development goals has affected the approach to cultural heritage management.

Although in the recent years environmental protection has moved towards its rightful standing in national development planning, cultural aspects of development has remained controversial in many cases. This problem is more evident in the developing countries because of the complexities of political, social, and economic structures. This reality has negative consequences at national and global level considering that considerable number of the World Heritage Sites are located in developing countries with old histories. With regard to the rapidly changing and diversifying demand

of the society for new functions in rural landscapes in these countries, it seems that there is an urge to rethink the management system of cultural heritage in order to utilize cultural capacities in development process while minimizing the speed of deterioration of cultural and natural heritage.

Although cultural heritage is an important representation of culture, the traditional approach to management of cultural heritage did not consider its positive impact on the development process. However, the recent approach to cultural heritage management has been evolved from different aspects. Integrating cultural heritage with its context and consolidating all its values in the management are two important evidences of this fact.

Many old cultural landscapes can be considered as places of integrated values and have high capacities to move towards local sustainable development. However, in many cases the development patterns are not complying with their potentials and not corresponding to the existing concerns. Therefore, many of them are endangered by the growing trend of unjustified development plans and industrialization, modernization and globalization which may result in diminishing the cultural landscape values in many of ways. The development plans emphasizing on economic aspects and overlooking cultural and environmental dimensions make this threat more serious. This situation poses more pressure on rural cultural landscapes, which are more vulnerable against global changes. This research, therefore, attempts to articulate the features of rural cultural landscapes from a different perspective in which their features make them distinguished and competent towards a more developed situation.

In this regard, this research aims at bringing forth the management issues of local sustainable development in cultural landscapes by considering the links between culture and nature while making attempt to foster the active role of cultural heritage in local sustainable development through highlighting the interfaces of cultural landscape and sustainable development. Furthermore, this approach to management will integrate the capabilities and intrinsic characteristics of cultural landscapes in order to exploit the local cultural resources as a driver in local sustainable development. This process will be elaborated in the subsequent chapters showing that the valorization of a cultural heritage not only fosters the conservation and preservation per se but also improves the quality of life of local community in a cultural landscape.

The results of the theoretical investigations of this research would be an answer to the question that "why and how valorization of cultural heritage is a step forward to reach sustainable development goals in rural cultural landscapes?" Once presented the results of the theoretical study in the first part, the achievements will be applied to a case study which is a World Heritage Site locating in a rural area in Iran. The area of study and the site is called "Takht-e Soleyman". This site is a combination of architectural elements belonging to different historical eras, sacred natural and cultural features, and diversity of intangible cultural heritage.

The empirical part, which will be developed through a participatory research approach, will investigate whether the theoretical findings match in a context of a real case.

At the end of the theoretical and empirical investigations, this research will come up with the concluding remarks that would contribute to improvement of the management system of Takht-e Soleyman WHS.

# 1.2 Specifications and methodologies

# 1.2.1 Research objectives

The research is aimed at finding ways to achieve sustainable development goals in cultural landscapes through an integrated management approach.

Meanwhile it is intended to :

- Showing how valorization of cultural heritage can be realized in the realm of sustainable development of cultural landscapes.
- Bring the theoretical findings in a real context by studying the case of Takht-e Soleyman WHS in Iran.

The final goal and the intermediate objectives will be attained through:

- Investigating the interfaces between cultural landscape and sustainable development as well as searching for relevant constructs based on interfaces.
- Developing a broad view on the state of the art in governance and management of cultural heritage.
- Understanding the concerns and challenges regarding management of cultural landscapes.
- Matching the theory and practice by comprehensive study of the values and assessment of governance and management of Takht-e Soleyman WHS through different methods.

Eventually, this research will be finalized by discussing all the findings and making final remarks on the ways to improve management system in Takht-e Soleyman cultural landscape for sustainable development.

# 1.2.2 Research questions

If culture is regarded as a driver for sustainable development, then cultural heritage should have a key role in local sustainable development of cultural landscapes. The question is how to foster its role in the case cultural landscapes? In addition, how it can be regarded as a factor to convert the concerns regarding old cultural landscapes to challenges for a better future? Accordingly, the questions of this research are articulated as follows:

- What are the linkages between values of cultural landscapes and sustainable development dimensions?
- How are sustainable development dimensions in a cultural landscape affected by integrated approach to cultural heritage management?
- In this regard, what is the existing management model in Takht-e Soleyman WHS? In addition, how can it be improved towards local sustainable development?

To answer the above questions, this study explores the interplay of specific measures of cultural heritage valorization affecting the local sustainable development. Meanwhile, it investigates the mechanisms through which the valorization process would be enhanced.

Based on the research questions, three hypotheses are proposed as follows:

- Hypothesis 1: Cultural heritage strengthen the interfaces of cultural landscapes and sustainable development.
- Hypothesis 2: Cultural heritage valorization is realized through a value driven approach inclusive of all stakeholders.
- Hypothesis 3: The current management system of Takht-e Soleyman WHS is compliance with the theoretical findings.

## 1.2.3 Methodology of research

To fulfill the objectives and concerns of this study, different variables were engaged and studies during different phases of the research. They had to be studied qualitatively or quantitatively or through a mixed qualitative-quantitative mixed method.

"Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone" (Creswell & Clarck, 2011).

This research comprises of two theoretical and empirical parts. Each part is divided to the different chapters. The chapters of this research have interactive design in which each part is developed in connection with the outcomes of the previous one.

## Theoretical part: Literature review

The two succeeding chapters (Chapter Two and Chapter Three) are devoted to theoretical study. Chapter Two is a conceptual study of cultural landscapes, which is conducted through a comprehensive literature review for understanding all the aspects of cultural landscape and making a platform for the study of the term in relation to sustainable development.

In the Chapter Three the cultural landscape values and sustainable development dimensions were studied in detail in order to find rational correlation between them.

The literature review was done by gaining knowledge and collecting information from different data sources such as books, academic papers, policy documents, conference proceedings, reports, and websites.

Considering the multidisciplinary theme of the research the theoretical part was inclusive of indications from different disciplines such as cultural and scape and cultural heritage, management, environment, history and regional planning.

#### Empirical part: Study of the case of Takht-e Soleyman WHS

The empirical part of this research, which is presented in Chapters Four and Chapter Five, consists of archival study and field work, conducting interviews and carrying out two questionnaire surveys.

The aim was the empirical study was to bring the theoretical framework of the research in a real context by making a comprehensive study on the case of Takht-e Soleyman WHS in Iran. Case study method is a specific field research method and is useful for experimental understanding of the subject. It enables a researcher to closely examine the data within a specific context. 'Field studies are investigations of phenomena as they occur without any significant intervention of the investigator' (Fidel, 1984).

This part of the research was started with historical, geographical, social, cultural, and economic study of the area of the case study. It was conducted through archival review and field work. The archival review was performed by collecting information, both from primary sources such as management plan of the site, reports, drawings, original photographs, travel diaries, policy documents, letters, official correspondences, and secondary sources including oral history of the region. The field work was accomplished through observation and in person discussions with experts of the site and key persons in relevant governmental organizations in Takab County (the nearest town to the site) such as Cultural Heritage, Handicrafts and Tourism Organization, Ministry of Agriculture Jihad and Housing and Urban Development Organization. This is worth mentioning that the data collection and discussions were followed in Tehran by referring to central office of Cultural Heritage, Handicrafts and Tourism Organization, Bureau for the Research Bases' Affairs, UNESCO office in Tehran, Department of Environment, and university professors. The collected data enclosed a broad range of socio-cultural, economic, environmental, and managerial information, statistics and national and local. They were classified in order to enable the researcher to shed light on significance of the place, concerns and capacities for development and assess the present state of the management.

The empirical part was carried out through a participatory approach by considering three groups of stakeholders: managers, local community, and visitors. Hence, three types of questionnaires were prepared to collect the reflections of the above-mentioned groups about the management issues of Takht-e Soleyman cultural landscape. At first the managers' viewpoints were consulted through semi-structured interviews. Subsequently interviews with the key persons in the field of cultural heritage management in Iran were conducted. The findings of the interviews broadened the view of the researcher about the real state of governance and management of the site. Moreover, the reflections of the interviewes about the findings of the theoretical part, in relation to this specific area was helpful in making a platform for the designing the other two questionnaires. After conducting the interviews and analysis the data the questionnaire survey phase started. Subsequently, the reflections of other groups of stakeholders (local community and visitors) were collected through questionnaire surveys and were analyzed based on the research theoretical framework. In the empirical phase the inductive and deductive approaches were applied is analyzing the data of interviews and questionnaire surveys.

The questionnaires for local community and visitors were designed to be quick and easy to answer, comprising of close-ended questions, involving choice of tick boxes. Most of the questions were in the form of 5-point Likert scale and few multiple choices. The statistical population were selected based on random sampling. The content and design of the questionnaires were controlled and confirmed by four highly-qualified university professors in the field of cultural management and one expert manager in the field of statistical analysis.

During the survey study there were some intrinsic biases such as questionnaire bias, response bias, and non-response bias. They could affect the result of the questionnaire surveys. To minimize these intrinsic biases, the questions were set up in a manner to be understood clearly and similarly by all the respondents. Moreover, it was avoided using leading questions that bring about any positive or negative effect on the respondents. The sequence of the questions was in such a way that the

respondents who intended to give improper answers could be recognized according to their answers. Moreover, the target group sampling was done in a way that different types of respondents would participate in the survey. Definitely, despite all attempts, it was impossible to eliminate bias problem completely.

Finally, based on the theoretical and empirical findings, and discussions at the end of Chapter Five the final concluding remarks were presented in Chapter Six. The schematic methodology of the research in presented in Figure 1.1.

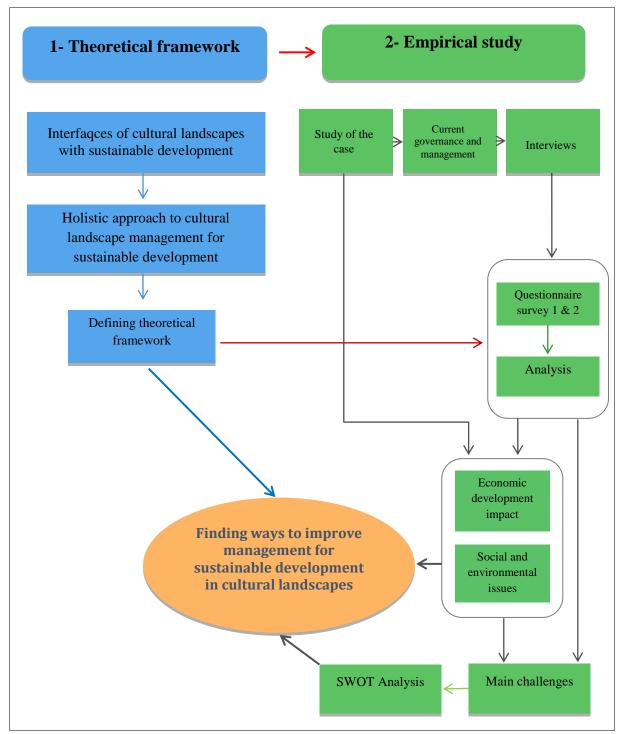


Figure 1.1. Schematic presentation of research methodology

## 1.2.4 Structure of the research

This research is structured in six chapters. After the current chapter, (Chapter One) two chapters (Chapters Two and Chapter Three) are dedicated to theoretical study and the two subsequent chapters (Chapters Four and Chapter Five) are devoted to empirical research. Finally in Chapter Six the conclusions of the research are presented.

Theoretical part is developed through an intensive literature review by referring to single articles, books, case studies, previous published and unpublished studies, international and national policy documents, and websites. It starts in chapter two by historical, philosophical and conceptual study of a cultural landscapes followed by discussions on integrated values in cultural landscapes and specifications of rural cultural landscapes. In chapter three, the literature review is continued by a comprehensive study on the role of culture in sustainable development, and interfaces of cultural landscapes and sustainable development and challenges of governance and management of cultural heritage in rural cultural landscapes with the aim of achieving sustainable development goals. This chapter is the end of the theoretical part of the research creating a concrete theoretical framework for further empirical study.

The empirical part is aimed at bringing the theoretical findings in a real context by focusing on Takhte Soleyman WHS in Iran. In chapter Four the first, the introduction to the area of study and its internal and external analysis is presented. This analysis includes the study of historical, geographical, cultural, and economic situation of the area, as well as conceptual study of the elements of the main site, which leads the chapter to concluding the relevant values bound to this cultural landscape. Chapter Five is dedicated to study current state of governance and management of Takht-e Soleyman cultural landscape by referring to policy documents and developed through a comprehensive empirical work including the interviews and questionnaire surveys. This chapter ends with discussions on empirical results and SWOT analysis of the management of Takht-e Soleyman cultural landscape.

Chapter Six is dedicated to the conclusions and remarks regarding the ways forward.

## **1.3** Terminology and definitions

**Biological diversity:** "The variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems" (United Nations, 1992).

**Buffer zone**: "... an area surrounding the nominated property which has complementary legal and/or customary restrictions placed on its use and development to give an added layer of protection to the property. This should include the immediate setting of the nominated property, important views and other areas or attributes that are functionally important as a support to the property and its protection" (UNESCO, 2015).

**Conservation:** "All operations designed to understand a property, know its history and meaning, ensure its material safeguard, and, if required, its restoration and enhancement" (ICOMOS, 1994).

**Cultural Diversity:** "Culture takes diverse forms across time and space. This diversity is embodied in the uniqueness and plurality of the identities of the groups and societies making up humankind. As a source of exchange, innovation, and creativity, cultural diversity is as necessary for humankind as biodiversity is for nature. In this sense, it is the common heritage of humanity and should be recognized and affirmed for the benefit of present and future generations" (UNESCO, 2001).

**Cultural Heritage:** *"Monuments*: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;

Groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity, or their place in the landscape, are of outstanding universal value from the point of view of history, art, or science;

Sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view" (UNESCO, 1972).

**Cultural significance**: "Aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places, and related objects (ICOMOS, 2013).

**Intangible Cultural Heritage:** "...the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. For the purposes of this Convention, consideration will be given solely to such intangible cultural heritage as is compatible with existing international human rights instruments, as well as with the requirements of mutual respect among communities, groups and individuals, and of sustainable development.

The *Intangible Cultural Heritage*, as defined in paragraph 1 above, is manifested inter alia in the following domains: (a) oral traditions and expressions, including language as a vehicle of the intangible cultural heritage; (b) performing arts; (c) social practices, rituals and festive events; (d) knowledge and practices concerning nature and the universe; (e) traditional craftsmanship" (UNESCO, 2003).

**Natural Heritage:** Natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view; geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty. (UNESCO, 1972)

**Setting:** The area around a place, which may include the visual catchment (ICOMOS, 2013).

# 2 Cultural landscape: origin, concepts and values

## 2.1 From landscape to cultural landscape: theoretical frameworks

The term landscape has got different connotations over time depending on the situations it has been used and the different approaches to it within the natural, the social sciences, the humanities, or the arts (Jones & Daugstad, 1997; Tress, Tress, Décamps, & d'Hauteserre, 2001). Conducting a research on cultural landscape as a notion born mainly out of the concepts of landscape, natural and cultural heritage requires thorough understanding of those terms. Thus, study of the evolutions of the landscape concepts leading to cultural landscape acceptations is essential to make a clear picture of the subject that is going to be discussed (Gosden & Head, 1994; Tress, Tress, Décamps, & d'Hauteserre, 2001).

The importance of such a study can be well mentioned by referring to David Livingstone statement (Jones, 2003):

"To have command of definition is to have control of discourse...key words frequently have a certain plasticity about them which means that their meaning can be expanded or contracted to serve the purposes of their users. Success in managing vocabulary–and thereby solidifying conceptual slipperiness – therefore brings considerable advantages in attempts to map out conceptual territory"

It is worth mentioning that for the reason that cultural landscape management is an issue related to several disciplines, the inconsistent or unclear use of concepts and definitions can hinder interdisciplinary and inter-sectorial communication (Jones & Daugstad, 1997).

"Landscape is the English equivalent of the term German geographers are using largely and strictly has the same meaning, a land shape, in which the process of shaping is not defined only through physical changes but also through district association of forms, both physical and cultural" (Sauer, 1925). This is in contrary to the traditional usage of landscape in English, whose primary meaning is closely associated with the idea of scenery (Förster, et al., 2013). "Indeed the quoted Oxford English Dictionary definition of landscape refers to a picture of natural inland scenery noting that the word first comes into the English language in the early seventeenth century as a designation of a type of painting" (Cosgrove, 2004). Landschap painting was a genre imported from the Netherlands that became popular among landowners seeking to represent newly acquired or consolidated estates, many of them showing a "struggle between the customary rights enjoyed by a feudal peasantry and the property rights claimed for landowners in an emerging capitalist land market" (Cosgrove, 2004).

As Denis Cosgrove (2004) elaborates "…landscape not only has long stood as the geographical concept that connects the discipline most closely to history and the humanities, but its roots in Anglophone geographic practice are to be found in the German concept of Landschaft<sup>1</sup>. The latter is of

<sup>&</sup>lt;sup>1</sup> The various usages of the term Landschaft may seem confusing, but they are not all that different from those of related terms in English. The suffix –Schaft and the English –ship are cognate, manning essentially "creation, creature, constitution, condition" (OED: -ship). –Schaft is related to the verb Schaffen, to create or shape, so *ship* and *shape* are also etymologically

more than purely philological interest: The migrations of meaning that Landschaft/landscape has experienced make it particularly suited to contemporary ways of thinking about space and reconnecting geographical study to current humanities concerns with culture, identity, and meaning". "The concept of Landschaft as used in Renaissance Europe referred to a particular notion of polity rather than to a territory of a particular size" (Olwig, 2002). The nature of Landschaft indicate station reality where the physical appearance of the area is formed through social drivers (Cosgrove, 2004). According to Olwig (2002), landscape was more than a scenery for the farmers and the population of rural areas. It was realized as a social and political expressions within a territory (Claval, 2005).

Therefore, the term landscape as used in painting could be used to refer to "scenic images in the tradition of Italian single-point perspective and to styles, identified with northern Europe that sought to reflect the laws of custom that shaped the land. This was true not only of the Germanic term but also of the French and Italian equivalents, paysage and paesaggio: (Olwig, 2005).

While landscape was regarded as polity in some parts of Europe for years, the connection between human and nature was growing even in the landscape painting.

John Ruskin argued the relation between nature and humanity in the art of painting. He stated in his lecture delivered in Oxford in 1871 that "The most splendid drawing of the chain of the Alps, irrespective of their relation to humanity, is no more a true landscape than a painting of this bit of stone...Only natural phenomena in their direct relation to humanity—these are to be your subjects in landscape. Rocks and water and air may no more be painted for their own sakes, than the armor carved without the warrior". Therefore, gradually a new approach was being developed that considered human and nature as parts of a unit in which one is meaningless without the other.

The important definition of landscape was introduced by Denis Cosgrove in the 90's of last century: "it is composed of three elements: the physical and tangible characters of an area,...the measurable activities of the population, the meanings or symbols imprinted in human awareness (Belluso, 2012). The conceptual evolution of the landscape meaning resulted in the birth of a new term, cultural landscape, indicating directly to the interactions between human and nature. It was conventionally an important issue of study and debate in cultural geography (Cosgrove, 2004).

The conceptual origins of the concept of cultural landscape, but not the exact phrase, can be found in the writings of German historians and French geographers in the 19<sup>th</sup> century (Fowler, 2003). As an academic term, cultural landscape goes back to Friedrich Ratzel (1895-1896), and was used frequently by other German geographers in the early 20<sup>th</sup> century (Jones, 2003). Ratzel defined Kultur landschaft as "an area modified by human activity, as opposed to the primeval natural landscape" (Jones, 2003). In the early 20<sup>th</sup>, the geographer Otto Schulter century defined two forms of landscape: the natural landscape (Urlandschaft) or landscape that existed before major human induced changes and the cultural landscape (Kulturlandschaft) a landscape created by human culture (Papageorgiou, et al., 2008). The notion of cultural landscape was promoted by Professor Carl Sauer and the Berkely School of human geographers in the USA in the 1920s. Sauer (1925) argues the "cultural landscape is fashioned out of a natural landscape by a culture group". In his important and fundamental definition of cultural landscape, Sauer says that in a cultural landscape "Culture is the agent, the natural area is

linked (OED: shape).<sup>1</sup>The suffix –ship or –scape, does not indicate scale, as in cartography, but rather an analog process of symbolic abstraction and extrapolation (Olwig, 2002).

the medium, the cultural landscape is the result." While the culture itself is evolving through time, "the landscape undergoes development, passing through phases, and probably reaching ultimately the end of the cycle of development." Sauer's approach to consider culture as an agent shaping spaces resulted in rejection of environmental determinism (Cosgrove, 2004). On the other hand, environmental determinism was rejected by modern geographers who were in favor of possibilism to explain relationships between human activities and the physical environment. Possibilism refers to the idea that the physical environment limit some human activities, however people have the power to adjust to their environment (Rubenstein, 2011).

In addition to historical evolution of the term, it is interesting to discuss about the acceptations and current approaches to cultural landscape.

Humanistic approaches in geography have brought to the fore the study of landscape meanings, involving ways in which landscapes are perceived, understood and mentally structured by different groups in the society. Moreover, it is understood that the cultural and social imperative of a landscape has become more important than its visual form.

Reviewing the landscape conceptual evolution shows that the idea of land has been often intertwined with the human activities and meanings attached to the area by them. It is in the same vein that Dematteis (1985) states "every new theory of space makes possible a new social and political order". Christopher Tilley (1994) in A Phenomenology of Landscape discussed about new interpretation of places and spaces considering how individual experience the world now and in the past. Being a human, Tilley argues, "involves first creating a gap between the self and what is beyond and then trying to bridge that gap through perception, bodily actions, movements, emotions and awareness, which are structured and given meaning through systems of belief". Evolved acceptations of landscape would respond to the ways to bridge this gap. This is acknowledged by Sauer (1925) indicating that landscape can be formed only in terms of its relations with time and space. Immanuel Kant (1781) states that it is impossible for us to have any experience of objects that are not in time and space. Therefore, the landscape can be conceptualized as a matter of experience within space and time, which means that this notion enables human being to fill the gap between himself and the environment beyond. The bonds is made through social and cultural expressions as well as system of beliefs and meanings. "The meanings that people give to landscapes are bound with culture, and the fact of naming gives shape to physical features of the landscape in people's cognition and communication" (Jones, 2003). This concept was acknowledged by Taylor (2009) stating that "landscape is a cultural expression that doesn't happen by chance but it is created by design as a result of our ideologies".

Since the late 1980s, newer cultural geographers such as Cosgrove investigated the plurality in the meanings of cultural landscape (Brown S. , 2008). A result of regarding culture as a dynamic 'way of life' and dynamic 'ways of human life' is that cultural landscape has been conceptualized as a process (Stratford, 1999). The recent acceptations of landscape is even more acknowledging the process of making relations with environment according to human's perception and understanding. According to Greffe (2010) "the traditional recognition of landscapes as a form of visualization in paintings and maps has been evolved to be a subjective content where changes in the modern cities with the position of the viewer, or even better, the flaneur – a person leisurely strolling through its streets".

Consequently, cultural landscape is a landscape formed by the human imperative. It is inherited from the past and can bridge the gap between the human being the outer world through perceptions and system of beliefs. Moreover, the subjective interpretation of a cultural landscape is formed according to the experience of the observer and brings about new social and political order. Hence, unifying cultural environment with social and political sphere gives more importance to the cultural aspects of the landscape (Olwig, 2005).

Further to academic recognition of the notion of cultural landscape, the term was entered to the international discourse and policy documents.

The UNESCO World Heritage Committee's debate on cultural landscapes began in the early 1980s. In the Report of the Eighth Ordinary Session of the World Heritage Committee (UNESCO, 1984) special attention was directed to rural landscapes and mixed cultural/natural properties. During that session IUCN (International Union for Conservation of Nature) was to discuss the topic of "mixed" World Heritage properties at the IUCN General Assembly to be held in Madrid on 2-14 November 1984. Accordingly, the Committee requested IUCN to consult with ICOMOS and the International Federation of Landscape Architects (IFLA) to elaborate guidelines for the identification and nomination of mixed cultural/natural rural properties or landscapes to be presented to the Bureau and the Committee at their forthcoming sessions. In the 15<sup>th</sup> session of World Heritage Center in which the Rapporteur pointed to initiatives to revise the natural heritage criteria and to propose a new criterion on cultural landscapes that were expected to progress further in 1992 (Fowler, 2003). Subsequently in the report of 16<sup>th</sup> session of UNESCO's World Heritage Committee (UNESCO, 1992) adopted guidelines concerning 'cultural landscape' inclusion in the World Heritage List. In particular rural landscapes, which met the criterion (iii) for natural sites as "exceptional combinations of natural and cultural elements", their evolution and integrity.

Therefore, in 1992, the Convention Concerning the Protection of the World Cultural and Natural Heritage of 1972 "became the first international legal instrument to recognize and protect cultural landscapes – provided they could be shown to be 'of universal value" (Fowler, 2003). The Convention concerning the Protection of the World Cultural and Natural Heritage (UNESCO, 1972), emphasized the protection of both cultural and natural heritage of outstanding universal value.

Later, in the Recommendation of the Committee of Ministers to Member States on the Integrated Conservation of Cultural Landscapes adopted by the Committee of the Ministers of the Council of Europe (Council of Europe, 1995), the landscapes and cultural landscape areas are defined as follows:

Landscape is a formal expression of the numerous relationships existing in a given period between the individual or a society and a topographically defined territory, the appearance of which is the result of the action, over time, of natural and human factors and of a combination of both. Landscape is taken to have a threefold cultural dimension, considering that:

- It is defined and characterized by the way in which a given territory is perceived by an individual or community.

- It testifies to the past and present relationships between individuals and their environment.
- It helps to mold local cultures, sensitivities, practices, beliefs and traditions.

This recommendation emphasizes that "Cultural landscape areas are specific topographically delimited parts of the landscape, formed by various combinations of human and natural agencies, which illustrate the evolution of human society, its settlement and character in time and space and which have acquired socially and culturally recognized values at various territorial levels, because of the presence of physical remains reflecting past land use and activities, skills or distinctive traditions, or depiction in literary and artistic works, or the fact that historic events took place there" (Council of Europe, 1995).

Identifying landscape types assists in clarifying the values that make a landscape significant and makes it possible to determine how it should be interpreted, preserved, valorized, and managed.

According to Operational Guidelines for the Implementation of the World Heritage Convention (UNESCO, 2008) cultural landscapes fall into three main categories, namely:

(i) The most easily identifiable is the clearly defined *landscape designed and created intentionally by man*. This embraces garden and parkland landscapes constructed for aesthetic reasons, which are often (but not always) associated with religious or other monumental buildings and ensembles.

(ii) The second category is the *organically evolved landscape*. This results from an initial social, economic, administrative, and/or religious imperative and has developed its present form by association with and in response to its natural environment. Such landscapes reflect that process of evolution in their form and component features. They fall into two sub categories:

- A relict (or fossil) landscape is one in which an evolutionary process came to an end at some time in the past, either abruptly or over a period. Its significant distinguishing features are, however, still visible in material form.

- A continuing landscape is one which retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress. At the same time, it exhibits significant material evidence of its evolution over time.

(iii) The final category is the *associative cultural landscape*. The inscription of such landscapes on the World Heritage List is justifiable by virtue of the powerful religious, artistic, or cultural associations of the natural element rather than material cultural evidence, which may be insignificant or even absent.

According to Mitchell, et al. (2009) "the category of associative cultural landscapes has contributed substantially to the recognition of intangible values and to the heritage of local communities and indigenous people. These landscapes are places with associative cultural values, some considered as sacred sites, which may be physical entities or mental images that are embedded with people's spirituality, cultural tradition, and practice".

# 2.2 Cultural landscape: place of integrated values

Cultural landscapes are the representation of the combined work of natural elements and human activities and these two sets of influence are often difficult to disentangle from one another. It is stated in Operational Guidelines for the Implementation of the World Heritage Convention (UNESCO, 2008) that they are "illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic, and cultural forces, both external and internal". They are associated with elements that people can change to improve the ecological, social, and economic values (Termorshuizen & Opdam, 2009).

As formerly discussed the recent acceptation of landscape definition is based on individual's perception and understanding of landscape. As an important policy document, European Landscape

Convention (Council of Europe, 2000) defines landscape as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". Therefore, to define the values of a landscape it is necessary to understand the values that are attributed to a landscape by individual's perception and experiments of the landscape (Dakin, 2003). Moreover, understanding how a landscape is valued involves understanding both the nature of the valued object, and the nature of the expressed values for that object. These values can only be identified when they are expressed by those who are part of the cultural context, or by those who are in a position to observe and understand. According to the research conducted by Ruiz and Domon (2012) the local populations consider landscape to be much more than a mere visual phenomenon. On the other hand, active participation of people in experiencing the landscape in different ways will influence the values they attribute to landscape. Therefore, in a holistic perspective to various typologies of landscape values individuals have continuous and reciprocal relationships with the material reality of landscape through practices, perceptions, and representations. These relationships are reciprocal in which the reality of landscape influences individuals while the individuals also influence the landscape (Tress, Tress, Décamps, & d'Hauteserre, 2001; Antrop, 2005; Ruiz & Domon, 2012). According to Lowenthal (1997) landscapes as part of heritage, not only are perceived by the tangible values but also by intangible values having a collective impact on the local art and social stability. He considers landscape as patrimony for its materiality, stability (the most fixed, immovable phenomenon in our environment) and regard it as a scontainer for a large variety of artefacts promoting their singular values in a broader context.

Yet, in a general classification, the values of a cultural landscape, by definition, come from nature, human being and their interaction. The first one bears in mind values related to natural resources, ecosystems, and biodiversity while the second one evokes social, cultural, and economic values.

Cultural landscape have multiple functions bound to their inherited values. That is to say that through their physical composition and psychological dimensions, they are responding to social and cultural needs while having influence in ecological and economic context (Farina, 2000; Council of Europe, 2006). Likewise the 6<sup>th</sup> European Commission Conference on Sustaining Europe's Cultural Heritage: from research to policy (2004) acknowledges that cultural heritage influences economic and regional development, sustainable tourism, job creation, improving skills through technological innovation, environment, social identity, education and construction which corresponds to economic, environment, social and cultural values.

Not only heritage values are understood to be dynamic and perceived through different lenses, being signified by the individuals or the society, but also, according to Sauer (1925), the form, structure, and functions of a landscape are subject to development, change, and completion. Moreover, the combined effect of the driving forces such as accessibility, urbanization, globalization and the impact of calamities have been different in each of the periods and affected the nature and pace of the changes as well as the perception people have about the landscape (Palang, Alumäe, & Ülo, 2000). Therefore, meanings and values would change from one culture or period to another (Hall, 1997; Antrop, 2005) resulting in a whole range of different values with complex interactions (Cristina Heras, et al., 2013).

Likewise, Sphenson (2008) concludes a study on cultural-value model saying that values in a landscape are not only limited to the physical forms but also to the contemporary or past practices and to relationships with and within the landscape. She argues that three fundamental components of landscapes are forms, practices and relationships and values are experienced where those three components interact. Just as ecological sustainability is dependent on interactions between the plants,

animals, and environmental conditions of a locality; perhaps cultural sustainability is dependent on local dynamic interactions between valued forms, practices and relationships (Papageorgiou, et al., 2008).

Those landscapes that turned to be a part of our heritage today, needs careful study and understating from human being physical and perceptual standpoint. The embodiment of this category in cultural heritage management sphere (Loulanski, 2006) brought about alterations in the cultural heritage management context. In this regard, the appropriate management approach fundamentally is based on the integrated consideration of all the values inherited in a cultural landscape (Farina, 2000; Stephenson, 2008; Cristina Heras, et al., 2013)

Also in the policy documents, the value-oriented approach to heritage has been highlighted. Cultural values imply cultural significance, which is synonymous with heritage significance and includes cultural heritage value. As defined in The Burra Charter (ICOMOS, 2013) "cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations". Heritage policies of UNESCO, ICOMOS the Council of Europe and European Commissions show a move towards value-oriented approach. UN System Task Team on the post-2015 UN Development Agenda (UNESCO, 2012), Burra Charter (ICOMOS, 2013), The Florence Declaration on Heritage and Landscape as Human Values (ICOMOS, 2014), Framework Convention on the Value of Cultural Heritage for Society (Council of Europe, 2005), Recommendation on "reconciling heritage and modernity," made by the Congress of Local and Regional Authorities (Council of European, 2006), The Conference on Sustaining Europe's Cultural Heritage: from research to policy (European Commission, 2004) are the evidences of this orientation in which the values, significance or impacts of heritage are addressed. Hereinafter, the values embodied in different components of a cultural landscape will be discussed as cultural, social, economic, and environmental values.

*Cultural values* – Cultural values include not only of attributes considered to be part of culture such as stories and myths, but also of attributes that are considered to be part of nature that are valued culturally (Stephenson, 2008).

The interaction of human with nature, results in creating special components in a cultural landscape, entailing cultural and social values. From heritage point of view, those components are classified into historical and archaeological features, human-made structures, contemporary features, history (Mitchell & Buggy, 2000; Marcucci, 2000; Palang & Fry, 2003), meanings and naming (Jones, 2003), stories and myths, memories and symbols, historic and cultural events (Schama & Porter, 1995). Symbolic and cognitive values pass contain a lot of information concerning the still poorly known history of ordinary people and land management traditions. The relation between values and impacts of heritage is twofold; values can affect impacts on region's economy and society, which in turn can lead to the elevation of the values, since an increase of heritage impact will evolve into a higher valuation of heritage (Consortium, 2015). The cultural landscape affect other values like social, environmental, and economic values. According to Farina (2000) the cultural component of cultural landscape is an element that can integrate ecology and economics.

*Social values* – Cultural heritage create sense of place and identity (Mitchell & Buggy, 2000; Antrop, 2005; Rössler, 2006), feeling of belonging to the community (Hummon, 1992; Lokocz, Ryan, & Sadler, 2011), traditional and contemporary activities, etc. (Stephenson, 2008). According to Antrop (2000) "each traditional landscape expresses a unique sense or spirit of place that helps to define its identity". They are representation of entangled reality of relationships, culture, and people's identity

(Rössler, 2006). The localized values create a typical identity that encompasses the relationships between people and the landscape. "Those who visit an area, as tourists or for work, take away an impression of a particular identity and a local distinctiveness, leading them to judge their experience of the area positively or negatively" (Council of Europe, 2006). Cultural landscapes are places to preserve national and local identities. However, they are endangered by globalization impacts, which might turn them to uniform spaces all over the world (Palang & Fry, 2003). Thus, they are important to be preserved since they have an identity value and provide meaning to people's lives and activities (Arntzen, 2002).

Culture and cultural heritage are usually included in the general discussions on promoting social, cultural, and economic capital and environmental protection. According to Putnam (2000) "social capital makes us smarter, healthier, safer, richer, and better able to govern a just and stable democracy". Coleman, another researcher on social capital, points to its role in "facilitating the achievement of goals that could not be achieved in its absence or could be achieved only at a higher cost". Good health, especially mental well-being, is also linked with involvement in different networks. Loneliness leads to greater stress and risk of depression while participation in social networks usually improves overall perception of health and decreases the risk of health problems (Siegrist, 2000; Kawachi, Subramanian, & Kim, 2008).

From management standpoint history of landscape helps understanding of changes towards dealing with the landscape as a whole (Marcucci, 2000). "Landscape can be handled as a palimpsest consisting of elements from different time periods. Any succeeding socio-economic formation tried to erase the elements erected by the previous period and replace them by elements of its own. However, never all the elements are removed; the landscape we have today has remnants of several former periods" (Palang & Fry, 2003).

As stated in Article 5.a of the European Landscape Convention (Council of Europe, 2000), landscapes are "an essential component of people's surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity". It is because landscape is in dissociable from people's surroundings that it "is a key element of individual and social well-being", as affirmed in the preamble to the convention (Council of Europe, 2006).

Effectively implementation of planning strategies requires an understanding of what influences public acceptance. One potential influence is place attachment, a positive emotional bond that develops between individuals or groups and their environment (Giuliani & Feldman, 1993; Lokocz, Ryan, & Sadler, 2011). Place attachment reflects the level of social involvement and individual commitment to place, particularly in rural communities where inhabitants have stronger bonds with their community and place than urban residents (Hummon, 1992; Lokocz, Ryan, & Sadler, 2011).

The appropriate management of the social values bound to cultural landscape components can enhance the quality of life of the society. "The landscape is a familiar part of everyone's daily scene and plays a part in people's sense of belonging to a particular place and a particular community. So on a conscious or even unconscious level it contributes to mental well-being, and so might play a part in combating violence" (Council of Europe, 2006).

*Economic values* – As stated in the Eighth Council of Europe Workshops (2010) "Landscape is the receptacle of human life and economy, and the foundation of the human settlement system".

In a cultural system, economy refers to the connection between individuals or groups and resources (Marcucci, 2000). A physical historical or cultural element may exist for several years but it only turns to be a resource under a specific cultural system and the related economy (Marcucci, 2000). As Throsby (2001) specifies, intangible values attributed to cultural elements give rise to economic value other than their physical reality.

Thus, a cultural and historical context by its diversity of values would contribute to economic development through a proper management approach that turns them into resources. It is emphasized by UN System Task Team on the post-2015 UN Development Agenda (UNESCO, 2012) that cultural heritage is referred as a strategic tool for revenue generation. Although monetary valuation integrates one aspect of economic values of cultural heritage into decision-making framework (O'Brien, 2010), the other values of cultural heritage have to be valorized and incorporated into economic development of a region. "Cultural tourism is one of the most important generators of inward investment" (Besana, 2013). However, it would equally be a mistake to think that tourism represents the only economic value as mentioned above (Council of Europe, 2010). Cultural heritage can play a role not only as direct resources of employment and revenues but also as indirect generator of revenues by offering crafts and other cultural products (Bandarin, Hosagrahar, & Sailer Albernaz, 2011). More generally, it also supports viable communities by creating good environments where people will prefer to live and work (Fairclough, 2014).

Cultural heritage has stopped being only a burden to national budgets, and is gradually transforming into a significant "value-adding industry" (Loulanski, 2006). "It particularly plays a role as recourse in developing countries given their often-rich cultural heritage. Especially in vulnerable communities, it provides new opportunities to improve economic situation by generating incomes from their own cultural knowledge and production" (World Bank, 1998).

*Environmental values* - A significant fraction of the earth's biodiversity survives in landscapes influenced by human being, mostly cultural landscapes. They represent a fundamental reservoir of the earth's natural and cultural capital (Farina, 2000). Much wisdom and inspiration for sustainable management can be found through study of the history of landscape (Antrop, 2005) which represents the evolutionary patterns and its ecological stages as well as cultural eras (Marcucci, 2000).

In 1960s, the term cultural landscape entered the terminology of environmental management (Jones, 2003). The notion of cultural landscape therefore has been adopted in environmental sphere and has been valued from environmental standpoints.

According to the classification of protected landscapes by IUCN, the fifth category of protected areas is defined as "areas that are generally cultural landscapes or seascapes that have been altered by humans over hundreds or even thousands of years and that rely on continuing intervention to maintain their qualities including biodiversity. Many category V protected areas contain permanent human settlements" (Dudley, 2008).

IUCN has acknowledges that protected landscapes/seascapes have befits for "conserving nature and biodiversity, conserving human history in structures and land use patterns, maintaining traditional ways of life, offering recreation and inspiration, providing education and understanding, demonstrating durable systems of use in harmony with nature" (Mitchell, Rossler, & Tricaud, 2009). Protected landscapes and cultural landscapes have different common aspects. Both are focused on landscapes where human relationships with the natural environment over time define their essential character. "In protected landscapes, the natural environment, biodiversity conservation, and ecosystem

integrity have been the primary emphases. In contrast, the emphasis in cultural landscapes has been on human history, continuity of cultural traditions, and social values and aspirations" (Mitchell & Buggy, 2000).

Environmental values in a cultural landscape would benefit other types of values as well. Cultural heritage in a cultural landscape can be better conserved in integration with environmental values. In many landscapes, the natural and cultural heritages are inextricably bound together and that the conservation approach could benefit from more integration (Mitchell & Buggy, 2000). Moreover, environmental values and economic values would be well connected through cultural values within cultural landscape context.

Cultural landscapes reflect specific techniques of sustainable land-use, considering the features and constraints of the natural environment, and a specific spiritual relation to nature. Protection of cultural landscapes can contribute to modern techniques of sustainable land-use and can maintain or enhance natural values in the landscape. The continued existence of traditional forms of land-use supports biological diversity in many regions of the world. The protection of traditional cultural landscapes is therefore helpful in maintaining biological diversity (UNESCO, 2008). Consequently, "the ecosystem and environmental features of a cultural landscape are valued for being as a genetic pool for the crops of tomorrow's world" (Mechtild, 2003), having rich biodiversity and contributing to sustainable development through specific techniques of land use and traditional knowledge of dealing with nature.

# 2.3 Rural cultural landscape features

In a general perspective, rural area is an area located outside city or town. According to the National Geographic definition, a rural area is "an open swath of land that has few homes or other buildings, and not very many people. In a rural area, there are fewer people, and their homes and businesses are located far away from one another. Agriculture is the primary industry in most rural areas. Most people live or work on farms or ranches"<sup>1</sup>. A rural area is usually defined as less densely populated area. In fact, "the city- the opposite pole of rurality- is by definition a concentration of people and activities for commercial and institutional purposes" (Sorokin, Tanquist, Parten, & Zimmerman, 1930)

From the policy making point of view the term is defined variously in each country. The most commonly used definitions of rural are based on either the Census Bureau or the Office of Management and Budget characterization of counties. The Census Bureau intentionally creates a definition of rural by designating census blocks and block groups as urban based on total population and population density, with all other areas being rural (Coburn, et al., 2007). More specifically a rural landscape reflect the relation of man with nature along with its evolution and the development of man's material civilization (Papageorgiou, et al., 2008) including aesthetical (Lowenthal, 1978; Carlson, 2001) or functional (Claval, 2005) features.

A rural cultural landscape is realized through definitions of the cultural landscape and rural area concurrently. Thus, a rural cultural landscape is a rural landscape enriched by various tangible and intangible cultural evidences, historical features, or powerful religious, artistic, or cultural associations

<sup>&</sup>lt;sup>1</sup> http://nationalgeographic.org

of the natural element. In traditional rural landscapes the inhabitants, who shaped and used rural areas, read their landscapes in many ways (Claval, 2005). They may perceive them as systems, each of their components being tied to the whole through functional links, or embodiments for specific social, cultural and political uses (Olwig, 2000). Landscapes may also be read as collections of independent signs, either created by men for conveying their ideas, or discovered by them as an expression of the inner order of nature or of a mythical and religious belief. They characterize the ways people have lived and organized themselves in certain places as well as local techniques and skills to respond to the conditions of everyday life and the ways of organizing social life (Papageorgiou, et al., 2008). The meanings attributed to a place are dependent on the ways people interact with the place. Through these interactions perceptions, values, attitudes, and emotions are defined (Brown M. F., 2005). Therefore, the importance of understanding the complexity of the actual ways people establish their relation with a rural area is out of question, having in mind that the way people live is influenced by the certain place they live in (Karpodini-Dimitriadi, 2008).

The concepts of rural character and perceptions of rurality are often intertwined with the close rural community connections (Halfacree, 1995). Many traditional rural landscapes have a holistic and complex character that expresses a unique sense of place, and are the key component of the identity of people. This could not only be considered among the community itself but also between the community and the place.

In addition to cultural features and values, rural cultural landscapes are formed throughout their environmental characteristics. Different elements intervene and create the set of local distinctive characteristics; climate, space, and soil are among them. They have affected the way humans used the materials for clothing, the way they organized their dance movements, the construction of musical instruments. Rural area form a very complex, specific system, the social and cultural components of which are interdependent (Karpodini-Dimitriadi, 2008).

Rural cultural landscapes form a significant type of heritage since they encompass several individual heritage features such as structures, monuments, archaeological sites and natural elements and mirror expressions of social life, local skills, determinants of rural cultural identities, rural customs, myths, traditions, beliefs etc. They also portray cultural and socio-economic changes throughout the years. They store codes, signs and symbols even in cases that are structurally and functionally transformed (Karpodini-Dimitriadi, 2008).

As stated in the website<sup>1</sup> of The ICOMOS/IFLA International Scientific Committee on Cultural Landscapes (ISCCL) in such landscapes the traditional knowledge, skills and other tangible and intangible cultural expressions create capacities to move towards sustainable development goals in different ways. Traditional rural landscapes are more legible and give a clear character and identity to place and region. Moreover, they reflect a strong social cohesion and feeling the attachment to the place, which brings about higher level of social involvement and individual commitment to place. It is a source of knowledge about sustainable management techniques and lessons for maintenance of cultural and bio-diversity. Their structure is a support for the preservation of both biodiversity and cultural diversity. Such rural landscape practices respect the natural characteristics of the land they occupy, maintain the biodiversity, and also keep the rich cultural diversity Moreover, many traditional rural landscapes are exponents of sustainable land-use acquired over years of rural practice<sup>2</sup>. These

<sup>&</sup>lt;sup>1</sup> www.isccl.org

<sup>&</sup>lt;sup>2, 3</sup> www.worldruralculturallandscapes.org

landscapes conveyors of essential knowledge about sustainable management techniques resulting in an inspiration for making better landscapes in future and a base for restoration (Antrop, 2005). "They present models that can be used to create strategies of technological and socioeconomic processes to produce liveable and sustainable environments" (Karpodini-Dimitriadi, 2008)

On the other hand, rural cultural landscapes are facing transformations because of abandonment of the land, intensification of the agriculture, loss of traditional and local knowledge, pressure of urban development, etc. For this reason, many initiatives are being carried out to understand, protect, and enhance the tangible and intangible values that the landscapes hold, as a reaction to the deep transformations they are enduring<sup>1</sup>.

Considering that in many cases the relationships between economic capital and natural capital are maintained by cultural capitals, traditional landscapes and the various relations that people have towards the physical environments offer valuable knowledge for more sustainable planning (Karpodini-Dimitriadi, 2008). As Loukanski (2006) points out the heritage in a rural cultural landscape has a pivotal role in regional development and can actively be valorized for meeting a wide range of economic, environmental, social, and community development objectives.

As stated by Lokocz and Sadler (2011) it is crucial for rural planners, understanding the values and attachments that residents have to their land and the surrounding rural landscapes and paying attention to preserving historical, artistic and natural beauties of such landscapes (Agnoletti, 2012) as an integral whole. Moreover, a protective management would support the importance of the rural landscape today as a development resource for future generations. In addition to the protective measures, the resources in a rural cultural landscape can be valorized in such a way that the local development would be realized in a sustainable way. As Cloke, et al. (1994) remark, "some rural areas are recognized to be bound up in modern image markets. They generate a constant flux of production, consumption, reproduction, representation, commodification, manipulation and so on. This constant flux can be seen in the construction of touristic images which, through mass media and communications are available to ever larger audiences, many of whom may be able to trace their own roots back to rural origins".

According to World Bank (1998) the heritage -as a distinctive component of rural cultural landscapescan be contribute to core development objectives in several important ways:

- "Providing new opportunities for poor communities to grow out of poverty by generating incomes from their own cultural knowledge and production;
- Catalyzing local-level development through the diverse social, cultural, economic, and physical resources that communities have to work with;
- Conserving and generating revenues from existing cultural assets reviving historic centres, conserving socially significant natural assets, and generating sustainable, significant tourism revenues;
- Strengthening social capital in particular, to provide a basis on which poor, marginalized groups can pursue activities that enhance their self-respect and efficacy and to strengthen respect for diversity and social inclusion so that such groups can have a share in the benefits of economic development; and

<sup>&</sup>lt;sup>1</sup> worldruralculturallandscapes.org

• Diversifying strategies of human development and capacity building for knowledge-based dynamic societies – for example, through support for local publishing, library services, and museum services, especially those serving marginalized communities and children".

Thus a rural cultural landscape conceptualize a management system of a historical- cultural - natural landscape in which the community plays a crucial role and the interactions of man with nature is respectful and responsive for preservation of cultural and bio-diversity.

# 3 Cultural landscape management and sustainable development

## 3.1 Culture, cultural landscape and sustainable development interfaces

The term, sustainable development, was mentioned in Our Common Future, a report from World Commission on Environment and Development in 1987. This report also known as the Brundtland Report (1987) defined sustainable development as a "development which meets the needs of the present without compromising the ability of future generations to meet their own needs."

The United Nations Conference on Environment and Development (UNCED), also known as the "Earth Summit," held at Rio de Janeiro, Brazil, in 1992 in the 20th anniversary of the first international Conference on the Human Environment (Stockholm in 1972), gave birth to a number of international instruments to provide a framework for sustainable development. The immediate outcome of this conference was Rio Declaration. Rio Declaration (1992) highlights the importance of the use of interdisciplinary managerial instruments for environmental management, and in particular environmental impact assessment and environmental standards. The declaration stresses the participation of citizens as an important ingredient of effective policy development and implementation. It attributes particular roles to women, children, the youth, and indigenous people. According to Rio Declaration, sustainable development is a broad concept which should be included by different disciplines. It also put emphasis the participation of the people and the role of the marginal groups in the society.

Another major achievement of UNCED was Agenda 21 (Agenda 21, 1992) which addresses the "pressing problems of today and also aims at preparing the world for the challenges of the next century reflecting a global consensus and political commitment at the highest level on development and environment cooperation. It is a comprehensive action plan demanding new ways of investing in future to reach sustainable development in the 21st century".

On the 20<sup>th</sup> Anniversary of Rio Declaration, UN Conference on Sustainable Development (UNCSD) took place in June 2012 in Rio de Janeiro Brazil. The conference also regarded as Rio+20, aimed at considering political commitment for sustainable development, the progress to date and remaining gaps in the implementation of the outcomes of the major summits on sustainable development, and emerging challenges. According to the outcome of Rio+20 which is called The Future We want, "people are at the center of sustainable development".

The sustainable component paradigm implies that whatever is done today does not harm future generations. According to Bell and Morse (2008) "sustainability, like development, is all about people, and there may be little point achieving a sustainable system that reduces the quality of life of the people in that system". "Sustainable development embodies an ultimate practicality since it is literally meaningless unless we can 'do' it" (Morse & Niehaus, 2009).

Soubbotina (2004) in Beyond Economic Growth defined sustainable development as "a process of managing a portfolio of assets to preserve and enhance the opportunities people face". The assets that this definition refers to include not just traditionally accounted physical capital, but also natural and

human capital. To be sustainable, development must provide for all these assets to grow or at least not to decrease over time.

An important concern about implementation sustainable development strategies is measuring the level of progress over time and landscape (Mitchell G., 2006). That would be practicable through defining indicators. "Such indicators are meant to present complex data and trends in simplified form to policy makers. They can help decision-makers to bring up policies with focus on sustainable development on the basis of information which is transparent and evidence based" (UNCSD, 2012). Chapter 40 of Agenda 21 calls on countries and the international community to develop indicators of sustainable development.

Consequently, the following points are realized with respect to the definition of sustainable development:

1- Sustainable development is a manner of development, which does not encompass only economic and environmental considerations, but also social and cultural aspects of human life.

2- Sustainable development implies a series of DOs and DON'Ts, which persuades human being to consume the resources for the better life and wellbeing while defining limits for the pattern of consumption otherwise improper resource consumption, would result in serious threats for the future generations.

3- Sustainability in development is a moral issue (Pawłowski, 2008). Consideration of successive generations as rightful of the existing recourses necessitates logical and finite consumption of those resources and efforts for their preservation. This approach carries a moral adherence and responsibility for the future generations.

4- Sustainable development remains an abstract issue unless it is put into practice. Its actualization can be achieved through long-term strategies and development plans. In addition, without finding ways for the measuring the level of sustainable development, it remains just a list of unpractical good intentions (Bruckner, 2009).

5- Human being is at the center of sustainable development goals. Moreover, in sustainable development policy making the role of people participation should be considered. Consequently, people are the aim and the driver of sustainable development.

#### Dimensions-Debate on culture as the fourth pillar

The theoretical perception of sustainable development has been evolved from stressing on the environmentally sustainable development to the inclusion of economic and social dimensions or pillars. Accordingly, in Rio Declaration (1992) the concept of sustainable development has been articulated in three dimensions or pillars, namely economic sustainability, environmental sustainability and social sustainability. As illustrated by Ljubljana Declaration on the territorial dimension of sustainable development (2003) the "first dimension implies economic growth and development, the second includes ecosystem integrity and attention to carrying capacity and biodiversity, whilst the latter includes values such as equity, empowerment, accessibility and participation". However, there has been a debate in the academic literature and policy sphere to consider culture as the fourth pillar of sustainable development.

The UNESCO Mexico City Declaration on Cultural Policies (1982) focused on the cultural dimension of development by arguing that "balanced development can only be insured by making cultural factors an integral part of the strategies designed to achieve it".

In the UNRISD (United Nations Research Institute for Social Development) and UNESCO Workshop on Towards a World Report on Culture and Development Constructing Cultural Statistics and Indicators (1997) culture was regarded as an instrument of development which cannot ultimately be reduced to a subsidiary position as a mere promoter of economic growth. It was emphasized that "the role of culture is not merely to serve ends - though in a narrower sense of the concept this is one of its uses - culture is the social basis of the ends themselves. Development and the economy are part of a people's culture".

Later an Australian researcher Jon Hawkes (2001) formulated the need to structure a new pillar, for sustainability. According to him, the fourth pillar of sustainable development allows us to advocate for culture to be at same level of significance for the development of a society as the economy, the social, and the environmental. This would be possible through creating bridges with the other spheres of governance.

At the same time in policy sphere, UNESCO adopted its Universal Declaration on Cultural Diversity in (2001) emphasizing the role of culture in development. "Culture should be regarded as the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs".

Ljubljana Declaration on the Territorial Dimension of Sustainable Development (2003) also refers to the guiding principles for territorial sustainability introducing a fourth dimension that is cultural sustainability. Agenda 21 for Culture was adopted in (2004) by United Cities and Local Governments (UCLG) at the Universal Forum of Cultures in Barcelona which is based on the principles set out in UNESCO's Universal Declaration on Cultural Diversity (2001). The theory of integration of culture in sustainable development strategies was developed once again in the following year in The UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions (2005) through emphasizing on the importance of cultural diversity in increasing the range of choices and fostering human capacities and values, hence sustainable development for communities, people and nature.

According to UCLG and Barcelona City Council (2012), "human capabilities such as literacy, creativity, critical knowledge, sense of place, empathy, trust, risk, respect, recognition can be understood as the cultural component of sustainability". Through these capabilities, human being can understand the world and transform it to become really sustainable.

The Hangzhou Declaration (UNESCO, 2013) the outcome of International Congress "Culture: Key to Sustainable Development" proposed to consider culture as the fourth pillar of sustainable development, equal to the economic, social and environmental pillars. Regarding heritage in particular, the declaration states for instance that the "rehabilitation of cultural heritage and cultural activities should be promoted to enable affected communities to renew their identity, regain a sense of dignity and normalcy" and "inclusive economic development should also be achieved through activities focused on sustainable protecting, safeguarding and promoting heritage".

As Loulanski (2006) points out "culture can be a powerful driver for development, with communitywide social, economic, and environmental impacts. It makes development much more relevant to the needs of people". Cultural factors also influence lifestyles, individual behavior, consumption patterns, values related to environmental stewardship, and our interaction with the natural environment. Local and indigenous knowledge systems and environmental management practices provide valuable insight and tools for tackling ecological challenges, preventing biodiversity loss, reducing land degradation, and mitigating the effects of climate change (UNESCO, 2012).

Culture-led development also includes a range of non-monetized benefits, such as greater social inclusiveness and rootedness, resilience, innovation, creativity and entrepreneurship for individuals and communities, and the use of local resources, skills, and knowledge. Whereas enhancing the cultural sector itself make contributions to strengthening the social capital of a community (Soubbotina, 2004; Murzyn-Kupisz & Dzialek, 2013) and fosters trust in public institutions. Thus, development interventions that are responsive to local cultural context and the specificities, and advance a human-centered approach to development, are most effective, and likely to yield sustainable, inclusive, and equitable outcomes (UNESCO, 2012). Hence, culture, being considered as the fourth pillar or cross-sectorial to other three dimensions, is believed to be included in the development models to reflect the complexity of contemporary society, foster social inclusion, protection of cultural diversity against global changes and environment, and economic development.

Consideration of culture in sustainable development discourse has two simultaneous effects. Firstly, it results in development of the cultural sector itself (i.e. heritage, creativity, cultural industries, crafts, cultural tourism); and secondly, it plays a constructive role in development of policies related to the other dimensions of sustainable development.

In UCLG Culture Summit in 2015, it was emphasized once more that culture has to be integrated in sustainable development model as the fourth pillar since:

- Culture brings its intrinsic values to development: creativity, heritage, knowledge, and diversity. A holistic and integrated approach to development will only be achieved when these values are explicit and operationalized.
- Culture is linked to equity and inclusion; it is an accelerator of resilience and rooting. It gives us the tools to fight against poverty; it facilitates citizens' participation, intercultural dialogue, and equal rights.
- Culture boosts the economy. It generates income and employment, and it has impact on entrepreneurship, new technologies, and tourism. Culture brings creativity and innovation to the economic dimension.
- Culture embraces the environment because it helps to explain identities. It raises awareness of ecological responsibility, and it informs urban planning processes.

As such cultural heritage as an important cultural asset in cultural and historic areas is considered to play a dominant role in sustainable development of such areas. Both in the policy documents and academic literature, cultural heritage is identified as a powerful development asset that can be used in local development, revitalize local urban and rural areas, strategic tools for revenue generation through jobs and incomes generation, enhance environmental protection, and strengthen communities' social capital as social inclusion (World Bank, 1998; UNESCO, 2001; Throsby, 2001; UCLG, 2004; Council of Europe, 2005; Loulanski, 2006; Gražulevičiūtė, 2006); (Duxbury & Jeannotte, 2012; UNESCO, 2012). According to Throsby (2008) there is widespread acceptance of the idea that human development should be a primary focus of development thinking. However, despite the advances made in understanding and consolidation of incorporation of culture into development processes, its articulation and translation into policy are matters that remain to be fully resolved.

## Interfaces

Cultural landscapes as places of special features and characteristics would be treated in a certain way in the context of sustainable development. Careful analysis of the correlations between those features and sustainable development dimensions and goals is helpful in reaching an appropriate management approach in such places.

Culture and landscape are highly interconnected. Culture is born in the landscape, since we shape our beliefs and values around the resources and setting that supports us. The Florence Declaration on Heritage and Landscape as Human Values adopted by ICOMOS (2014) emphasizes that the concept of landscape, whether urban or rural, is increasingly becoming a new paradigm for harmonious development, offering an approach that can integrate economic, social, and environmental processes. Cultural landscapes embodying cultural and natural heritage elements are places where sustainable development strategies can be successfully applied.

There are interrelation between the dimensions of sustainable development and components and attributes of cultural landscape. Landscape is a component of the environment, just like water, air, and biological diversity. Consequently, landscape policies must be so formulated as to fit in with the objectives of sustainable development (Council of Europe, 2006) and to maintain the links with the conviction of human-centered development (Vileniske, 2008). A landscape cannot be expressed in terms of its constituents separately. Instead, all the objects present in the landscape are interrelated and together create a holistic system, which has a form, structure, and function. This system is subject to development, change, and completion in which the components could be divided among history, economics, government, sociology, and so on (Sauer, 1925; Lennon & Taylor, 2012).

Cultural landscape, which is recognized by UNESCO in the World Heritage List, is not only a reflection of history of the territory but also a projection of a complex system of human and nature interactions. They represent rich cultural and natural heritage strengthen the links ascribed between cultural heritage and sustainable development, which are rooted in the reunion of conservation and development goals and better balance between economic, social and environmental aspects of development (Loulanski, 2006).

With regard to the discussions made hereinbefore, the most important interfaces of cultural landscape and sustainable development are reflected in the two following main perspectives. These interfaces justify particular features of cultural landscapes to be considered in development planning.

The first interface is culture which is a constituent of a cultural landscape and a driver for sustainable development (UNESCO, 2012). It is effective through the development of the cultural sector itself i.e. heritage, creativity, cultural industries, crafts, cultural tourism (Besana, 2013) and ensuring that culture has its rightful place in all public policies, particularly those related to education, the economy, science, communication, environment, social cohesion and international cooperation. Cultural endowments embodied in the form of cultural heritage in rural cultural landscapes contribute in making the character of the territory and inhabitants, therefore they can be considered as a powerful driver of local development at the interface of sustainable development.

The second interface is the human factor as pivotal component in cultural landscape existence and sustainable development goals. While the new definitions of sustainable development consider human at the center of development, the modern acceptations of landscape indicate that landscape is formed

in the mindset of the observer. As reflected by Greffe (2010) the traditional recognition of landscapes as a form of visualization in paintings and maps has been evolved to be a subjective content where changes, with the position of the viewer, leisurely strolling through its streets. Hence, cultural landscape is inherited from the past and can bridge the gap between the present human being the outer world through perceptions and system of beliefs. Accordingly, the significance of the human factor in both cultural landscape and sustainable development affirms a demand to reorient the governance and management into a participatory approach. Figure 3.1 demonstrates the correlation between the components of a cultural landscape corresponding to the dimensions of sustainable development.

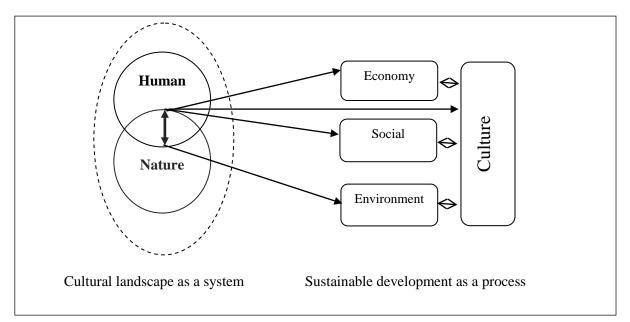


Figure 3.1. Schematic interfaces between cultural landscape and sustainable development

Nara Document on Authenticity (ICOMOS, 1994) underscores the importance of the cultural context for heritage conservation. In the same vein, Jokilehto (Jokilehto, 2004) points out to integrated heritage management in terms of considering the historic area and its context as a totality where different parts of human activities, buildings, spatial organization, and surroundings are integrated. Thus, the notion of conservation has drastically changed from preservation to sustainable use and management of change in both the cultural and natural environment.

This consideration consolidates the importance of landscape as the context in cultural heritage conservation and preservation. Therefore, in particular, recognition of cultural landscapes has been influential on the theory and practice of heritage preservation and its relationship to nature conservation (Mitchell, Barrett, & Brown, 2014). It shaped a concept of heritage conservation that has become increasingly dynamic and inclusive. Hence, "cultural landscapes have become an important arena for integrating perspectives and strategies for cultural and natural heritage conservation, as well as for integration of conservation and sustainable economic and community development" (Mitchell, Barrett, & Brown, 2014).

Cultural landscapes are not only important as the context of culture and cultural heritage but also a significant reservoir of the earth's biodiversity. So cultural landscapes conservation is a step forward in conservation of both cultural and natural biodiversity (Farina, 2000) which is an important concern in sustainable development discourse. This means that valorization of cultural heritage resources at the interface of cultural landscape and sustainable development not only fosters cultural aspects in the both sides but also improves environment and natural resources protection in different ways. In the

same vein, UNESCO's Historic Urban Landscape Recommendation (2011) put emphasis on the environment: "Concern for the environment, in particular for water and energy consumption, calls for approaches and new models for urban living... Many of these initiatives, however, should integrate natural and cultural heritage as resources for sustainable development".

One of the key features of a sustainability science, as formulated by leading global change scientists from natural and social sciences (Kates, et al., 2001) include inter- and trans-disciplinary cooperation between the sciences in order to find out substantial results with regard to interactions between human and nature. In order to gain a better understanding of the interplay between biological and cultural diversity at a landscape level and its implications for livelihood and wellbeing, The Florence Declaration on Heritage and Landscape as Human Values suggests more focus on interdisciplinary and trans-disciplinary research (ICOMOS, 2014).

All the above-mentioned indications advise a complex and entangled system of different components in a cultural landscape, which can be considered as capacities for achieving sustainable development goals. The management of such an area for sustainable development needs consideration of all the features and values corresponding to the complexities.

# 3.2 A holistic approach to cultural landscape management

In this section, the discussion about holistic management of cultural landscapes is developed through a value-based approach, interfaces between cultural landscape and sustainable development, functions and to cultural landscape.

The discussions in previous paragraphs show that, the values attributed to cultural landscapes are not confined to economic values. The comprehensive study reveals that such areas are embodiments of intertwining cultural, social, economic, and environmental values, all corresponding to sustainable development dimensions. On the other hand, many of the addressed values are born and remain alive interdependently. This interdependency brings about complexities in the management sphere but at the same time makes it possible to think of a symmetrical and comprehensive local sustainable development in all aspects. Accordingly, the appropriate management approach is considered to be inclusive of all the values simultaneously making them transformed to resources for development. In such management approach valorization and preservation of the resources has to be promoted concurrently resulting in a sustaining preservation through a dynamic approach to the area. With regard to the focus of this research and the discussion in the former paragraph, culture and human factors are identified to be at the interface of cultural landscape and sustainable development. Accordingly, the cultural endowments inherited in a cultural landscape -mainly considered as cultural heritage- are regarded as resources for local sustainable development. Moreover, the significance of the human factor in the both characterizations affirms a demand to reorient the management to a participatory approach.

Management means directing and controlling a group of one or more people or an organization to reach a goal. Management often means the deployment and manipulation of human resources, financial resources, technological resources, and natural resources. The integrated management and conservation approach of cultural heritage, known as value-driven approach, has been developed based on the Burra Charter (ICOMOS, 1998) indicating a holistic and integrated analysis of cultural heritage values, which has become a solution for both safeguarding and valorization of cultural

heritage resources. As defined by (De la Torre, 2005) values-driven management of a heritage site takes a holistic view of a heritage site, and its objective is always the conservation and communication of those values that make the site significant. The management process begins with an examination of the values attributed to the site and is carried out through consultations with the stakeholders at the site. Thus, the value-based approach would be achieved through a rational relationship between the administrators and the local community in such a way to maintain the active role and participation of them in all stages of cultural heritage governance and management (Perkin, 2010) (Smith, Morgan, & van der Meer, 2003).

The combinations of social, cultural, economic and environmental values in a cultural landscape creates a value system (Vos & Meekes, 1999) (Cristina Heras, et al., 2013) which could be interpreted through static and dynamic approaches. These interpretations can be used as guidelines for planning, governing, managing and measuring the results (Mitchell, Rossler, & Tricaud, 2009). Thus, the study of cultural landscape values and their interrelation creates a basis for integrated management approach aiming at sustainable use and preventive conservation of heritage (Cristina Heras, et al., 2013).

Accordingly, appropriate actions should be taken for capacity building for value understanding, mapping of stakeholders, defining the relationship between stakeholders and their participation, in the management context.

Valorization - Cultural endowments have crucial role in the development process. This process should be followed through modern management approaches rather than traditional way of thinking merely of preservation issues (World Bank, 2001).

The move from tangibles to integration of intangibles in cultural heritage acceptation, created a platform for changing the management approach from preservation to valorization. In the he Nara Document on Authenticity (1994), the shift was established by distinguishing between the intangible and tangible in cultural heritage. The integrated management approach, presented in Burra Charter by the Australian ICOMOS (1988 and updated in 1999) as value-driven approach, was defined to be based on a holistic and integrated analysis of cultural heritage property, which recently becomes an appealing solution for both safeguarding and valorization of cultural heritage resources used worldwide. This was developed in the UNESCO Convention on the Safeguarding of Intangible Cultural Heritage (2003) and even more in the case of the Council of Europe Framework Convention on the Value of Cultural Heritage for Society (known as FARO Convention) (2005), where the division between the tangible and the intangible was abolished and a more holistic definition proposed.

According to Greff (2004) local development requires integration of preservation and valorization of heritage. In other words, the development would be realized through an integrated management system in which preservation and utilization of heritage are considered concurrently.

Valorization consists in the exercise of the duties and in the discipline of the activities addressed to promote the cultural heritage knowledge and to ensure the best conditions for exploitation and public enjoyment, included promotion and conservation. Italian Decree on cultural heritage and landscape (January 22, 2004, n.42, modification of - March 26, 2008, n. 63) defines valorization of cultural heritage as exercising its functions and in the regulation of activities to promote the knowledge of cultural heritage and to ensure the better conditions of use and fruition of the heritage itself, even by disabled people, in order to promote the development of culture. It also includes the promotion and support of conservation of cultural heritage.

In order to have the command of preservation policies and sustainable use of the heritage, planning and management decisions would need to be taken in the context of the cultural dynamics of landscapes, and new development would need to be designed to support and enhance its values (Stephenson, 2008). Therefore, in a cultural landscape valorization indicates fruition of cultural heritage through any relevant activities, which would result in a richer social, cultural and economic conditions for the society, higher awareness and better environmental protection. This process indicates a dynamic approach to heritage which is broader than the static preservation approach. This approach makes the heritage as a part of the everyday life of the people (as experimenters) who attribute more values to the landscape as a result of the higher awareness and the sensible impact of the heritage in their lives. This approach to management considers the participation of different groups of stakeholders in order to valorize cultural heritage for the development of cultural landscape. It is consistent with the current acceptation of the landscape, discussed in the previous chapter.

Participation - Developing such a management approach requires not only precise identification of the values of the place but also comprehension of the characteristics and demands of the community who take part in the valorization process. In a general perspective, social structures and demands have been changed over the past decades because of several forces like globalization and democratization.

Accordingly, the citizens expect to influence the decisions affecting them by asking policy-makers to take them into account in the process of policy-making. These changes established systems of collective decision-making and brought forth demands for new forms of governance (Kooiman, 1993; Chhotray & Stocker, 2009). The failure of traditional hierarchical and authoritarian methods of government in response to the new context resulted in the development of a more practical concept of governance attributed to a rather open, collaborative and participatory style of government (Rosenau & Czempiel, 1992; Fischer, 2006). Participation can be thought of as an inclusive process in which stakeholders are involved in, and, more importantly, have some level of control over decisions that affect them (Arnstein, 1969; Stewart & Sinclair, 2007).

In the former approach, the communities were regarded as helpless and incapable of influencing their fate while in the latter approach citizens take responsibility for as much as possible of what happens around them. Thus, they are not viewed as clients who receive what others provide for them but are considered to be co-producers of their own education, safety, health, and well governed communities (Ostrom, 1993).

The decision-making process in a collaborative network is naturally influenced both by the common value system of the network and the individual value system of each partner (Camarinha-Matos & Macedo, 2010). Thus, the process of deciding something collectively requires attention to the issues as who can decide what, and how decision-makers are to be made accountable (Chhotray & Stocker, 2009). It can be a cooperation between public and private partners, by stressing the existence of varying possible patterns of interaction among them (Dewulf, Baarveld, & Smit, 2013; Swensen & Stenbro, 2013). Over the time, it has been clearer that a governance approach based on a participatory perspective is necessary for sustainable development policies.

Agenda 21 (UNCED, 1992) as an important document in developing approaches to social aspects and participation of stakeholders in the discourse of sustainable development emphasizes that "sustainable development must be achieved at every level of society. Peoples' organizations, women's groups and non-governmental organizations are important sources of innovation and action at the local level and have a strong interest and proven ability to promote sustainable livelihoods. Governments, in cooperation with appropriate international and non-governmental organizations, are asked to support a

community-driven approach to sustainability, which would include, inter alia: empowering women, respecting the cultural integrity and the rights of indigenous people and their communities, promoting or establishing grass-roots mechanisms to allow for the sharing of experience and knowledge between communities, giving communities a large measure of participation, establishing a network of community-based learning centres for capacity-building and sustainable development".

In the same document in chapter 26 it is mentioned that "in view of the interrelationship between the natural environment and its sustainable development and the cultural, social, economic and physical well-being of indigenous people, national and international efforts to implement environmentally sound and sustainable development should recognize, accommodate, promote and strengthen the role of indigenous people and their communities".

The review of the policy and academic documents acknowledged that culture could foster local community participation through enabling the local community to realize the global models of development at local level. Therefore, culture is a strategic concern in management of cultural landscapes which can motivate community participation for sustainable development. As mentioned in agenda 21 for culture (UCLG, 2004) culture in local governance will empower people and places to become actors of globalization by generating new meaning without losing the identity instead of being threatened by globalization.

The local community can take part in both tangible and intangible heritage fruition as considered in valorization process. According to Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003) "communities, in particular indigenous communities, groups and, in some cases, individuals, play an important role in the production, safeguarding, maintenance and recreation of the intangible cultural heritage, thus helping to enrich cultural diversity and human creativity".

From the 1990s, an increased focus on community participation (Smith, Morgan, & van der Meer, 2003) and the inclusion of intangible values have enabled a more holistic understanding of cultural heritage (Brown M. F., 2005). In Declaration on the Role of Sacred Natural Sites and Cultural Landscapes in the Conservation of Biological and Cultural Diversity, (UNESCO, 2005) the important role of indigenous peoples and local communities as custodians of sacred natural sites and as holders of traditional knowledge, which is fundamental for the preservation of biological and cultural diversity is acknowledged. Moreover, in the Florence Declaration on Heritage and Landscape as Human Values (ICOMOS, 2014) and the EU Presidency conference on Heritage Commons towards a Participative Heritage Governance in the Third Millennium (2014) the social dimension of heritage, community-led development, and the involvement of local communities in heritage management has been emphasized. The latter has been considered as a driver for a more effective management and governance of multifunctional landscapes. In the same vein, in it is stated by scholars that the governance and management of a cultural landscape require a bottom up approach, through the active participation of local communities (Murzyn-Kupisz & Dzialek, 2013; Yung & Chan, 2011; Selman, 2004). The engagement of the local community in the governance and management of the landscape will integrate the traditional knowledge and the manifold relations people have towards the perceivable environment and the symbolic meaning it generates, offering valuable considerations for more sustainable planning and management for future landscapes (Antrop, 2005; Millar, 2006).

### **3.3** Challenges of management in rural cultural landscapes

The need for a participatory governance and management approach in a cultural landscape is even more evident in the case of rural cultural landscapes. The reason is that the concepts of rural character and perceptions of rurality are often intertwined with the close rural community connections (Halfacree, 1995). This could not only be considered among the community itself but also between the community and the place (Antrop, 2005). Place attachment reflects the level of social involvement and individual commitment to place, particularly in rural communities where residents are more likely to be satisfied with their community than urban inhabitants (Hummon, 1992). It refers to a positive emotional bond that develops between individuals or groups and their environment (Giuliani & Feldman, 1993; Lokocz, Ryan, & Sadler, 2011). Therefore, a management approach consistent with the rural cultural landscape characteristics requires the inclusion of what influences place attachment, social involvement and individual commitment.

Accordingly, rural cultural landscapes need an integrated management system bearing a vision of joint economic and cultural development in the medium and long terms (Palang, Helmfrid, Antrop, & Alumäe, 2005). This approach is functional for improving the cultural and economic performance of the area and enhancing the territory in terms of cultural knowledge, social belonging, promotion of tourism and entrepreneurial development (Badia & Donato, 2013).

From environmental protection standpoint, in case of many rural cultural landscapes around the world (Berkes & Davidson-Hunt, 2006), local people have incentives to conserve biodiversity when their livelihoods depend on a multitude of products and values produced by biodiversity.

As emphasized in Conclusions and Recommendations of the Conference on Linking Universal and Local Values: Managing a Sustainable Future for World Heritage in Amsterdam (UNESCO, 2004) "management systems consider varied opportunities for social and economic development through conservation addressing the needs of local peoples, and examine the prospects for involving the local communities in managing the area around a site. Scientific research and interdisciplinary work linking culture and nature in theory and practice as a basis for management systems be strengthened, particularly with a view to reinforcing dialogue between indigenous and scientific knowledge holders to enhance biodiversity conservation and to transmit local and indigenous knowledge by education". Therefore, raising the awareness among indigenous people about the role of cultural and natural heritage conservation in social and economic development and creating real opportunities on that basis has to be considered as a part of the management approach.

The management of rural cultural landscapes as areas with specific characteristics, significance and demands face several concerns. It is important to identify and consider the challenges in order to be able to convert them to opportunities and for better preservation of the area. Otherwise, the challenges can negatively become threats for those delicate areas resulting in the losing the local identities and values.

Over time landscapes underwent a variety of transformations, demonstrating different aspects of the relationship between man and nature: "awe and respect of man for nature, that makes his survival possible; man' s efforts to conquer nature, making his survival easier and more secure; and lastly, the irrational and complete imposition of man over nature in present times, aiming to maximize the exploitation of natural resources, without realizing what this means for future generations" (Papageorgiou, et al., 2008).

Many rural areas are being abandoned and depopulated since people migrate to urban areas for many reasons, including agricultural technology, industrial technology, and the hope of changing ones economic circumstances (online encyclopaedia of National Geographic). Moreover, ignoring the values and disconnection with the history and traditions in a rural cultural landscape results in disappearance of rurality character of the area losing the sense of identity.

Issues regarding understanding and awareness, global changes and mass tourism are discussed hereinafter as major concerns in management of rural cultural landscapes.

*Understanding and awareness* - A common challenge in such places comparing to urban areas, is the education composition of indigenous inhabitants which necessitates a more structured awareness raising process and planning for local community participation. In this regard there is a need to build the foundation of collective management through a stepwise awareness raising procedure.

The lack of awareness can also be a challenge in the realm of policy making and management. The imprecise interpretation of the area's reality as separate elements instead of a holistic system of cultural land natural features according to Terkenli (2001), is underlain by "the fact that no integrated, comprehensive theoretical and analytical frameworks have been thus far formulated that adequately address landscape study, assessment and planning". This would result in a static model of significance as a representation of cultural landscape values with no consideration of the cultural dynamics. The consequence would be the ignorance of the hidden potentials in the forms of cultural tangible and intangible features. However, if these potentials are identified and valorized, there will be a shift towards social and cultural development (Opschoor & Tang, 2011). The preservation and valorization of the heritage has to be optimized in an equilibrium with each other, in such a way neither to consider the cultural landscape as a museum which has lost its functions nor an evolving system that substitutes all the intrinsic values with the new characterizations (Volpe, 2015). However, in a reciprocal combined conservation and valorization approach, conservation is considered to be precondition for valorization provides a steady rhythm of conservation without the need to costly restoration operations (Donato F., 2013).

It is important to consider the integrated approach not only towards cultural features and values but also regarding the dimensions of sustainable development and their interactions. Still in many countries there is tendency to focus more on one dimension, like economic, than the others. The parallel development in all the aspects consolidates the infrastructures of sustainable development and balances the rationale and homogenous use of resources. This approach prevents focusing on one-dimensional development resulting in ignorance and attenuation of the other resources (Bruckner, 2009).

Different perceptions and strategies of sustainable development according to Omann and Rauschmayer (2011) bring about conflicts or tensions at different levels: intra-individual tension or the conflict with individual values, intra-societal tension or the conflict with the society who might choose unsustainable strategies, intergenerational tension arisen from the strategies support caring for next generations, which inhibit current needs and vice versa.

Referring to the previous discussions sustainable development planning has to be on long-term scale. Short-term development plans emerging from ignorance, power conflicts or other political reasons, endanger the sustainability of the cultural landscapes (Bruckner, 2009).

Another challenge arises from the ignorance of the close relation between human and nature in cultural landscapes. According to Agenda 21 (UNCED, 1992) people living in rural areas have developed over

many generations a holistic traditional scientific knowledge of their lands, natural resources and environment. All the traditional knowledge of the indigenous people regarding production, material and construction techniques, land use, etc. are compatible with the environment, and so helpful in environmental protection. Therefore, recognition of the indigenous people values, traditional knowledge and resource management practices with a view to promoting environmentally sound and sustainable development is important to be considered in an integrated management system.

*Global changes* - Rapid modernization, globalization, urbanization and climate change would result in the decline and, in some cases, loss of cultural heritage including traditional building crafts, artisan skills and materials production (Engelhardt & Rogers, 2009). The combined effects of such driving forces have created various expressions and pace of changes in different periods. Moreover, the influenced the perception of people about the landscape (Antrop 2005). The cultural landscapes are affected by the modern changes and unsustainable development patterns both in their physical reality and in intangible features. Thus, the main concern today is finding solutions to bring together these changes with the preservation of valuable features in those landscapes (Roca, 2010).

According to ICOMOS Charter on the Built Vernacular Heritage (1999), "due to the homogenization of culture and of global socio-economic transformation, vernacular structures all around the world are extremely vulnerable, facing serious problems of obsolescence, internal equilibrium and integration". Vernacular building is the traditional and natural way by which communities house themselves. The survival of this tradition is threatened worldwide by the forces of economic, cultural, and architectural homogenization. In addition, rural depopulation may leave buildings disused and perhaps abandoned to people who do not see or care about their inherent value. While in the past, the use of materials and labour was strictly local and bound to tradition, nowadays, the use of new technologies and building techniques has introduced elements and styles that are totally foreign to the local environment. The new imposes itself on the old and on the surrounding landscape and, while ignoring any reference to typologies, layout, building techniques, it has a strong visual impact on the landscape.

Globalization is resulting in a loss of traditional knowledge, particularly among the younger generations in the region. Skills which are required to create, maintain and present cultural heritage in an authentic manner are at risk (Engelhardt & Rogers, 2009). "Loss of the sense of place of the region's heritage sites" is one of the consequences of "inappropriate reconstruction processes which homogenize their unique characteristics" (Engelhardt & Rogers, 2009). The picture of culture and development and their multiple interactions becomes particularly difficult to grasp and deal with in the age of globalization. Undeniably, "globalization threatens to homogenize culture, but at the same time it gives opportunities to express and emphasize cultural diversity" (Loulanski, 2006).

The challenges of management become more peculiar in the case of WHSs considering their universal values, special interactions between different groups of stakeholders and higher level of cooperation among different disciplines.

*Mass tourism* - Tourism is considered an income generator, but on the other hand, it can endanger cultural landscape physical fabric as well as its identity and authenticity (Palang & Fry, 2003). The concerns about tourism can mainly emerge from two issues. First issue is related to the presentation of heritage by the tourism industry for the benefit of its members without involving those responsible for the safeguarding of cultural heritage. The result of this disciplinary detachment would be the impairment of both the physical fabric of a heritage property and its intangible aspects (Engelhardt & Rogers, 2009). The second issue is receiving a massive influx of tourists in a certain place, referred as a mass tourism. Mass tourism is known to be large-scale, externally controlled and concentrated in

high-density tourist strips (Weaver, 2001). While alternative tourism, as Clarke (1997) defined was supposed to be small-scale, locally controlled, conducive to the formation of linkages with other sectors of the local economy, and dispersed within low-density local neighbourhoods. Where mass tourism was considered to be unsustainable, alternative tourism was thought to be inherently sustainable. Although mass tourism is referred to be unsustainable by many scholars, it can be considered as the indication of many internal capabilities and regional attractions bound to a specific place. In other words, it can be considered as a discovery of peculiarities of a place for further planning for alternative tourism. Therefore, through a specific planning for the tourism and visitors, the relevant capabilities would be used in a rational manner resulting in local development without endangering any elements of the area.

The tourism concerns are more relevant to case of WHSs for their universal values and notability. The WHSs locating in rural areas are more prone to the negative impacts of mass tourism regarding the rurality characteristics and mostly vulnerable state of fabric and social issues.

*WHSs* – The above-mentioned concerns become even more evident when a rural cultural landscape is considered as a World heritage Site. World Heritage Convention (UNESCO, 1972) addresses the protection cultural and natural heritage of "outstanding universal value", with thorough understanding and respecting the whole range of values including local values, intangible and spiritual values in the process of identification and sustainable management of World Heritage. In Conclusions and Recommendations of the Conference on Linking Universal and Local Values: Managing a Sustainable Future for World Heritage in Amsterdam (2004) it is stated that World Heritage properties are dynamic entities where cultural and social values evolve. They should not be frozen in time for purposes of conservation. Indeed, the continuity between the past and future should be integrated in management systems accommodating the possibility for sustainable change, thus ensuring that the evolution of the local value of the place is not impaired.

Therefore, management approach for rural cultural landscape would be based on intertwined conservation and valorization process. It has to embed natural heritage, cultural heritage in both tangible and intangible forms as well as the ways in which human being interact with nature. On the other hand, the management of World Heritage Rural Cultural Landscapes are more complicated since rurality features make those places more fragile against the above-mentioned concerns if not well managed.

Participation gains more importance in the case of World Heritage Rural Cultural Landscapes considering that the economic activities and development has immediate connections with local community involvement, environmental protection can be perused through traditional knowledge and social development has strong connections with social capital pertaining to rural characteristics. In the same vein, Operational Guidelines for the Implementation of the World Heritage Convention (UNESCO, 2015) emphasizes that the outstanding universal value of a property should be preserved, preferably through participatory means. Participation becomes more central to valorization process in Would Heritage Rural Cultural Landscapes since the local community and their interactions with their living context are considered as part of the universal values. Thus, a key action for the participatory management is developing competencies among actors of the WHSs (Donato and Badia, 2013) through awareness raising mechanisms like education and training programs.

The inhabitants in such areas is often comprised of indigenous population with not a high literacy and awareness levels. Therefore, realization of participatory management requires a stepwise process starting from awareness raising programs in order to enhance the understanding of heritage

significance and its potential impacts of the lives of local community. This preliminary step helps to widen the vision of local community to consider the heritage as a part of daily life and a resource through which their region would be economically, socially and culturally developed. The awareness raising programs result in better conservation of the heritage by local community based on understanding and awareness. In addition, valorization programs would gain more public support since local community find them influential on the improvement of different aspect of their life.

Obviously, management plans have to be adopted and localized for the World Heritage Rural Cultural landscapes. The proper and consistent management approach based on the realities and characteristics of rural cultural landscapes with universal values brings about opportunities to deal with the global or external concerns.

Many of those places are located in small remote geographical areas with more probability of being impacted by external changing forces, which would transform the rural cultural landscape coordinates in the discourse of development. In contrary to their seeming vulnerable character against the mentioned concerns, they can be sustained through the same characters under a proper management system. It can enable the World Heritage Rural Cultural Landscape to have a development scheme emphasizing on the roots without being overwhelmed with homogenization and losing the local identities. Thus, the valorization approach is a help to make a development model based on local cultures, traditions, identifies etc. by integrating different aspects of world heritage rural cultural landscapes. In the course of paying attention to the concerns more attention should be paid to strengthening the rurality feature like the bonds among the local community and with the place, the natural friendly products of the rural cultural landscape, more environmental protection through traditional knowledge, raising awareness through registration as a World Heritage Rural Cultural Landscape, presenting national cultural competencies in international community and developing a more targeted tourism plans to avoid the threats caused by mass tourism.

Considering the geopolitical area in which the empirical part of this research is developed, it is essential to analyze the above-mentioned issues with regard to the developing countries.

*Developing countries* - The management model for the cultural heritage sector must evolve from a careful analysis of the characteristics of the country in which cultural heritage is located (Donato & Gilli, 2011). Likewise it is stated in Rio Declaration (1992) that "standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries". In other words the management models and practices developed in some countries, has to be localized based on the careful study of the country and the context to which the cultural heritage is belonging. Hereinafter, the abovementioned issues are going to be discussed in the case of developing countries to reflect the specific concerns related the case study of this research located in Iran.

According to the World Bank classification, countries with low or middle levels of Gross National Product (GNP) per capita and according to United Nations countries with low Human Development Index (HDI) relative to other countries, are considered as developing countries. Many of the developing countries are located in Asia with its specific continental and cultural attributes referred to as eastern culture.

As stated in Hoi An Protocols for Best Conservation Practice in Asia (Engelhardt & Rogers, 2009), "many countries in Asia are custodians of important heritage sites reflecting ethnicities, religions and cultures different from those of the modern state. It is usual, for instance, for Islamic nations to have

within their borders valuable Hindu and Buddhist sites". In many cases in the developing countries, the concrete value system for cultural and natural heritage is not well established among different stakeholders. Moreover, in the evolutions of traditional landscape there is always a transition generation who does not have appropriate comprehension of the elements of the past cultural landscape and detached from the material and immaterial values of it. This is a barrier against preservation and sustaining the cultural landscape (Palang & Fry, 2003). All these concerns leads to inadequate stakeholders understanding of the need to conserve and valorise heritage resulting in ignorance and deterioration of the heritage.

The concerns related to cultural landscape management in this area are often different from other parts of the world; "they reflect a combination of specific environmental/climatic impacts, natural disasters, local pressures to upgrade the built and rural environment, and pressures caused by development projects". More than any other type of infrastructure development, the expansion of road networks and other infrastructure works associated with development in rural areas of Asia is impacting on archaeological sites, cultural landscapes and heritage monuments (Engelhardt & Rogers, 2009).

Much of the material patrimony is located in small or medium-size localities, which do not have adequate resources to maintain and manage major heritage. The lack of regulatory controls, inadequate financial or human resources are other important issues undermine the management of cultural landscapes in developing countries. Institutional weakness also results from the absence of interactions between government structures and the society, regarding participation in cultural heritage management and in the natural, economic, and social causes of patrimony loss (Cernea, 2001).

A deficiency in management perspective in developing countries which can largely affect the valorization of cultural landscapes is the lack of strong link between culture and creativity in developing countries, "where there is a general lack of support for artists, the creative crafts are gradually disappearing, there is no protection for artistic property or, worse, existing protection is counterproductive, there are no local markets to encouraged the emergence of cultural goods and, generally speaking local governments fail to take account of such productions" (OECD, 2005).

The other issue refers to the state of protection, conservation, and restoration. Often conservation and adaptive reuse projects trivialize authenticity of the heritage, spatial layout (e.g. the construction of high-rise buildings inside a low-rise historic precinct) or traditional materials. These interventions usually have negative impacts on the spirit of place.

The trend of economic development has been evolved in rural cultural landscapes. While agricultural activities have been considered by many policy makers as the main economic driver in rural areas literature suggests that farming does not, anymore, have intensive effect on economy and community in such areas (Lapping, 2006; Rowley, 2003). Thus, the focus of attention to agricultural activities as a pillar of economy in rural cultural landscapes has been broadened to cultural values and resources. Although many financial policy decision makers in developing countries regard cultural heritage as exclusively a net consumer of budgetary resources, rather than as potential contributor to economic growth, it is evidenced that a country's cultural heritage have a substantial, intrinsic economic value (Hassan, de Trafford, & Youssef, 2008). Especially in rural cultural landscapes, intertwined culture, and cultural resources have substantial role in direct revenue generation or from creation of job opportunities. Moreover, cultural heritage mainly can foster entrepreneurial activities in rural cultural landscapes. As Marini and Mooney (Marini & Mooney, 2006) declare, entrepreneurial economics draw their incomes mainly from the valorization of local resources.

As argued by Hassan, et al. (2008) in many developing countries "the economic value of heritage, however, tends to remain only potential and lay passive, remain unused, or little used, or even be hijacked by other sectors, as long as it is not deliberately actualized, mobilized, and channelled. Alternatively, with proactive conservation, wisely oriented modern management, and sound investments, this intrinsic potential can be harnessed, activated, and made to contribute to development in both direct and indirect ways".

All he developing countries are in the transition process to the new situation. It is important to pay more attention to the cultural and social derivatives for adjusting the change to the local identities. Weaver and Jordan (2008) argue that supportive constituencies are required to enable policy makers to take the risk of starting fundamental changes.

Given these points, the pure and untouched rural cultural landscapes in many developing countries, despite the existing concerns and deficiencies, are potential resources for economic development, social inclusion, cultural and bio-diversity preservation and cultural development. In case of WHSs, they are outstanding drivers for being part of the international community. They still have maintained their original values not being affected so much by globalization, urbanization, and climate change impacts. Thus, identification of intrinsic and original values and valorization of heritage resources through local community involvement can help to pave the way towards sustainable development.

The above-mentioned points are going to be incorporated in the general visions of management of cultural landscape in order to unlock the potentials of the cultural landscape.

### 3.4 Setting visions and theoretical framework

Based on the literature reviewed, this section is focused on concluding visions for management of cultural landscapes for sustainable development. The subsequent discussions summarize the considerations by which sustainable development dimensions would be realized in the realm of management of cultural landscapes.

This is strongly acknowledged both by the academic and policy literature that culture plays an important role in achieving sustainable development goals. This is concluded from the argument of both groups who consider culture either as the fourth pillar of sustainable development or crosssectorial to the other sectors. In the same vein, cultural heritage, as an important representation of culture, is believed by many scholars and policy documents to be a driver for sustainable development. The acceptations of culture and cultural heritage in the realm of sustainable development make cultural landscapes peculiar areas to be considered for sustainable development. They are especial for their inherent cultural and natural peculiarities and the importance of human interactions with nature in creating the existing landscape. Cultural heritage is considered the main constituent of the reality of many cultural landscapes however, they are considered as a part of the heritage according to another viewpoint. As shown in the previous paragraphs cultural landscapes have intrinsically interfaces with sustainable development dimensions. The interfaces become broader in the case of management of rural cultural landscape. This fact is evidenced by the rurality characters of rural cultural landscapes embodying especial social structures and cultural features. The synergy of cultural heritage elements with sustainable development dimensions is more extensive in rural cultural landscapes considering the rurality features and traditional characteristics.

Given the mentioned points, the traditional approach to management of cultural heritage has been broadened to integration of conservation and valorization, which means concurrent preservation and sustainable use of heritage without damaging its fabric, values, and authenticity. This evolution changed the visions of cultural heritage management to a more dynamic perspective indicating a transition from separate heritage elements (architecture, archeology, and movables) to landscapes, urban and rural areas and the whole historic environment. Moreover, the recent successful practices of cultural heritage management indicate "clear move toward a people-centered, functional approach shifting its focus along three interrelated axes: from monuments to people, from objects to functions and consequently from preservation to sustainable use and development" (Loulanski, 2006).

The conceptual study of cultural landscapes makes it clear that the evolved management approach is strongly consistent with the inherent features of such places. Cultural landscapes are dynamic systems where the conservation objectives have to include not only the existing realities but also the evolutions, changes and interactions in a sustainable way (Engelhardt & Rogers, 2009). Therefore, the purpose of safeguarding cultural landscapes is to preserve them, not only as historical evidences, but also as living systems that can be considered as future paradigms for development.

On the other hand, the focus of heritage management is shifted from tangibles, to inclusion of intangible values. Consideration of intangible values sheds light on the several hidden potentialities of heritage, which enhance their function in a cultural landscape and support the valorization approach. The holistic approach to management of cultural landscape is inclusive of different aspects of different values, which makes a platform for valorization approach.

The literature reviewed suggests that a holistic approach to management of cultural landscapes integrates values, functions, and stakeholders.

Inclusion of stakeholders in the management of cultural landscape can be achieved through their active participation. The knowledge and traditional practices of indigenous people and their communities plays a vital role in environmental management. As demonstrated by (Cantwell & Adams, 2003) local knowledge can often significantly improve the methods conventionally used in landscape planning and management. Development projects that impose visions from the outside ignore the capacity of people to contribute to the well-being of their communities. Therefore, it is necessary to invest largely on the people and giving them the awareness instead of inducing them by the fear of being overwhelmed (Donato & Badia, 2008).

In addition to the academic literature, the policy documents suggest indications of evolutions in the management of cultural heritage.

Heritage policies of UNESCO, ICOMOS, Council of Europe and European Commissions show a move towards value-oriented approach. The (European Commission, 2004), Framework Convention on the Value of Cultural Heritage for Society (Council of Europe, 2005), Recommendation on "reconciling heritage and modernity," made by the Congress of Local and Regional Authorities (Council of European, 2006), UN System Task Team on the post-2015 UN Development Agenda (UNESCO, 2012), Burra Charter (ICOMOS, 2013), The Florence Declaration on Heritage and Landscape as Human Values (ICOMOS, 2014), are the evidences of the recent international orientations towards cultural heritage management in which the values and impacts of heritage are addressed.

The integration of values implies social, cultural, economic, and environmental values. The values are recognized on the basis of individuals' (stakeholders') perceptions and are realized through an

experimental approach in the course of the daily life experience of landscape and is intensified throughout participation. In Declaration on the Role of Sacred Natural Sites and Cultural Landscapes in the Conservation of Biological and Cultural Diversity, (UNESCO, 2005) the important role of indigenous people and local communities as custodians of sacred natural sites and as holders of traditional knowledge, which is fundamental for the preservation of biological and cultural diversity is acknowledged. Moreover, in the Florence Declaration on Heritage and Landscape as Human Values (ICOMOS, 2014) and the EU Presidency conference on Heritage Commons towards a Participative Heritage Governance in the Third Millennium (2014) the social dimension of heritage, community-led development, and the involvement of local communities in heritage management has been emphasized.

In this regard UNESCO Historic Urban Landscape Recommendation (2011), elaborates a landscape approach which would be useful in developing the management vision based on preservation aspects as well as socio-economic impacts, intangible features of heritage, environmental aspects, inclusion of different stakeholders and heritage communities.

Agenda 21 (UNCED, 1992) declares that sustainable development must be achieved in every level of the society and emphasizes on different groups of people to be included for reaching sustainable development goals.

According to the definition of cultural landscape, it is realized by the nature, human, and the interaction between them. Therefore. It seems to be necessary to consider a consistent regional planning with cultural and cultural heritage management policies. Council of Europe Conference of Ministers Responsible for Spatial/Regional Planning, Territory and Landscape (Council of Europe, 2010) expresses visions for regional planning which are relevant to those of cultural landscapes. It summarizes those visions as democratic (ensure the participation of the people concerned and their political representatives) comprehensive (integrate various sectorial policies in an overall approach), functional (consider the existence of regional consciousness based on common values, culture and interests) and longer term oriented (take into consideration the long-term trends and developments of economic, social, cultural, ecological and environmental phenomena and interventions).

It is important to recall that the discussions in the former paragraphs reveals that there are several concerns regarding cultural landscape management. Lack of understanding and awareness, global changes and mass tourism are the concerns that can overwhelm a cultural landscape by creating dangers to the identity and inherent values. However, the values and features of the cultural landscapes can strengthen those places not only to survive but also to become unique in a global change. This is more remarkable in the cultural landscapes with rurality characteristics. Participation of the community is helpful in dealing with the concerns of cultural landscape management. Through participatory management, it would become easier to raise and sustain the level of understanding and awareness towards a value driven management. Participation can make the cultural landscape mobilized in valorising the heritage of a cultural landscape. It makes it possible to develop schemes to emphasize the roots of the society in order not to be overwhelmed by globalization impacts.

Both literature and policy affirm that a value-driven approach to management of cultural heritage is a way to achieve sustainable development goals in cultural landscapes. In this regard, involvement of local community is a key approach to realize the valorization and value driven management. The collective management is a response to the modern society, which is demanding to influence the decisions affecting their lives. It is, markedly, consistent with the current international policies in the fields of sustainable development, cultural heritage management, and regional planning. Referring to

theoretical investigations, the process of developing a value-driven management approach for a cultural landscape is shown in Figure 3.2.

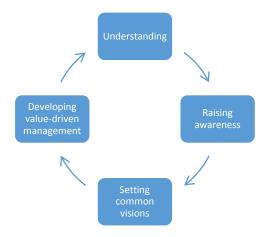


Figure 3.2. Process of developing an integrated management approach

As shown in the above figure understanding of values, creates knowledge for improving awareness raising process. Subsequently, the higher level of awareness among different groups of stakeholders makes it possible to set common visions for participation enhancement. Through collective activities, a platform is established for developing a knowledge-based management. As a result, a value-driven management would be developed based on awareness, participation and valorization which in turn creates a flow of knowledge that promotes the value understanding.

Hereinafter a general value analysis of cultural landscapes with regard to the sustainable development dimensions is presented the Table 3.1. The values are organized and divided into subdomains in order to find their correlation with the dimensions of sustainable development. It is worth noting that according to the focus of this research on cultural issues a separate classification is considered for cultural values. As discussed in previous sections there is a debate on considering culture as the fourth pillar of sustainable development and it is not yet articulated as the fourth pillar in policy documents.

According to the theoretical investigations, cultural heritage significantly fosters sustainable development in a cultural landscape through promoting social and cultural capital, cultural ledeconomy, and environmental protection. In other words, valorization of cultural heritage in a cultural landscape contributes to the protection of cultural diversity. Strengthening the sense of identity in terms of attachment to the place and history, social inclusion, cultural creative activities, participation, awareness raising and environmental protection. It helps economic development through cultural tourisms, cultural creative activities and products based on cultural atmosphere and traditional and creating other job opportunities.

Valorization of cultural heritage and integrating values would be realized through adopting appropriate strategies. Those strategies would indicate identification and awareness of values among all the stakeholders from local community and visitors to policy makers and development planners in all disciplines including non-cultural sectors. The process of awareness raising, according to (World Bank, 2001) has to be incorporated in planning, financing, and institutional mobilization. It is an important part of preservation process and valorization through a collective preparedness and reaction.

Values/Impac ts domains	Sub-domains	Created by			
nic	Tourism industry	Regional attractiveness, Place branding (in case of WHSs), Regional competitiveness			
Economic	Cultural products supply	Skills, Traditional knowledge			
Eco	Jobs opportunities	Labor market (education, tourism services, conservation and restoration, other)			
	Sense of attachment to the place	Identity			
	Social bonds inside local community	Social cohesion, Attachment to the place, Identity			
Social	Social bond with non-local	Place branding, Regional attractiveness			
Soc	Innovation and creativity	Traditional knowledge and practices			
	Voluntary activities	Social cohesion, Identity or sense of place, Level of awareness			
Cultural	Awareness	Understanding of values (Knowledge)			
Environmental	Environmental protection	Traditional skills, Traditional knowledge, Regional competitiveness, Cultural heritage related to environment features			

Table 3-1. Values: Cultural heritage values in cultural landscape management

Culture-led economic development should take into account the protection of cultural assets that are often fragile and constitute a unique and non-renewable capital. It has to be developed through capacity building for sustainable cultural tourism, cultural and creative industries, and cultural institutions as powerful economic sectors that generate decent employment, stimulate local development, and foster entrepreneurship. Moreover, traditional knowledge and practices have to be integrated in sustainable environment schemes and seeking synergies between traditional environmental practices and high technologies. Promoting intercultural dialogue should be promoted to foster social cohesion. Also capitalizing on the potential of the arts promotes social cohesion and develop entrepreneurship, especially among youth, and in post-conflict and post-disaster situations.

Cultural landscape management	and sustainable development
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Strategy	Area of action	Means of action
Capacity building	Awareness raising	Education, Training, On-site training for visitors
	Participation	Awareness raising, Empowering marginalized groups, Sense of attachment to the place
	Social inclusion	Promoting dialogue among stakeholders, Local community involvement
	Culture-based economy	Development of cultural tourism, Cultural products, Handicrafts, Innovative activities, Entrepreneurship
	Environmental protection	Integrating traditional knowledge and practices, Seeking synergies between traditional environmental practices and high technologies, Awareness raising, Promoting cultural based economy
Reinforcement of legal dimensions and technical system		Updating and developing policies and strategies, Monitoring, Competencies

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Table 5-2. Strategies	tor an integratea	management approach
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Table 3.2 summarizes the strategies, the areas of action, and the means of actions for fostering valuedriven management. The above-mentioned visions and strategies make the theoretical framework, which are going to be used in the empirical part of this research. They would be used to study and analyze the situation and state of management of Takht-e Soleyman WHS in Iran. This framework would be helpful in finding the possible gaps in the management context of the case study, analyzing the reasons and identifying the ways forward.

This is worth mentioning that there is a probability for further adjustment and completion of the above visions in general and for individual cases.

# 4 The case of Takht-e Soleyman cultural landscape

### 4.1 Takht-e Soleyman World Heritage Site: an introduction

#### 4.1.1 Locality and boundaries

The case study of this research is Takht-e Soleyman cultural landscape in Iran. Takht-e Soleyman, which is recognized as a WHS by UNESCO in 2003 is located in Azerbayjan province in North-West of the county (Figure 4.1). Its distance from the nearest town, Takab, is 45 km and from Tehran, the capital city of Iran is about 540 km. The nearest village to the site is Nosratabad, about 1.5 kilometers to the west of the main historical site.



Figure 4.1. Location of Takht-e Soleyman in West Azerbayjan province in Iran

The boundaries of the area which is going to be analyzed in the empirical part of this research is confined within the defined boundaries of UNESCO WHS. This zone embodies several entangled cultural and natural features, which create the outstanding universal significance of this area.

# 4.1.2 Introduction to Takht-e Soleyman WHS

#### Historical background

"This name was given to the site in the medieval and modern times, which means the 'Throne of Solomon', after the name of the biblical prophet who, according to ancient texts and legends, possessed supernatural powers. During the Sassanian period (224-641 AD), the site was called Azargoshnasb/ Athur-Gushnasp (Fire of the Knights). It was known to the historians of the early Islamic period as Shiz. During the Ilkhanid period in the 13<sup>th</sup>-14<sup>th</sup> centuries, the site was called Saturiq" (ICHO, 2002).

The hollow, volcanic mountain, called Zendan-e Soleyman (Solomon's Prison) is surrounded by the remains of temples or shrines, dated to the first millennium BC (Osten & Naumann, 1959). These are associated with the Mannaeans, who ruled the region from 830 to 660 BC. The crater was once full of water, but has later dried out. Some constructions on the mound itself dates back to the early Achaemenian dynasty (559–330 BC), and there are traces of settlement activity from the Parthian period. With the arrival of the Sasanians (5<sup>th</sup> century AD), Zendan-e Soleyman lost its importance in favor of Takht-e Soleyman (Naumann, 1977).

The site became a royal Zoroastrian sanctuary in Sasanian period, and it was the most important of the three main Zoroastrians sanctuaries. "The construction of this temple site coincided with the introduction of Christianity as the main religion in the Roman Empire. The need to strengthen Zoroastrianism can thus be seen as an effort to reinforce national identity as a counterpoint to Christianity in the Roman world. The importance of Takht-e Soleyman was further increased with the introduction of the cult of Anahita. The royal ensemble was surrounded by an urban settlement on the plain. The site was destroyed by the Byzantine army in 627 AD, a counter measure to the Sasanian attack to their territories" (ICHO, 2002).

"During the Islamic conquests several generations later, an accommodation was made with local Muslim rulers, and Zoroastrian services continued to be observed on the site. It is not clear when the site ceased to operate as a temple (perhaps sometime during the 10<sup>th</sup> century). Over the years, it was damaged by natural causes such as earthquakes, precipitation, natural fluctuations of weather, and regular inundation of the lake as well as by local residents seeking to reuse building material for new construction" (Encyclopædia Britannica Online, 2016). "Takht-e Soleyman regained its importance as the palace of the Mongol IlKhanid dynasty in the 13<sup>th</sup> century. Although they reused and renovated several of the pre-Islamic structures, the II-Khans largely erected new buildings. The reconstruction phase included the fire temple and the western Iwan, as well as new structures around the lake. After the Ilkhanid period, from the mid-14<sup>th</sup> century, the site was abandoned and gradually fell into ruins. Inundating water from the lake washed gradually out the mortar from the joints of the lower parts of the Fire Temple. The cavities thus produced between the bricks caused irregular sinking of courses of brick and stone which resulted in vertical cracks and fissures in the masonry. The fall of the dome of the Fire Temple as well as the vault of the West Iwan must have happened as a result of this process. A small occupation of the site in the 19<sup>th</sup> century was in its turn replaced by the new village of Tazekand (now called Nosratabad) at a distance of 1.5 km west of the Takht-e Soleyman (enclave C in Figure 4.2)" (ICHO, 2002).

The site of Takht-e Soleyman was noticed by the British traveler, Sir Robert Ker Porter in 1819, followed by other explorers. In 1937, the site was photographed by Erich F. Schmidt. He took the first aerial photographs of the site (Figure 4.3 and 4.4). In the same year Takht-e Soleyman was thoroughly surveyed by Arthur U. Pope and Donald N. Wilber. In 1958 it was explored by Swedish archaeologists

Hans Henning von der Osten and B. Almgren on behalf of the German Archaeological Institute. The first systematic excavation was undertaken by the German Archaeological Institute under R. Naumann and D. Huff, in the 1970s.

#### Elements of the WHS

In UNESCO evidence, Takht-e Soleyman is proposed as a single nomination centered on its main oval fortified site (no. 1 as seen in the Figure 4.2 below) protected within its double buffer zones (specific 'A' and landscape 'B'). The landscape buffer zone 'B' includes 6 other connected ancient complexes provided with their own specific buffer zones (2 to 7 except for no. 5 that is included in A) and an enclosed area 'C' allocated to Nosratabad village and its restricted expansion (Figure 4.2).

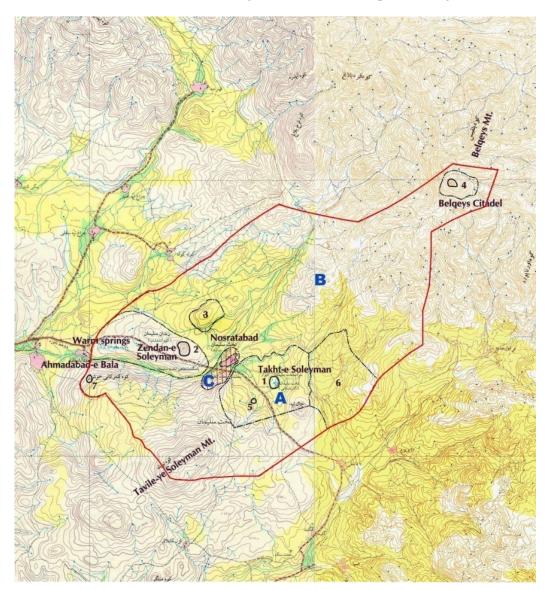


Figure 4.2. Takht-e Soleyman WHS core and buffer zones, Source: Iran Cultural Heritage Organization, 2002. Available at http://whc.unesco.org/uploads/nominations/1077.pdf

The nominated area has a landscape buffer zone, covering  $74 \text{ km}^2$ , enclosing the following nominated properties with their specific buffer zones:

- Takht-e Soleyman (No.1 on Figure 4.2), the main focus of the nomination: The site of Takht-e Soleyman is a fortified oval built around a natural lake situated in a valley surrounded by mountain ranges. Like the nearby and earlier site of Zendan-e Soleyman (Zendan Mountain), existence of the site is connected to the lake, a calcareous artesian well, whose sediments have made the site rise more than 60 meters above the ground level of the valley.

- Zendan-e Soleyman or Zendan Mountain (No. 2 on Figure 4.2), (in English: Solomon's Prison): It is a small volcano with ancient shrines around the top. At this place the artesian well went dry probably between 700- 500 BC and left only an empty crater-liked bed of about 80 meters depth (Figure 4.4). Zendan-e Soleyman is situated 3 kilometres to the west of Takht-e Soleyman. The height of this conical mountain above neighbouring lands is 97 to 107 meters with its opening diameter of approximately 65 meters. According to geological studies, the crater dates back to the Pliocene geological period. Later, there have been activities in form of spring and lake formation. These are the last evidences of a dormant volcano. Thus, springs flowing to the Aq-Darreh valley have warm waters containing many minerals, minerals that formed the mountainous mass of Takht-e Soleyman and Zendan-e Soleyman. The sedimentary layers of the springs are part of the natural Pliocene landscape. Travertine layers of the Zendan-e Soleyman Mountain have piled up on Miocene rocks, tightly pressing the mortar in the southern edge of the basin, close to where the Tavileh Mountain stands. Attempt to precisely determine the age of the mountains according to the piled minerals mass and the other geological hard materials has not been satisfactory because it is not known what changes the springs have undergone in terms of temperature, quantity of water flow and dissolved sediments and gas (ICHO, 2002).



Figure 4.3. Aerial photo of Takht-e Soleyman main site and its setting, Source: Archive of Takht-e Soleyman Site

*Figure 4.4. Aerial photo of Zendan Mountain, Source: Archive of Takht-e Soleyman Site* 

- Tepe Majid (No. 3 on Figure 4.2): It is an archaeological mound culturally related to Zendan Mountain.

- Belqeis Mountain with a citadel (No. 4 on Figure 4.2): This mountain is situated 7.5 kilometres North-East of Takht-e Soleyman site. On the highest part, there are remains of a citadel dating back to the Sasanian era, built in yellow sandstone. The explorations that have been carried out so far on the

site indicate that the citadel would have contained another fire temple. Its orientation indicates a close relationship with Takht-e Soleyman.

- Brick baking kiln (No. 5 on Figure 4.2): It consists of a series of ceramic kilns which produced glazed tiles and decorations for post-Sasanian monuments, especially in the Ilkhanid period (13th-14th cent).

- Old stone quarries (No. 6 on Figure 4.2): The kilns, belonging to the Sasanian period, are situated at about one km to the East of Takht-e Soleyman lake and fire temple. The extracted stones were used in the construction of the temple and its surrounding wall.

The area has only been partially excavated, and there is archaeological potential especially in the buffer zone, and also outside. The so-called Ahmad Abad Tumulus (No. 7 on Figure 4.2) to the west of Zendan-e Soleyman has been indicated as an example. Tumulus is a mound of earth and stones raised over a grave or graves.

#### Nosratabad village

Nosratabad village is located in mountainous areas and is of a foothill texture. Its texture has been affected by environmental-climatic determinants such as the form of the ground, cold mountainous climate, geographical directions, development barriers factors, material of the ground and vegetation, and has partly stepping appearance (Figure 4.5). The hindering nature of watercourses, slope, and roughness of the ground together with other mentioned factors have created a dense, compressed texture with tiny grading. The consequence of such a procedure is a form which man-made elements overcame the adjacent nature.

The interaction of the village physical reality with natural-climatic-environmental factors is observed in the colour, materials and components of the architecture. In the vernacular architecture, great attention to the optimum use of energy is observed. As an example, the height of the doors of the houses are less than 1.5 meters to save the heat inside the house. Brick networks have been installed on the outer side of windows as thermal insulation. Wooden roofs covered by local plants and thick brick walls are other examples that contribute to the identity of vernacular architecture. The dominant colour of the physical texture, due to usage of local materials, is in harmony with the context.



More than 65 percent of the preserved buildings of the village is residential. In the village, there is a health centre, administrative spaces including District Council, Registration Office, Village Council, Agriculture Jihad Office, a public library, a stadium and three schools. In addition, as for public utilities, two mosques and an old bath are existed. The formation of livestock space near living spaces has been influenced by livestock-based livelihood.

Figure 4.5. A view of Nosratabad village

The review of the distribution and location of utilities and activities in the village indicates that the public spaces have been mainly established out of the residential units. Most of the buildings related to the public utilities are new and residential places are mostly old. The old residential houses are preserved and the other old buildings are damaged and out of use.

Nosratabad village is about 200 years old. The last name of the village was Tazekand of which there is no trace left today. Considering the close distance of the village to the historical site of Takht-e Soleyman (1.5 km), the residents are mostly willing to introduce the village with the name of Takht-e Soleyman.

According to the statistics of Census Bureau of Iran, the demography of this village during different periods is as presented in the Table 4.1 below:

	1 2 2		0			
Item/Year	1966	197	76 198	86 1996	2006	2011
Population	802	909	9 650	5 838	803	980
Number of families	-	-	120	5 134	168	206
Growth rate (percentage)	1.26		-3.21	2.48	-1.38	

Table 4-1. Demography of Nosratabad village between 1966 and 2011

The location of Nosratabad village in Iran political administrative divisions is summarized in Table 4.3.

Table 4-2. Provincial division of Nosratabad Village

Village	Rural area	District	County	Province
Nosratabad	Nosratabad Chaman Takht-e Sol		Takab	West Azerbayjan

#### 4.1.3 Conceptual study of the elements of the main site

Fire and water have been among the respected natural elements for the Iranian people since ancient times. In pre-Islamic architecture, fire was present in the vicinity of water resources, without any harm to nature. Worship places of fire and water were built close to each other. Fire was conceived a divine messenger between the physical and meta-physical world. While, water was considered the source of life and was believed to be the human passage the purer world. Accordingly, volcanic regions were of particular interest, especially where there was the presence of water as it was the case of Takht-e Soleyman embodying Azargoshnasb Fire Temple next to Anahita Temple.

#### Anahita and divinity of waters

History shows that all the human civilizations have been created next to water resources. In the ancient myths and beliefs, regardless of their cultural context, water was believed to be the requisite of any being creation. It was considered as the source of birth, growth and the symbol of purification.

From geographical point of view, Iran plateau is located in dry land that is why water had supreme stand among people. Massive subterranean cisterns in dry central regions of Iran, along with various rituals to request water and rain, all point to the fact that Iranians not only equipped themselves with different tools and techniques to obtain water but also held various rituals and celebrations related to water. In addition to using water for meeting the general needs, water was considered to be influential spiritually and mentally (Tahmouri & Hoseinrazavi, 2013). It was believed to have different impacts on the human psyche and mind by bringing about fertility, freshness, brightness, cleanliness, prosperity, calmness, comfort, and mobility. With the same vision, in the ancient beliefs Anahita known as goddess of water, was worshiped, had prayers, and was offered sacrifices (Gaviri, 1993).

This goddess appeared more clearly in Zoroastrianism and the religion text of Avesta (Gaviri, 1993). Zoroastrianism was founded by the Prophet Zoroaster in ancient Iran more than 3000 years ago. Avesta includes the writings of Zoroaster known as the Gathas, enigmatic poems that define the religion's precepts, and the Yasna, the scripture. It was the official religion of Persia from 600 BC to 650 AD. This religion is characterized by its monotheistic aspect related to Ahuramazda, and it recognizes the conflict between good and evil forces.

Ahuramazda was worshiped by the early Achaemenids, whose rituals took place in the open on fire altars, without any temples. Artaxerxes II's devotion to Anahita is most apparent in his inscriptions, where her name appears directly after that of Ahuramazda and before that of Mithra. This is a remarkable break with tradition; no Achaemenid king before him had invoked any but Ahuramazda alone. In Parthian period, the trinity of Ahuramazda, Anahita and Mitra were worshiped. In Sassanid era, Zoroastrianism was the official religion in Iran. The Sasanians also recognized the cult of Anahita. A temple of Anahita is included in the complex of Takht-e Soleyman (Encyclopædia Britannica Online, 2016).

In Avestan language, the name Anahita is combined with two adjectives and is written as *Aredvi Sura Anahita*. *Aredvi* means moist. The words *sura* and *anahita* are Avestan adjectives and respectively mean mighty and pure Aredvi Sura Anahita is addressed in Yasht 5 (Yasna 65) of Avesta, also known as the Aban Yasht, a hymn to the waters in Avestan and one of the longer and well preserved of the devotional hymns (Gaviri, 1993).

After the spread of Islam in Iran the building of worship places for Anahita was no longer practiced but the element of water entered the Islamic architecture. Water has appeared in centre of the palaces and gardens, the central yards of mosques, schools, caravanserais and houses etc. In mosques, water plays a purification role and it has its own symbolic aspect (Tahmouri & Hoseinrazavi, 2013).

#### Fire in ancient Iranian beliefs

Fire as one of the four main elements of the nature have long been respected in Iranian culture. Persepolis reliefs together with carved designs on tombs of the Achaemenid kings, hearth bases in Pasargad as well as other regions have demonstrated the high significance of fire and light in the Achaemenid period. A very precise solar calendar in the form of a construction so-called 'Zoroaster Kaaba' existed in this period indicates the significance of precise solar chronology, holding celebrations and sacred rituals in its own time with the help of observatory. Zoroaster Kaaba is one of the most important fire places in which some sacred texts, jewellery, body of the important people and one of the most accurate observatories in the past were kept. Light and fire along with their impact on Parthian's sacred beliefs are evidenced in the history of this era. At the end of Parthian period,

Zoroastrianism again received the tendency and attention and the hearth design is seen on coins. Khajoo Mountain Fireplace is attributed to this period, also solar calendar together with holding sacred celebrations of solar year on due time were taken into consideration in this time.

In Sasanian time, Zoroastrianism became the official religion of the country. In this period, also, solar chronology and measurement system of holy days of the year were continued. Sasanians revived the principles of Zoroastrianism based on special consideration of this religion to worshiping water and fire. Fire is identified as the symbol of Zoroastrianism, and humans in terms of their good or bad deeds are identified as fellows of light or darkness. In accordance with Zoroastrians belief, Ahuramazda created fire from its own thought and wisdom. In Avesta, the Zoroastrian holy book, fire and light are the fundamentals of the universe and the universe is created from the eternal light, therefore creation of the universe is a successive outflow from the original Supreme Light of Lights (Nur al-Anwar) (Ghadrdan, 2009).

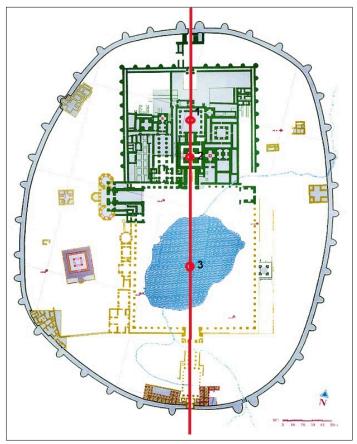
In the Sasanian period, individuals were divided into 4 classes: religious leaders and priests, army men, farmers and traders. Each social class had its own special fire and fireplace. Of all fireplaces, three were of high importance as following:

- 1- Azargoshnasb Fire Temple located in Takht-e Soleyman of Azerbaijan was related to kings and knights.
- 2- Azarbarzin Mehr fireplace located in Rivand city of Khorasan depended on the class of farmers, workers, as well as technicians.
- 3- Azarfarnbag fireplace located in Karian city of Fars was especially for priests and clergies.

The holy fire of Azargoshnasb in Takht-e Soleyman is a mythical fire associated to the kings and knights. Through a yearly ceremony, all emperors' fires were set from its holy fires as a sign of alliance with the king, and then the king was re-crowned in a ceremony. Sasanian kings worshiped the Fire Temple and dedicated some vows before going to a war.

In this period, the highest level of the importance of fire and light could be observed in Azargoshnasb since; on one hand, the relation with the meta-physical world and Ahuramazda were considered; on the other hand, the links between people and the king were established. Based on this belief, Sasanian kings reached a cosmic, religious and political unity resulted victory over land, demon and enemy.

Of important subjects raised in the architecture of this period, is construction of fireplaces adjacent to water resources. This point is quite outstanding in the architecture of the huge sites such as Takht-e-Soleyman. The relevance of this point is about considering the existence of water sources in selecting the location of the site. Fire temple in Takht-e Soleyman is located next to the Anahita Temple. The water of Takht-e Soleyman Lake was entering to temple by a channel, passing through the corridors and it announced its presence in the centre of temple. The fire temple and the lake are situated on the same direction (North - South) with Anahita Temple (Figure 4.6).



of Solomon's legends; here he had his throne, hence Figure 4.6. The centers of Anahita Temple (no. 1), Fire Temple (no. 2) and the sacred lake (no. 3) are in the same direction, Source: Archive of Takht-e Soleyman WHS

# Sacred and mythical beliefs about Takht-e Soleyman

In Takht-e Soleyman there is а combination of mystic and religious beliefs. Due to its natural and cultural qualities, the site has been associated with various legendary and religious characters and issues, such as Solomon, Zoroaster etc. Takht-e Soleyman is a name given to the site after the name of the biblical prophet Solomon who, according to ancient texts and legends, possessed supernatural powers. Some local beliefs indicate that this name was given to the place by Zoroastrian clergies to save it against Arab invasion at the end of Sasanian period, knowing that Prophet Solomon has was highly respected in Islam.

Accordingly, Takht-e Soleyman has got close mythical beliefs with the Kingdom the name Throne of Solomon (Takht-e Soleyman). Belqeis Mountain was named after Bathsheba, Solomon's mother. Moreover, the ruins at Takht-e Soleyman around its mythical lake are

also connected to legends related to the birth of Zoroaster. Takht-e Soleyman Lake was mentioned in the 4<sup>th</sup> century in an Armenian manuscript relating a legend concerning the birth of a child whose story is a mixed one of Christ's birth and that of Zoroaster. The foundation of the fire temple around the sacred lake is attributed to that legend. Many mystic beliefs have links with the names of the cultural and natural elements. As an example, Zendan Mountain that might have given the impression of an infernal cavity, in the mystic beliefs, was considered as a prison where Prophet Solomon imprisoned monsters. Another feature is Sang-e Azhdeha (in English: Dragon Stone), a sedimentary stone wall of the stream locating in the South-West of Takht-e Soleyman main site. This feature is made up of the remains of a sedimentary wall built out of the deposits left by the water stream with an exceptionally winding path appealing to the eye, as it is named, Dragon. It is 300 meters long and approximately 2 meters high. This stream brought water to a residential area under the Sasanians, but the locals believe that the stream was in fact a dragon that was turned into stone upon Prophet Solomon's command (ICHO, 2002).

Apart from the mystic beliefs, this area has got religious importance since about 3000 years ago. Around the cone-shaped opening of the Zendan Mountain, there are marks of a holy temple dating back to the first millennium BC. The remains of the architectural monuments around the opening of the Prison Mountain are, according to the artefacts found in the area, related to the Mannaeans who ruled in this region of Iran from 830 to 660 BC. It seems that the holy place was flourishing as long as the Zendan Mountain Lake had water. Some of its architectural units however, remained in use for a

while to continue to watch over that spot. The drying of the water did not happen suddenly, rather, its level gradually decreased over a long time.

Takht-e Soleyman regained its religious importance in Sasanian period when Zoroastrianism became the official religion of the country. One of the three most important Zoroastrian fire Temples were built in this place and it was the focal point of the attention of the kings and Zoroastrian clergies. Also the remains of a mosque was found inside the main site which means, although without the same importance as in the Sasanian period, but it had been used for the prayers by Muslims.

Apart from mystic and religious importance of this area during the history, local inhabitants nowadays feel respect for the lake of Takht-e Soleyman. It is not only because of the legendary beliefs but also because of the appreciation of water, which has roots in Iranian cultural. As an evidence, there is an interesting tradition among the local people that a couple on the wedding day make a walk around the lake for making wish to stay as pure and bright as water.

# 4.2 Takht-e Soleyman as a cultural landscape

The significance of this region relies in the relationship between cultural and natural features which are reflected in sacred elements and local beliefs of the inhabitants.

The site has strong symbolic and spiritual significance related to fire and water. It is as an exceptional testimony of the continuation of a cult related to fire and water over a period of some 2500 years. This is evidenced by the presence of an artesian lake and a volcano which are essential elements of Takht-e Soleyman. In some cases, the respect for natural elements within a social organization would result in creation of cultural landscapes. Volcanic regions are, accordingly, a relevant case especially when there is presence of water as it was the case of Takht-e Soleyman.



Figure 4.7. A view of Takht-e Soleyman cultural landscape presenting the main site, Nosratabad village and Zendan Mountain, Source: Archive of Takht-e Soleyman

Takht-e Soleyman may precisely be considered as an outstanding example of creation of an architectural ensemble in close symbioses with its landscape illustrating significant stages in human history. It reveals one of the great artistic achievements of the Sasanian civilization, and witnesses the organization of landscape and religious activity in perfect harmony. The lake, which is supplied by sources operating as an artesian well, is undoubtedly at the origin of foundation of this site. In their

selection of the site, the original builders of the temple showed a high level of creative competence in their use of the sacred lake and its relationship to the Zoroastrian faith as well as the Pre-Zoroastrian beliefs in order to match with geological and natural settings in the line of their spiritual beliefs. In other words, its builders, made full and successful use of its natural environment to create a harmonious work of art and spirituality (Figure 4.7).

Although in 2003 Takht-e-Soleyman could have been nominated as a cultural landscape rather than as a complex of single historic sites, the proposal emphasized on the architectural, archaeological, and historic aspects of the site. The result of that designation was a lack management and planning consistent with a cultural landscape (Dailoo & Pannekoek, 2008). Thus, the management system failed to have an integrated approach to the entangled values inherited in the cultural landscape. In such approach, the place is considered as a holistic system in which all the elements interact with each other. Moreover, it would be inclusive of relevant concerns and challenges as well as considerations for participation of different groups of stakeholders who are the actors and beneficiaries of the cultural landscape.

By considering Takht-e Soleyman as a cultural landscape, the area of study in this research will be beyond the borders of Takht-e Soleyman main site. Accordingly, the analysis of the management system for sustainable development would be fulfilled though comprehensive understanding of the realities of the place as well as the values of the area.

# 4.3 Integrated values in Takht-e Soleyman cultural landscape

Takht-e Soleyman reveals outstanding architectural achievements as well as artistic, religious, mythical, and historical representation, emerged from a symbiosis of man-made and spectacular natural setting.

The most significant characteristic of this site is the linkage of principal architectural elements with the natural context, which provided a harmonious composition of natural-architectural cultural features. The ability of ancient people to use the lake as the centre of the design represents their deep understanding of the relationship between their faith/philosophy and natural/geological feature (Dailoo and Pannekoek, 2008). Takht-e Soleyman is probably the best place for studying the development of Iranian art, architecture, and landscape planning in the pre-Islamic and early Islamic periods. It is the most significant religious and cultural centre of the Sasanian period (3<sup>rd</sup>-7<sup>th</sup> centuries AD). It represents interaction of human with nature in the span of time and landscaping design. The archaeological remains and historical evidences show the ability of human being in landscape planning (Management Plan of Takht-e Soletman WHS, 2010).

This place embraces all types of cultural significance defined in Burra Charter (ICOMOS, 2013) that is to say aesthetic, historic, scientific, social or spiritual value for past, present or future generations. The cultural significance together with the natural features attributed to this landscape create a combination of values that would be important for local development and national excellence. The universal values of this site was recognized by UNESCO in 2003 under the following criteria:

• Takht-e Soleyman is an outstanding ensemble of royal architecture, joining the principal architectural elements created by the Sasanians in a harmonious composition inspired by their natural context.

- The composition and the architectural elements created by the Sasanians at Takht-e Soleyman have had strong influence not only in the development of religious architecture in the Islamic period, but also in other cultures.
- The ensemble of Takht-e Soleyman is an exceptional testimony of the continuation of cult related to fire and water over a period of some two and half millennia. The archaeological heritage of the site is further enriched by the Sasanian town, which is still to be excavated.
- Takht-e Soleyman represents an outstanding example of Zoroastrian sanctuary, integrated with Sasanian palatial architecture within a composition, which can be seen as a prototype.
- As the principal Zoroastrian sanctuary, Takht-e Soleyman is the foremost site associated with one of the early monotheistic religions of the world. The site has many important symbolic relationships, being also a testimony of the association of the ancient beliefs, much earlier than the Zoroastrianism, as well as in its association with significant biblical figures and legends.

### 4.3.1 Takht-e Soleyman society and culture

Apart from the universal cultural significance of this place, which was mentioned in the previous paragraph, the present living society has specific dimensions which have roots in the past and are consistent with the current situation. The society is inclusive of different social and cultural features such as various sects, beliefs, ethnicities, speaking languages, costumes, music, clothing and so on (Figure 4.8).

Majority of the people in Takht-e Soleyman District live in small villages. Nosratabad is one of the villages in Chaman rural area in Takht-e Soleyman Distirct. All the villages embrace the rurality features that is to say small size, strong social bonds and traditional ways of living. The villages are of sect, ethnicity, and language varieties. Two main Turkish and Kurdish ethnic groups reside in the villages. The religion of the local people is Islam composing of two different sects of Shia and Sunni. There are also Right followers (Ahl-e Hagh) living in some villages. Followers of different sects live and get along well with each other without any considerable disagreements. An evidence of this fact is the marriage between Shia and Sunni people based on common religious rules, although limited. Speaking languages include Azerbaijan Turkish, Kermanji Kurdish and Sourani Kurdish. They know also Farsi language as the official language of the country. Type of clothing of the villagers has affected not only from cold climate, but also from ethnic varieties. Kurdish people wear local clothes, but people from Azerbaijan wear common urban clothes. Some of the women from Azerbaijan also wear their own local clothes (Mohammadi, 1997). Despite the ethnic and religious diversity in the villages, there are no cultural or ethnic conflicts and the residents live together in peace and quiet, participate in each other's ceremonies, and have social and neighbouring relationship with each other. All the religious, national, and local ceremonies and rituals take place in the full consensus and mutual respect. As an instance in wedding occasions, there is no discrimination about the ethnicity or sect of the invited people and both Azeri and Kurdish music and songs are performed. Hospitality and appropriate behaviour towards strangers and tourists in such villages indicate the rich resilience of the local community.

Review on the social and cultural features of the villagers in the area of Takht-e Soleyman highlights this point that the cultural and social relationship among the villagers is quite strong and in spite of ethnic and religious diversity, cultural and social conflicts are inconsiderable.

Apart from the mentioned social and cultural features, Azargoshnasb Fire Temple, as an important historic symbol Zoroastrianism attracts many followers for a special religious ceremony every year (Figure 4.9).

This is outstanding of this society who has inherited many values from the past and having them entangled with the current social and cultural features. Although the cultural diversity in this area results in different social demands, local people stay in peace and consensus with each other.



*Figure 4.8. Local clothing and local music (photo by Eyninejad, 2011)* 



Figure 4.9. Zoroastrians religious ceremony next to the Takht-e Soleyman Fire Temlpe, source: Archive of Takht-e Soleyman WHS

# 4.3.2 Natural and environmental features

This paragraph is going to study Takht-e Soleyman in its context and to investigate how it is impacted by natural and geographical features.

Nosratabad village is the central village among the 104 villages locating in Takht-e Soleyman District in Takab Country. Among all the villages, Nosratabad has special position by situating close to the main historical site of Takht-e Soleyman within the UNESCO buffer zone. This village geographically has a strategic location between the main historical site and Zendan Mountain (Figure 4.10).

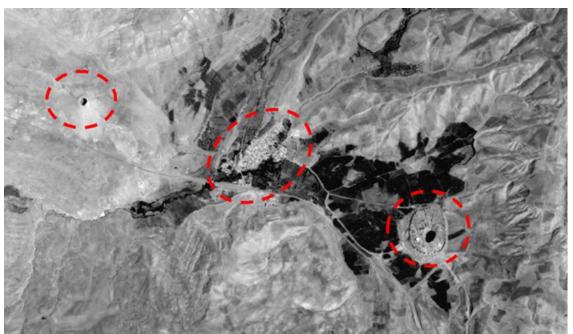


Figure 4.10. Nosratabad village location between Takht-e Soleyman Site and Zendan Mountain (Source: Archive of Takht-e Soleyman WHS)

The nearest town to the historical site and the village is Takab with the distance of 40 km. Its distance from Tehran the capital city of Iran, Urmia capital city of West Azerbayjan province and Zanjan, the capital of the Zanjan province are relatively about 540, 320, and 210 km (Figure 4.11). For reaching Takht-e-Soleyman from Tehran, it is possible to travel by four asphalt ways.

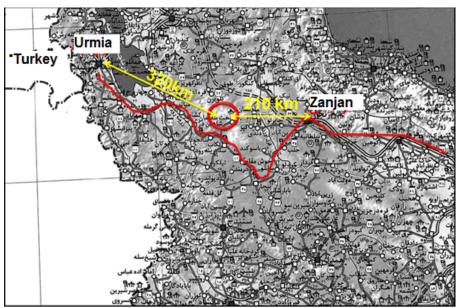


Figure 4.11. Location of Takht-e Soleyman between capital cities of two provinces

There are historical natural and cultural heritage features close to this site. This makes a capacity for this area to be as a part of an integrated regional plan for different aims such as preservation and conservation, tourism, and education. Urmia Lake in Urmia, Karaftou Cave near Takab, Soltanieh Dome (which is a WHS) near Zanjan and many other cultural and natural features defused in the surrounding area are examples of such neighboring features.

Takht-e Soleyman embodies beautiful perspectives of mountains, plains and valleys. The mountains are reservoirs for water, flora and fauna. The area embodies many warm water springs and geological features made by the sediments of those springs. The most important and the largest of all the springs is Takht-e Soleyman Lake which is acknowledged to be the origin of the main historical site. Moving Grass is another natural feature made by an artesian spring. It is a small piece of land moving on the surface of a small lake as the result of the change in the level of water (Figure 4.12). Every year, the warm water springs attract a number of tourists who benefit from their relaxing and medical treatment properties and enjoy the beauty of the surrounding environment. The sediments has created many huge geological features, which were connected to the local legendary beliefs like Zendan Mountain, Sang-e Azhdeha, Zendan-e Nabikandi and Zendan-e Berenjeh.

The animal life reservoir is existed in the mountainous area. Various plants and animals at Belqeis Fort are being observed by experts from the Department of Environment of Iran. Moreover, there is a small seasonal lake close to the peak of the Belqeis Mountain.

The vegetation in this area is divided in the fruit and non-fruit trees. All the area is covered with pasture plants in the warm seasons, which makes it a good area for animal husbandry. In addition, several kinds of medical herbs grow in this area (Management Plan of Takht-e Soleyman WHS, 2010).



Figure 4.12. Moving Grass (photo by author, 2013)

Figure 4.13. Takht-e Soleyman in winter (photo by Eyninejad, 2012)

This site is located in a monotonous area with harsh climate. The average of minimum temperature is recorded as (-28) and the maximum (+32) degrees centigrade in the past 10 years. Apart from the harsh climate (cold weather, heavy rainfalls and snows during the winter), which endangers the unprotected or fragile architectural structures, no other major environmental risk to cultural heritage is observed (Figure 4.13). Since the site is far away from towns and industrial centres, there is no impact of the air pollutions on the cultural and natural heritage.

### 4.3.3 Pillars of the local economy in Takht-e Soleyman

Economy in this area is mainly based on animal husbandry, agriculture, beekeeping, carpet weaving, mining and tourism industry.

Among the pillars of economy, animal husbandry and agricultural activities are the important sources of household income. Carpet weaving is mostly done inside the houses and by women. This precious

handicraft production is lacking a systematic organization and support. Therefore, carpet weaving helps the household economy but on the occasional basis.

There are several quarries and precious stone mines around this area including one of the biggest gold mines in Middle East called Aghdarre and Zarshooran. Few of the local people are engaged in mining activities but the presence of the mines does not affect the local economy very much (Management Plan of Takht-e Soletman WHS, 2010). According to the Development Plan for Nosratabad village (Housing Foundation of IRI, 2008), 92.02% of the working people are in the section of agriculture, animal husbandry and beekeeping, 0.92 industry and 7.06 services.

Tourism industry has been considered to become an emerging pillar of economy since inscription as a World Heritage Site. Tourism is mainly related to the historical site although there are other types such as eco-tourism, geo-tourism, belief tourism (religious tourism and energy tourism), and health tourism. Despite the fact that there is a large capacity for the tourism in this area, still many potentials are overlooked and not properly used. The tourism management visions would have to consider different touristic aspects of the area other than the WHS, which are going to be discussed in the next paragraph. The underdevelopment of the tourism industry is on the other hand, related to the poor existing infrastructures.

The dependency of the economy on agriculture and animal keeping, which are done mostly in the traditional way, have discouraged the young generation of finding a job and earning an acceptable income. Despite the rich economic resources in this area, the young generation tend to emigrate to the bigger cities to look for the job and enjoy more welfare. The current situation could be improved by capacity building for new economic activities based on local cultural resources and tourism industry.

# 4.3.4 Analysis of the resources for local sustainable development

The usual model for sustainable development is of three separate but connected rings of environment, society and economy, with the implication that each sector is partly independent of the others. Sustainable development approach refers to the homogenous use of resources for dealing with environmental problems and socio-economic issues (Hopwood, Mellor, & O'Brien, 2005). The analysis of social cultural, environmental and economic analysis of Takht-e Soleyman cultural landscape reveals that there are several potentials in this region that can be turned into resources for local development.

With regard to the discussions in section 3.1 of this research, cultural landscapes have strong interfaces with sustainable development. Hence, preserving and exploiting any of the intrinsic feature of a cultural landscape would result in moving towards sustainable development goals.

Takht-e Soleyman cultural landscape is an exquisite combination of resources for development which are bound to the cultural landscape values and the rurality characteristics. These resources are related to historical, natural, and cultural values which can make contributions to local development by making connections between the rings of sustainable development.

The historical values of the region point out to universal values and visual integrity and authenticity of the area. They can be considered as resources for cultural development in terms of education and training as well as raising awareness and knowledge among the people who experience it whether as a visitor or a local resident.

Cultural values derived from built cultural heritage of the main site and other adjacent cultural heritage, historical Zoroastrianism Fire Temple, mixed ethnic groups and their cultural representations, traditional knowledge and life styles (also including nomads in nearby regions) create resources for cultural, social and economic development.

Natural values source from existence of natural heritage elements, mines, local herbs, vegetation and plants, agricultural products, warm water springs, mountains, waterfalls and other single natural features. Habitation in the mountainous region from the very ancient time up to now shows intensive and peaceful interaction of the human with the nature in this area. The high natural values can be considered as recourses for local development. Moreover, they contribute to cultural values of the region considering that they have inspired humans for expressing symbols of their beliefs (as in Manae Temples, Azargoshnasb Fire Temple and Anahita Temple) or developing his legendary mind during the history. On the other hand, cultural values support environmental protection mostly through respect for natural faith symbols, traditional knowledge and vernacular architecture. The traditional culture of this area which is entangled with natural features demonstrates high respect for natural

# 5 Assessment of Takht-e Soleyman WHS management for a sustainable development

### 5.1 Takht-e Soleyman in the realm of Iranian sustainable development policies

# 5.1.1 Valorizing cultural heritage and local sustainable development: national policy review

Iran is a historic country with diversity of cultural heritage. With refer to the Iranian scholarly literature, Iran cultural heritage can be considered as a great resource to be valorized in order to move towards non-oil economy. This resource which differentiates each culture and nation from the other one can be turned to a unique resource in attaining an acceptable level of development at global level. Therefore, it can play a dominant role in this regard considering the long history and diversity of cultural heritage in Iran. Although the general trend considering cultural heritage in Iran is improving, still a distance is observed between the current situation and the optimum level.

One of the important cornerstones for having the proper cultural heritage management is having policies at national and local level. For this reason, a study has been done on the upstream, national and local policy documents in order to find out the policies and strategic national frameworks within which the valorization of cultural heritage in Takht-e Soleyman cultural landscape can be assessed and improved.

#### Cultural heritage and development: national policy review

# - The 20-Year National Vision of the Islamic Republic of Iran for the dawn of the Solar Calendar Year 1404 [2025 C.E.]

The above document (hereinafter called Development Vision Document of Iran) is a highest policy document aimed at identification of the horizon of the development of Iran in cultural, scientific, economic, politics and social fields, codified by The Expediency Discernment Council<sup>1</sup>. The implementation of this document started from 2005 in the framework of four five-year National Development Plans and will continue until the year 2025. Development plan is a document in which the favourable economic, social and cultural situation is identified within the framework of the foreseen limitations and facilities. It also contains the suitable policies through which the favourable situation would be realized.

In the mentioned document, culture and history of Iran are referred as the drivers of development. In the horizon of this document, Iran will achieve a state of development proportionate to its cultural, geographical and historical features.

# -The Fourth Economic, Social and Cultural Development plan of Islamic Republic of Iran (2005-2009)

In the forenamed document, hereinafter called (Fourth National Development Plan) in chapter seven (cultural development), article 14, the following goals were considered for cultural heritage and tourism section:

- 1- National effort for identification, preservation, research, conservation, enhancement of tourism
- 2- Utilization and presentation of Iran cultural heritage
- 3- Revenue generation and job opportunities
- 4- Cultural exchange with other countries

For achieving the above-mentioned goals, the necessary measurements were elaborated including but not limited to documentation of cultural heritage, establishment of touristic villages, museums and exhibitions. Those measurements were again deconstructed to more detail actions and were discussed comprehensively.

#### - The Fifth Economic, Social and Cultural Development plan of Islamic Republic of Iran (2011-2015)

However, in the above-mentioned document (hereinafter called Fifth National Development Plan) there were brief indications regarding cultural heritage. According to the article 11 of the abovementioned document, 'Iran Cultural Heritage, Handicrafts and Tourism Organization' (ICHHTO) was authorized to support and take actions about involvement of non-governmental, cooperative and private sectors in development of cultural and touristic centres, as well as specialized organizations such as museums, conservation of historical and cultural objects, setting up the professional museums,

<sup>&</sup>lt;sup>1</sup> An administrative assembly appointed by the Supreme Leader of Iran. It has been set up to resolve differences or conflicts between the Parliament and the Government.

and establishment of centres in charge of preservation of rural and nomadic culture and cultural objects.

In article 3 of the same document, it is stated that the government of Iran is responsible for supporting the non-governmental sectors for enhancement and maintenance of handicrafts and cultural products.

Despite the explicit indication to cultural heritage in the Development Vision Document of Iran, there has been a swinging approach in Fourth and Fifth National Development Plans in this regard. In other words, the role of cultural heritage in sustainable development had been much more emphasized in the Fourth National Development Plan than in the Fifth Five-year National Development Plan.

#### - The sixth Economic, Social and Cultural Development plan of Islamic Republic of Iran (2016-2020)

The aforementioned document (hereinafter called Sixth National Development Plan) is going to be affected during 2016-2020. In this document, there are implications about systematic support to cultural products like handicrafts, Iranian traditions, development of domestic tourism industry preservation of cultural heritage and Iranian-Islamic identity as well as revitalization, restoration and conservation of historical monumental contexts.

The policy orientations of the current government of Iran shows more sever concerns about cultural heritage. Accordingly, it is expected that relevant considerations be reflected in executive legislations of the above-mentioned document.

# - Document of Development of Cultural Heritage and Tourism Sector in the Perspective of the 20-Year National Vision of the Islamic Republic of Iran

The general policies of cultural heritage and tourism that has been ratified by the High Council of ICHHTO on 25/09/04 persuades the public engagement in cultural, historical and natural related affairs. It also declares that the government is responsible to make legal provisions for the research, protection, revitalization and presentation of cultural heritage. It makes emphasis on presentation of the significance of cultural heritage and enhancement of cultural identity of the society and public awareness raising in the fields of cultural heritage and tourism though educational, cultural and media capacities.

The qualitative objectives and strategies of cultural heritage development include:

- Development of cultural relations and consolidation of political situation of Islamic Republic of Iran
- Introduction of Iran history and civilization globally and creation of conciliation among nations,
- Satisfying the psychological needs of the society
- Stabilization of national unity and promotion of cultural identity
- Creation of job opportunities and revenue generation
- Increase in GDP per capita and less social instabilities

In the same document, the strategies in the field of cultural heritage include but are not limited to participatory preservation, conservation and presentation of cultural heritage and suitable unitization of historical and cultural monuments and contexts situating in the cities and villages.

# Development Vision Document of West Azerbayjan Province

According to the forenamed document the historical, cultural and natural attractions as well as carpet weaving are considered as capacities for development after agriculture and animal husbandry which are at present considered as the two fundamental economic pillars.

# Objectives and Visions of ICHHTO in Development Vision Document of West Azerbayjan Province

The objectives and perspectives of the above-mentioned document for West Azerbayjan province points out to:

- Comprehensive recognition of Iranian culture reflected cultural heritage and traditional arts
- Presentation of Iran culture, civilization and its cultural, historical and natural capacities and utilization of those capacities
- International interaction and engagement
- Public awareness raising aiming at promotion of social capital bound to the cultural and natural heritage, handicrafts and tourism
- Capacity building for tangible and intangible cultural heritage, natural heritage, art and traditional knowledge, domestic techniques, handicrafts and tourism
- Systematic production and distribution of handicraft at national and global level
- Research, documentation, presentation, education, preservation, revitalization and valorization of cultural heritage, natural heritage, traditional arts and handicrafts

## Stakeholders participation

Along with the study of the upstream documents focusing on the considerations about the role of cultural heritage in sustainable development, the literature reviewed lead the researcher to investigate Iran upstream policy documents for participation initiatives. The necessity of this investigation is justified given the fact that the participatory management of the cultural heritage is a dominant strategy for valorization of cultural heritage for sustainable development.

In the third principle of Constitutional law of Iran, there is a general indication of public engagement by considering the participation of all Iranian people in making their political, economic, social and cultural destiny. Principle 44 of Constitutional Law, specifically, elaborates the public participation from the economic point of view. It declares that the economic system of Islamic Republic of Iran is based on governmental, cooperative and private sectors. Furthermore, it emphasizes that the development of non-governmental sectors should be fulfilled through delegation of the current governmental sector activities to the public, private and cooperative sectors. Moreover, it indicates that the government is responsible for the sovereignty, policy making and monitoring the implantation of laws and should delegate all the affairs related to management and execution procedures to nongovernmental sectors.

In The Fourth National Development Plan, article 104 it is indicated that sufficient support has to be provided for public engagement and non-governmental sectors in art and cultural affairs. In article 105 of the same document, The Islamic City Councils are expected to participate in conservation and

preservation of cultural and historical sites, monuments and objects as well as assisting in prohibition of transformation of their application.

In The Fifth Economic, Social and Cultural Development plan of Islamic Republic of Iran, article 3, it is stated that the government of Iran is responsible for supporting the non-governmental sectors. Likewise, In the draft of the Sixth National Development plan, it is elaborated that the Islamic Republic of Iran polices about social participations have to be realized through enhancement of public engagement, utilizing public capabilities of municipalities, government and Judicial System of Iran and, promotion of social capital through strengthening and engagement of non-governmental sectors, cultural and social organizations, mosques and religious boards.

In the Objectives and Visions of ICHHTO in Development Vision Document of West Azerbayjan Province the integrated and efficient management system is identified though participation of all the stakeholders in cultural heritage (tangible and intangible), natural heritage, handicrafts and tourism sectors. This process would be based on moral and national-Islamic values and in accordance with scientific and technical standards as well as geographical, historical and cultural conditions of the country. The sustainable and efficient economic system should be established through engagement of non-governmental and private national and foreign sectors on the basis of cultural and natural excellences. In addition, there is an emphasis on national efforts and collective sense of responsibility for the enhancement of public participation in supporting, safeguarding, preservation, revitalization and valorization of cultural and natural heritage, cultural diversity and biodiversity of the country.

In the proposal document for registration of Takht-e Soleyman by UNESCO (2002) it is stated that the private sector has to be encouraged for taking part in the management plan and the conservation activities. Moreover, in the same document it is specified that the management procedure have to be accomplished through a better cooperation with local inhabitants. In the last Management Plan of Takht-e Soleyman WHS (2010), the role of local community and public, private and cooperative sectors are mostly emphasized in development of tourism industry.

### Management plan of the Takht-e Soleyman WHS

The initial Takht-e Soleyman site Management Plan (2003) makes initiatives for raising the awareness of local authorities and the public about the significance of the site, and engagement of local community, private and public sectors.

In the latest Management Plan of the site (Management Plan of Takht-e Soleyman WHS, 2010), the correlation of cultural heritage and sustainable development is considered through development of tourism industry. Although this issue is comprehensively elaborated, the other linkages between cultural heritage and sustainable development are missing. Moreover, the role of local community and public and private sectors are mentioned only in relation to the development of tourism industry.

## 5.2 Takht-e Soleyman site management

## 5.2.1 Governance system in Takht-e Soleyman WHS: an introduction

Iran Cultural Heritage, Handicrafts and Tourism Organization (ICHHTO), is an independent organization working under the direct supervision of the President of Iran. This organization is responsible for the governance and management of all the affairs related to cultural heritage, handicrafts and tourism. It considers tangible and intangible cultural heritage and is in charge of study, research, preservation, conservation and presentation of Iran cultural heritage.

ICHHTO is administered and funded by the government of Iran. The director of the organization is appointed through the President decree. In like manner, ICHHTO is the authorized organization for governance and management of Takht-e Soleyman WHS. The policies and decisions are mostly affected by ICHHTO's provincial office in Urumia city which is the administrative centre of West Azerbayjan province.

The director of Takht-e Soleyman WHS is nominated by Bureau for the Research Bases' (located in Tehran) in accordance with Deputy for Cultural Heritage as well as its provincial office of West Azerbayjan province. Finally the director is officially appointed by the head of central office of ICHHTO in Tehran.

The main responsibilities of the director of the WHS are including but not limited to:

- Setting annual plan of the site regarding preservation, conservation, research etc.
- Decision making about the budget allocations
- Communication and participation in meetings with National and Provincial offices, etc.
- Preparing periodical reports
- Developing the relation of the site with scientific, educational and research centres directly or through the provisions of the Bureau for the Research Bases' Affairs

A steering committee composed of different expertise works closely with the director of Takht-e Soleyman WHS in decision-making, planning for preservation and conservation, research activities, and communication. The importance of this committee has been ignored in certain periods but at present the committee is reconstructed and its role is being more highlighted.

## 5.2.2 Management context of Takht-e Soleyman WHS

### **General management framework**

For understanding the management system of Takht-e Soleyman WHS the review of the relevant national documents and the management plan of the site was necessary. The profound comprehension of management system clarifies the legislative and normative framework, which has influenced the present situation.

Takht-e Soleyman was inscribed on the National Heritage List of Iran in 1931. The site thus has benefitted from a special program of development devoted to important historical sites labelled 'National Heritage'. In 2003, Takht-e Soleyman cultural and historical site was registered in UNESCO World Heritage List.

The management of the site is being undertaken by the Provincial Office of ICHHTO in cooperation with the Director of the Takht-e Soleyman WHS. A steering committee composed of experts in the fields of archaeology, conservation, history and architecture works closely with the director of Takht-e Soleyman site in decision-making, planning for preservation and conservation, research activities, and communication. The working history of this committee shows that it has been disregarded in certain management periods. However, at the time of writing this research the committee is reconstructed and getting more involved in the management process. The management of Takht-e Soleyman WHS was

initially assumed by the following offices: office of the director, office of finance and logistics, laboratory of conservation and restoration, office technical support, office of research and office of presentation and publication (ICHO, 2002). At present the performance of the latter two offices are very limited.

There are several ministries and governmental organizations involved within UNESCO zone related to the fields of agriculture, road and transport, mining industry, environmental protection, housing etc. According to the interviews with the directors of local offices, there is not considerable conflict of behaviour observed between the performance of the mentioned organizations and the management of cultural heritage in this area. The development projects initiatives by the local organizations within the limits of the UNESCO zones have to be in accordance with the UNESCO criteria for the WHS. This conformity has to be controlled by ICHHTO assuring the preservation of the universal values of the site. Therefore, the institutional segmentation and conflict is not an important burden in preservation of Takht-e Soleyman WHS. This is a privilege for the management of this cultural landscape sustaining the integrity and authenticity against the changes imposed by development activities.

## State of conservation and preservation

In the Management Plan of Takht-e Soleyman site (2003), three substantial factors have been identified to have had effective role in conservation and preservation of Takht-e Soleyman main site and its surrounding area according to the features of different historical periods:

- A- The local community's beliefs about the sacredness of Takht-e Soleyman historical complex, Belqeis Citadel, Dragon Stone and Prison Mountain have made the local people feel responsible about the conservation of the heritage since past generations. They have effectively cooperated with the maintenance of the site since 1958 along with the launch of the scientific studies in the site.
- B- Researchers and those interested have had an important role in introducing the hidden cultural values of the complex. The outcomes of their researches have better identified the art, architectural and historical characteristics of the places, more importantly, expert opinions have contributed to the provision and implementation of conservation plans.
- C- Since 1958, Governmental organizations and their related officials have played a key role regarding the conservation of the site. The attention and direct financial investment of Cultural Heritage Organization as the government representative along with the legal support of the local officials such as the police, governorship, district attorney, and other relevant organizations aiming at conservation of the historical relics and conducting research plans on specifying conservation boundaries and criteria have caused better presentation of the site as well as preventing the historical area from unjust confiscating.

The regulations and criteria for conservation and preservation of the core and buffer zones of Takht-e Soleyman have been established since 1993 following its nomination as a national cultural heritage project. The criteria have been ratified by the Iran Cultural Heritage Organization in 1993 with the aim of enforcement of law and preventing unjust confiscating in the buffer zone of Takht-e Soleyman site. According to the mentioned ratification any development activities, urban development, agricultural activities, etc., has to be conducted in accordance with the above criteria and is subject to the authorization by ICHO. The criteria for the core and buffer zones include the following considerations.

Core Zone:

- 1- Any confiscation, construction activities, well and qanat drilling, tree planting, excavation, embankment and any other development activities are strictly forbidden inside the core zone of the historical site.
- 2- Any installations related to research and conservation facilities have to be accomplished under the approved plan of the mentioned organization.
- 3- Agricultural activities in the farms in traditional forms and within the existing limitations are permissible.
- 4- The permission of Cultural Heritage Organization is required for any future installations like electricity pylons in the connecting road between Takab and Zanjan passing through core and buffer zones of Takht-e Soleyman. Furthermore, the road widening in the core zone is strictly forbidden.

## Buffer zone:

1- Conducting activities related to agricultural and gardening to existing standard extent is permissible.

Note 1- Transformation of agricultural lands into new gardens or expanding the existing gardens after coordination with the Cultural Heritage Organization is permissible. Note 2- Establishment of industrial agriculture-related facilities has to be primarily approved by the Cultural Heritage Organization.

- 2- Any mining activity, change in the natural structure of mountains and any industrial plants leading to the environment pollution in the mentioned area are forbidden.
- 3- Establishment of any residential complex within the mentioned area, except in the predicted area for the expansion of Nosratabad village, is forbidden.
- 4- Crossing local infrastructure to the mentioned area should be approved by the Cultural Heritage Organization.
- 5- In order for construction of connecting roads inside the mentioned area the Cultural Heritage Organization will consider some facilities provided that the ratified plans are available (Azizi & Norouzi, 2011).

In addition to the general legislative considerations for preservation and conservation of the area, practical activities have been conducted inside the main site in order to preserve and conserve the historical relics.

According to the Annual Performance Report of Takht-e Soleyman WHS (Azizi & Norouzi, 2011), the following measures have been conducted for the majority of architectural historical relics in the main site:

- Field Study (identification, value assessment, pathology, etc.)
- Library study (collecting relevant research and restoration studies conducted)
- Executive works (documentation, cleaning, consolidation, preparation of suitable conservation material, conservation, etc...)

During the past years, measures regarding conservation, preservation and fortification of the rampart and its towers, which enclose the main site of Takht-e Soleyman, Fire Temple, and other parts, had been taken into consideration. However, at present, the number of conservators are very few and relevant research activities are very limited.

Apart from the main historical site, the other tangible cultural and natural heritage locating within the buffer zone except Zendan Mountain does not serve guardians or preservation measurements. Observations and investigations show that systematic measurements for preservation and conservation of vernacular architecture of Nosratabad village are not at place.

The existing criteria regarding conservation and preservation of core and buffer zones clarify the delimitations for the activities and alterations as well as for development projects. However, the considerations regarding the preservation, conservation, presentation, and relevant research activities have not been fully accomplished yet and need to be improved.

### **Research and development activities**

The Office of Research was considered as a part of management system of the main site in the "Proposal for the nomination of Takht-e Soleyman on the World Heritage List as a World Cultural Property" (2002). Its load of activities varied in different time intervals according to the budget, number of experts and the internal policies for the management of the site. At the time of writing this research this office was not truly active and there were no fixed personnel working in there.

Consequently, the relevant activities in the recent years have been conducted on sporadic basis. The current state of research and development activities can be improved to a large extent considering the universal significance and unexplored fields relating to the site as well as the necessity of upgrading the existing knowledge.

This office locating inside the main site could have a very important role in preservation, conservation and also historical and archaeological studies. Moreover, it can make contribution to finding appropriate and practical ways for preservation and maintenance of the relationship between cultural and natural heritage. It would directly affect the management system of the site through providing scientific and realistic feedbacks.

### Human resources in the site

The number of fixed staff at the time of writing the thesis were 16 persons excluding the seasonal workers who were hired for restoration and conservation activities (Table 5.1).

Task	Number of persons
Director	1
Secretary of director	1
Technical and scientific staff	2

Guide	1
Guard	2
Driver	1
Financial department staff	1
Ticket Seller	1
Service (cleaning and maintenance)	2
Workers	5 (seasonal)
Military guards	4

Table 5-1. Human resource in the site,

As stated

in the above table the number of technical and scientific staff referring to conservators, researchers and technicians are confined to two persons at present. This important part of staffing has been diminished during the past years. In fact, the number of existing experts is not sufficient to establish a concrete body of expertise for this site.

The complexity of governance and management of a WHS necessitates the development of competencies among actors of the site as a key action. Accordingly, the boundaries of expertise, which is currently limited to conservation and architecture (as seen in table 5.2) have to grow beyond archaeology, conservation, restoration and

Source: Archive of Takht-e Soleyman WHS (2015)

architecture. In an integrated approach to management of the site, the competencies should include the fields of general management, tourism management, event planning, engineering, economics as well as other disciplines in natural sciences and humanities like sociology, psychology, and ethnology.

Table 5.2 presents the Technical and scientific offices which were mentioned in the first management plan of the site. As shown in the same table, at present there are no fixed staff working in the Office of Research inside the main site. Moreover, the Office of Presentation and Publication, which is a fundamental body for presentation and communication with the visitors of the site, is not active.

In addition to the adequate number of staffing and integration of all required competencies, a special attention has to be paid to the training and education of the staff. This process can be fulfilled through appropriate communication with the academy and scientific organizations, holding training courses, on the job training etc.

Table 5-2.	Technical	and	scientific	offices
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Office	Number of experts	Field of expertise
Laboratory of Conservation and Restoration	1	Conservation
Office of Technical Support	1	Architecture
Office of Research	0	-
Office of Presentation and Publication	0	-

Source: Archive of Takht-e Soleyman WHS (2015)

### **Budgeting and finance**

As a national cultural heritage, Takht-e Soleyman has benefited from the national project of development, mainly from its parts directed towards the development of tourism (ICHO, 2002).

According to the Iranian policy, exclusively the government of Iran is responsible for all preservation costs of the site including expenditures related to personnel and workers. All the wages of the staff and seasonal workers, procurement of the necessary material for conservation and preservation, technical instruments, fuel costs, safeguarding, and any other expenses are paid by ICHHTO through state funds.

The budget allocation varies in different periods according to the state economic situation (Management Plan of Takht-e Soleyman WHS, 2010).

### **Communication and marketing**

Since the Office of Presentation and Publication is not active, there is no organized section inside the site in charge of communication, presentation, and marketing.

At the time of conducting this research, the only material for presentation of the site, were copies of a CD, which were sold in the nearby supermarket. It contained interviews with one of the old local persons who was aware of the importance of this site and took care of it against vandalism when there were no official guards in the past. Apart from that, there were no source of information such as brochures or leaflets disposable for the visitors. As of the verbal presentation of the historical site, there was only one guide in charge of explaining different parts of the site including all the architectural relics, lake and the museum. Indeed, one guide was not sufficient for such a large complex. The audio guides and digital presentations were not available.

Moreover, no website is specifically designed for the WHS. Only, few web pages are assigned to Takht-e Soleyman in the website of Bureau for the Research Bases' Affairs, presenting general information about the site and its director. Furthermore, there are not structured procedures to make networks with external bodies such as academic sectors, travel agencies, NGOs etc.

#### Local community engagement

The importance of local community engagement is stressed in several Iran policy and legislative documents. It dates back to Iranian Cultural Heritage Organization Charter, 1988. It is also highlighted in Takht-e Soleyman Management Plan as well as in further upstream national and regional policy documents (e.g. Development Vision Document of Iran, National Plan for Tourism Development, and Development Vision Document for West Azerbayjan Province). These considerations indicate normative provisions for participatory governance and management of the cultural heritage.

Although a strong bedrock for local community engagement underpinned in policy and legislative document, there is not a concrete process of engagement in practice in Takht-e Soleyman cultural landscape.

In the management plan of Takht-e Soleyman WHS (2010), it is acknowledged that participatory management has to be promoted in order to create compromise and to overcome the distrust between the management part and the local community. As stated in the same document, the local community of the village (Nosratabad) is willing to participate voluntarily in building of school, bathrooms and organizing the internal passages of village in addition to participation in land preparation procedures for the above-mentioned purposes. The encouragement of local community for participation can be initiated by their trusted organizations like local health centres. Subsequently, it has to be followed by establishment of an official organization that supports the participation of the local community in different ways.

Despite the national and local provisions and the highlights in the management plan of Takht-e Soleyman, the local community is not considerably engaged in any addressed fields of participation.

### Public and private sector engagement

In the Iranian policy documents, there is a great orientation towards highlighting the role of public and private sectors participation in management, execution and monitoring of the cultural affairs and tourism projects. This approach in Iranian policies is different from elimination of the role of government in cultural planning. In fact, it refers to the approach in which the government is responsible for governance, national policy making and strategic planning.

The so far measurements fulfilled for realizing those privatization policies (regarding Third and Fourth National Development Plans) shows that the trend of privatization has not been systematically pursued up to the time. One of the main reasons is that the private sector, which is unsure of profitability and security of investment, is not willing to participate in cultural heritage fields. Moreover, the private sector does not have enough liquidity to purchase centralized government assets.

This fact stayed almost on the same track during the Fifth Five-year National Development Plan. The existing situation reveals that there is inconsiderable tendency in public and private sectors to invest or take part in cultural heritage sphere.

As of public sector, apart from the central government, municipalities and NGOs involve in the field of cultural heritage on a very limited scale. NGOs have not much power and authorization to get involved. Moreover, municipalities as local organizations usually have unsuccessful outcomes considering the centralized government system and their challenges and interactions with central government.

The current model of public and private sector engagement is recognized for Takht-e Soleyman WHS as well. All the affairs related to the WHS are centralized in the government and ICHHTO. The collaborations of private sector with Takht-e Soleyman WHS were limited to the research and study projects by a number of engineering consultant companies as follows:

- Naghshavaran Toos 2011
- Cheshmandaz-e Shahr-o Abadi 2011
- Tarh-o Rahbord-e Pouya 2010
- Mehraz-e Ide ta Padideh 2009
- Padideh Samet 2009
- Khesht-o Khorshid Study and Conservation Company 2008

• Gisement – 2005

### Cultural heritage and economy

The observations and discussions with local people as well as the technical experts working in the site, reveals that the capacities of Takht-e Soleyman cultural heritage has not been optimally exploited in enhancement of economic situation and the life conditions of the local people. Although it can affect the economic development in the region through various ways, the existing situation shows that there is a gap between the economic capacities of Takht-e Soleyman cultural landscape and its real contribution at present.

Economy in this area is dependent on agriculture and animal husbandry. The revenues of two mentioned pillars of economy are not sufficient for the families to live at normal standards. The low prices of agricultural products hardly compensate the costs of production. Besides, practicing traditional methods of animal husbandry, results in higher expenditures while the final products cannot be sold at a good price. Those challenges have caused diminution if their economic preponderance.

Therefore, confining the economic activities almost to the two above-mentioned areas have limited the job opportunities for the new generation and consequently increased the rate of emigration to bigger cities.

## 5.2.3 Review of existing tourism management

Touristic attractions in Takht-e Soleyman cultural landscape can be divided into two principal categories: natural attractions and cultural attractions. Each mentioned category brings about various types of tourism. Travels aiming at exploring nature, relaxing by nature or treatment intentions are related to natural attractions while visits for the purpose of historical places and archaeological sites, pilgrimage destinations and educational reasons are attributed to cultural attractions. As described in the previous sections (See chapter 4) Takht-e Soleyman encompasses not only the variety of cultural and natural attractions but also combined elements of cultural and natural importance. Moreover, the diversity of intangible cultural heritage and mixed ethnic cultures of Kurd and Azeri make this area a peculiar destination for different touristic purposes. Accordingly, study the tourism as an important economic pillar seems to be consistent with the aim of this research.

In this section the current state of tourism management as well as the national policy trends will be discussed.

### **Current state of tourism**

According to the statistics from the archive of Takht-e Soleyman site the annual number of visitors of the site during the past five years varied from 68,000 to 92,000. This number is composed of approximately 98% Iranian and 2% foreigner visitors. The number of foreign tourists visiting Takht-e Soleyman has increased during past years but remained very limited. Regarding the geographical location of the site and cold climate, the touristic season starts from late spring and continues until

early autumn. However, the majority of the tourists visit this place during summer time. Many visitors of the site during the holidays are the local people from nearby villages or from Takab town.

Comparing this statistics with the similar Iranian WHS, Takht-e Jamshid (Persepolis), reveals the average of (-43%) of lower incoming tourists in Takht-e Soleyman on annual basis<sup>1</sup>.

According to the observations and interviews, one of the main reasons of underdevelopment of tourism industry is related to the existing infrastructures.

### Infrastructures

Although the existence of many touristic attractions in Takht-e Soleyman cultural landscape, the current facilities for the receiving visitors are fairly basic. There is not any accommodation place for the tourists except few local houses, which are not inside the local traditional context of the area. There are spaces prepared for camping and staying during the night next to the car parking of the WHS and also inside the Spa area but they are not of acceptable standards. Except two small shops providing very basic food and a café in the Spa centre, there is no remarkable restaurant offering neither the general nor the local food. Moreover, no souvenir shop or any other spots presenting local handicrafts are existed.

Considering that, there is no possibility of air or rail transportation to Takht-e Soleyman, visitors can reach this place only by means of car or bus. The nearest bus and taxi terminal to Takht-e Soleyman is located in Takab (40 km away from the WHS).

In addition to the above-mentioned issues, the improvement of the following facilities could have positive impact on tourism industry:

- Connection roads to Takht-e Soleyman area
- Domestic roads
- Health care and medical Centre
- Fuel station (there is only one)
- Banks and ATM

The nearest place to access the above facilities in a moderate quality is the town of Takab, 40 km away from the WHS. For instance, there is only one three-star hotel in Takab, which means that the tourists do not have many alternatives even if they decide to stay in Takab.

Apart from the low number of incoming tourists, the lack of above-mentioned facilities has impaired the economic impact of the current situation of tourism. In other words, the lack of accommodation centres, restaurants, souvenir shops and other services for the tourists made their stays very short inside the area. Moreover, the revenues from the incoming tourist is mainly related to buying the ticket to enter the WHS and using the Spa centre.

### **Capacities for tourism**

<sup>&</sup>lt;sup>1</sup> http://www.farschto.ir - Website of ICHHTO of Fars province

The cultural, natural and social values in Takht-e Soleyman cultural landscape can be regarded as capacities that can make this area a striking tourism destination. With regard to the fact that the remarkable potentials of this region have remained unlocked, a proper management approach would be the key to realize the real position of this region.

This area has the capacity to receive different types of tourists like cultural tourists, eco-tourists, health tourists (for mineral warm springs), religious tourism (for Azargoshnasb Fire Temple) and energy tourists (for the believers of energy centres in this area).

Considering that energy tourism is less popular than the other mentioned types, hereafter a brief introduction about it will be presented. Goldouz, et al. (2010) in a paper about energy tourism and spiritual tourism in Takht-e Soleyman explained that there are many places on the Earth with natural attractions for healing, relaxing and awareness of people, which have resulted in "coining the phrases sacred sites and the Earth or planetary chakras". These places also have the archaeological, religious and cultural attractions. According to this paper in 2004 a group of tourists in accompany of two of the authors of the paper visited this area for the aim of energy tourism. "All tourists, feeling great rapture, made a circle around the mesmerizing lake and prayed for peace". The purpose of the energy tourism falls between eco-tourism and health tourism. While eco tourists respect the physical body of the Earth, the energy tourists have respect for the physical body and also the soul of the Earth. On the other hand, like health tourists, energy tourists seek for healing their body and mind.

Apart from the various features that attract different types of tourists to this area, there is a very important potential that has been overlooked. Nosratabad village in vicinity of the WHS is a very rich area to be regarded for targeted tourism. This ignorance has resulted in deprivation of the inhabitants of the village from the direct positive impacts of tourism. The fundamental potentialities of Nosratabad village to contribute to tourism development are:

- Neighbouring with the WHS and the wonderful view to the site
- Possibilities for tourist accommodation in local houses
- Eye catching domestic architecture and stepped physical appearance of the houses
- Local food products like honey and diary

Another important peculiarity of this area is the existence of numerous warm water springs, which have the capacity to be equipped for the health and relaxing purposes. This combination of the natural feature with the cultural heritage attractions can make this place a peculiar destination for the visitors.

Based on the mixed characteristics and special capacities of this area, it is evident that tourism development is an important strategy towards local development. High percentage of tourists visit this area for cultural land natural heritage purposes, therefore, the policies of management of tourism have to be in line with heritage management policies. In this regard, sustainable development has be fostered not only through improvement of infrastructures but also through local community participation.

The results of the questionnaire survey presented in the next chapter gives more insight to the researcher about the weak points in the infra structures and the reflections of visitors about the management of cultural heritage in Takht-e Soleyman WHS. The visitor questionnaire survey is regarded as a complementary part to this section combining empirical evidences with the above archival and observation data analysis.

### **Tourism development: trends and plans**

The tourism development laws of Iran together with the upstream documents describe current and future trends of tourism in Iran. The aim of including tourism development in national development programs is to enhance its role in the macro economy as a substitute for the oil resources.

The policies of national development and The Development Vision Document of Iran and National Development Plans clearly explain the state priorities as well as its commitment to tourism development. In these highly important national policy documents, improvement of private sector in the field of tourism has been underscored. Furthermore, foreign financial resources have been highlighted in improving tourism industry.

In the context of infrastructure improvement in the regions of high cultural heritage importance point of view, ICHHTO with the collaboration and the coordination of related bodies, organizations and companies is tasked with providing regulations and submission to the board of ministers for further ratification. These regulations are related to capacity building for the active participation of non-governmental sector in investing in construction of infrastructure facilities such as access roads, water, electricity, gas and phone supply in the hubs of historical and cultural attractions of the country. Moreover, in the context of ratifying tourism projects, in addition to legal requirements of the ICHHTO, Iran Department of the Environment has also an important role in ratifying tourism projects and finds it essential to conduct Environmental Impact Assessment (EIA) for all development projects.

In Development Vision Document of West Azerbaijan Province, the future improvement and perspective of the province has been specified. In this document, the natural, historical, and handicrafts attractions have been noted as the main development capabilities of the province. Therefore, tourism industry development proportional to natural, historical and cultural capacities of the province has been considered as one of the long term goals of development. One of the strategies for reaching this goal is to persuade private and governmental sectors to invest in tourism industry and promote cultural and artistic services. Of proposed plans in this document, establishing and improving the required infrastructure for developing tourism sector and supporting private sector in establishing, revising and expanding tourism facilities have been addressed. In this document, the shortage of appropriate infrastructure of tourism and low quality of facilities in touristic centres have been taken into consideration as main obstacles and development concerns.

The addressed policies relevant to tourism sector in "Document of Development of Cultural and Tourism Sector in the perspective of The Development Vision Document of Iran" emphasizes on sustainable development of tourism respecting cultural values of the society, cultural and environmental heritage capacities in order to meet the Iranian society requirements, consolidating national unity and solidarity, increasing international understanding and introducing Iranian culture. Moreover, it put emphasize on promoting incoming tourism and achieving right share from world tourism market, in order to increase gross domestic production (GDP) and job opportunities.

In this document, challenges of tourism sector have been addressed as following:

- The existence of security view towards incoming tourists.
- Lack of appropriate investment for optimal utilization of the existing resources and facilities.
- Wearing out tourism facilities and equipment due to lack of continuous investment.
- Weakness of marketing though media at the national and international levels.
- Strict rules and regulations and the weakness of tourism industry structure.
- Lack of comprehensive statistical system and the tourism account system.

- Absence of established tourism market system due to institutional deficiencies and existing traditional relations.

In the Fourth and Fifth National Development Plans, delegation of some tourism activities to private sector as well as their encouragement through granting privileges and bank loans have been stressed.

In the Sixth National Development Plan, The preservation of Iranian cultural heritage and customs through non-government sector participation has been highlighted. In this regard, the local development of tourism industry particularly religious, cultural, and health tourism and supporting development of handicrafts, artistic works, cultural industries, multi-media productions and their infrastructure have been addressed.

# 5.3 Methodology

Methodology refers to the guidelines of performing the research in order to make the research results acceptable as valid knowledge. A method consists of rules and techniques on how to collect, adapt, analyze and present empirical evidence (Kumar & Phrommathed, 2005). While thinking about choosing the research methodology, the competence of each approach with the goals and objectives of the research should be estimated (Bernard, 1988). Based on the explanations the overall design of this research is mixed method-sequential that is an integration of qualitative and quantitative methods with an ordinal arrangement. Mixed method design and the related arguments is explained in this section.

In the first part of the empirical research, the context of the case study was studied with a focus on the findings of the theoretical part. With this approach, the empirical research was dedicated to different phases of ordinal data collection and analysis consisting of the study of management of the site as well as national policies analysis, conducting interviews with the key persons in cultural heritage sector and carrying out questionnaire surveys.

As it is expressed and will elaborated in the succeeding paragraphs, the methodology of empirical part is developed through participatory. In other words, it considered different stakeholders, namely; managers, local community and visitors. It is believed by some scholars that the most widespread appearance of participation in mainstream development is seen in the form of participatory methodologies of research. Distinctly enough, participatory research focuses on a process of sequential reflection and action, carried out with and by local people rather than on them. In this methodology local knowledge and perspectives are not only acknowledged but also considered to make a platform for further research and planning. The key difference between participatory and conventional methodologies lies in the location of power in the research process (Cornwall & Jewkes, 1995).

From another perspective, the integrated approach discussed in the theoretical section was used as a suitable paradigm to accomplish the empirical survey. That is, a top-down approach was employed through an in-depth interview with the key cultural heritage managers to recognize their reflections about valorization and state of management of the site. While questionnaire survey was conducted with a bottom-up approach revealing the opinion of the local community and visitors of the site.

# 5.3.1 Theoretical vs. empirical approach

This research was accomplished through both theoretical and empirical studies. After a comprehensive literature review, it was attempted to thrive the findings and articulate the theoretical framework in the context of a real case.

The first part of the empirical research was focused on a comprehensive study of the relevant national upstream and local policy documents. Subsequently, the theoretical framework was adjusted to the local concerns and challenges through interviews with the key persons in cultural heritage sector. The findings of this phase provided the researcher with a better view to identify the constructs for developing the questionnaires. The questionnaire surveys were carried out on the basis of qualitative-quantitative approach among the local community and visitors of the WHS.

# 5.3.2 Mixed method approach

Mixed methods can be defined as the integration of more than one method or data source to investigate a phenomenon. In particular, the research literature proposes multiple ways and many levels of mixing both qualitative and quantitative methods as complementary approaches (Jick, 1979; Rocco, Bliss, Gallagher, & Pérez-Prado, 2003). It is believed by many scholars that using multimethod designs would minimize the methodological bias. In the same vein, Greene, et al. (1989) acknowledged that the intrinsic bias resulting from single-methods could be overcome by combining different methods. He stated that mixing methods permits more exact understanding or, in methodological terms, enhances validity (internal and external) as well as reliability. Therefore, using the mixed methods has become more widespread in order to conduct stronger researches (Greene, Caracelli, & Graham, 1989; Creswell & Clarck, 2011).

According Creswell and Clark (2011), there are several reasons that make mixed method suitable for a research. Among those reasons, there are three that make it vital to combine two methods in this research:

- One data source is insufficient
- A need exits to best employ a theoretical instance
- To enhance the study with the second method

Five purposes for adopting mixed methods design strategies are identified as triangulation, complementarity, development, initiation and expansion. Triangulation is necessary in order to increase a study's validity and interpretability, while Complementarity increases a study's validity and interpretability by effectively managing overlapping, but different aspects of a phenomenon. Development uses results from one method to develop the other method. Initiation is used to add depth and breadth to inquiry mixed methods in order to deal with inconsistent results from qualitative and quantitative research findings. Finally, expansion approach helps to extend the scope of the study (Greene, Caracelli, & Graham, 1989; Rocco, Bliss, Gallagher, & Pérez-Prado, 2003)

In this dissertation mixed method design is regarded as qualitative and quantitative approaches which are utilized in different phases of the research. In addition, the purpose of adopting the mixed method design is defined under Development category in which the result of the qualitative exploratory study is used for developing the quantitative analysis carried out in the questionnaire survey.

#### 5.3.3 Qualitative vs. quantitative data analysis

In qualitative research data are collected from a small number of organizations through methods such as participant-observation, in-depth interviews, and longitudinal studies (Gable, 1994). Qualitative research, in contrast to quantitative research, generally does not translate aspects of the research into numbers to be analyzed mathematically. Instead, it analyzes the data on the basis of researcher's interpretations. Gable (1994) mentioned the critics that Kerlinger (1986) defined for qualitative methods as: inability to manipulate independent variables, the risk of improper interpretation, and the lack of power to randomize. Qualitative research data collection methods are time consuming, therefore the sample size is usually smaller than that of quantitative approaches (Punch, 2013). The advantages of qualitative approach has been combined with qualitative method to achieve more concrete results. Quantitative data analysis is a systematic approach to analyze numerical data. Sometimes data are collected in qualitative forms and then converted to numerical data by using special techniques (Mayan, 2001). This is the procedures that is followed in this research. One of the advantages of quantitative methods of data analysis is enabling the researcher to gain meaningful results from a large size of sample. The use of quantitative procedures in analyzing qualitative information can also lend greater credibility to the research findings by providing the means to quantify the degree of confidence in the research results (Abeyasekera, 2005).

In this study, the qualitative data analysis helped to identify the main factors that affect the valorization of cultural heritage in Takh-e Soleyman cultural landscape. Measuring the correlations between factors and their effect on local sustainable development was studied through quantification of the data and a subsequent analysis by quantitative methods in phase two.

#### 5.3.4 Phase one: interviews

The phase one of empirical part was dedicated to conducting interviews. It was done through a qualitative approach.

#### Objectives

Main objective of conducting interviews was to identify the main factors that affect the valorization of cultural heritage in Takht-e Soleyman cultural landscape. Moreover, it was aimed at assessing the current concerns related to the management of the site. The interviews were expected to show if there is consistency between the visions found in the literature review and the real concerns and challenges in the area of study.

#### **Data Collection**

Data collection was done through conducting interviews using semi-structured open ended questions. Semi-structured interviews with open ended questions were the main tools and the primary data source in this phase of study. The interviews designed on semi-structured format that are generally organized around a set of predetermined open-ended questions, with other questions emerging from the dialogue between interviewer and interviewees (DiCicco-Bloom & Crabtree, 2006). The findings of the theoretical part, study of different values and dimensions of Takht-e Soleyman cultural landscape together with the relevant national policy documents and analysis of the state of management in Takht-e Soleyman were used to determine the questions for the interviews.

### Selection of interviewees and sample size

Selecting the interview participants was based on purposive sampling that seeks to maximize the depth and richness of the data to address the research question (Kuzel, 1999). The main goal of purposive sampling is to focus on particular characteristics of a population that are of interest, which will best enable the researcher to answer research questions. The sampling process involves identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest (Creswell & Clarck, 2011). Accordingly, ten persons in high relevant positions to cultural heritage management were communicated and involved in the in-depth interviews. All the interviews were carried out face to face. The main advantage of face-to-face interviews is that the researcher can adapt the questions as necessary, clarify doubts and ensure that the responses are properly understood by repeating or rephrasing the questions (Loosveldt, 2008). Each interview lasted between 45 and 75 minutes. The interviews were recorded with prior permission of the participants. In addition, notes were taken during the interview in order to emphasize the main topics. The recorded interviews were fully transcribed and further coded to capture key concepts of the argument.

### **Data Analysis methods**

The analysis of the qualitative data was carried out in four steps:

- Transcription of the interview contents
- Coding
- Classification
- Interpretation and conclusion

After careful transcription of the interview contents, which were previously recorded, the coding was done through transcripts review and labelling relevant words, phrases, sentences, or sections. The initial code can be a word, a phrase, or the respondent's own word, obtained by the careful reading of the text (Lichtman, 2012). The codes were chosen based on the points mentioned by most of the interviewees or highlighted specifically by an interviewee and also the reflections complied with the findings of literature review.

The second step was dedicated to distillation of the coded data and establishment of more abstract classification. This step enabled the researcher to better organize and conceptualize the data for further analysis. Moreover, it was helpful in determining the most important codes and creating categories by bringing several codes together.

The final step in qualitative data analysis was to interpret and synthetize the classified data to build up the conceptual framework (Miles & Huberman, 1984). In this research, the achievements of this phase were incorporated to the findings of literature review to finalize a theoretical framework consistently with the specification of management realities of the case study. The results were also used to build

the constructs of the questionnaires. Moreover, they were considered in defining the realistic ways to improve the management system in Takht-e Soleyman cultural landscape. All the mentioned procedure were done manually.

The findings of the interview phase are going to be explained in the subsequent paragraphs of the same chapter.

### 5.3.5 Phase two: questionnaire surveys

Phase two of the empirical part consists of two questionnaire surveys addressed to the local community and the visitors of Takht-e Soleyman WHS. Both questionnaire surveys were conducted through qualitative-quantitative approach.

### Objective

The main aim of both questionnaire surveys was to bring the conceptual framework established on the basis of literature review and interviews in an empirical context.

### **Data collection**

The data collection tool in this phase were questionnaires consisting of close-ended questions.

## Questionnaire design

The questionnaires were built on the basis of the variables found through interviews and the results of the literature review. They consisted of close-ended questions suited for quantitative/qualitative analysis. The close-ended questions are known to be more quick and easy to analyze rather than openended questions. The questionnaire was designed to be self-administered, Furthermore, for being able to convert the opinions of the respondents into quantitative data, a proper scale and responses format had to be considered in designing the questionnaires.

There are ranges of scales and responses formats as presented in Table 5-3. Frequency scales may be used when it is important to establish how often a target behaviour or event has occurred. Thurstone scales use empirical data derived from judges to ensure that attitudes or behaviours being measured are spaced along a continuum with equal weighting/spacing. Guttman scaling is a hierarchical scaling technique that ranks items such that individuals who agree with an item will also agree with items of a lower rank. Rasch scaling is a similar type of scale (Rattray & Jones, 2007). Mokken scale analysis is a hierarchical scaling method and is similar to Guttman scaling. In both techniques an underlying latent attribute is represented by a set of relevant items (Van Schuur, 2003).

Within the social research, Likert-type are most commonly used. This ordinal scale measures the levels of agreement/disagreement of the respondents. In this scale, it is assumed that the strength/intensity of experience is linear. Respondents may be offered a choice of five to seven or even

nine pre-coded responses with the neutral point being neither agree nor disagree (Rattray & Jones, 2007).

With regard to these explanations Likert scaling was determined as the most relevant and useful scale in this research. A five-point Likert scale was employed as the response format with assigned values ranging from 1 = strongly negative to 5 = strongly positive impressions.

While the majority of the questions were in the Liker scale form, few multiple choices were employed where Likert scale was not applicable. The Likert choices were accompanied by the final choice of 'I have no idea' to persuade the respondents to give their very real answers to the questions.

The Likert scale questions were designed to measure the awareness, emotions, tendencies, assessments and behaviours of the respondents. To generate the items for the questionnaire design the following issues were defined:

- Main objective
- Medium goals
- Necessary information to reach the goals and objective
- Questions that could provide the necessary information
- Right persons who can provide answer the questions

It was attempted to avoid a group of survey biases by considering an appropriate layout and phrasing. The specific terms were proposed in a clear articulation in order to be understandable for the respondents of different age and educational groups. A short introduction about the research and researcher at the beginning of the questionnaires was considered in order to build trust and confidence for the respondent. In Table 5.4, the composition of the questionnaires is presented.

Twenty two questions were similar in both questionnaires. At the end of each questionnaire three questions regarding age, sex and education of the respondents were asked.

The questionnaires for local community were prepared in Farsi language while the questionnaires for visitors were prepared in Farsi and English languages for both Iranian and foreign visitors. All the questionnaires were coded with a reference serial number.

After designing the questionnaires, the methods to choose the respondents and the statistical sample size had to be defined.

Questionnaire development	Key issues	
What will the questionnaire measure?	Knowledge	
-	Attitude/beliefs/intention	
	Cognition	
	Emotion	
	Behavior	
What types of scale can be used?	Frequency	
	Thurstone	

Table 5-3. Stages in questionnaire development: item generation and scale construction

	Rasch
	Guttman
	Mokken
	Likert type
	Multiple choice
How do I generate items for my questionnaire?	Ensure relevance of items?
	Wording issues Which response format is best?
	Which types of question are possible?
	Free text options?
	Does your measure have subscales?
	Questionnaire layout

#### Assessment of Takht-e Soleyman WHS management for a sustainable development

Source: Rattray & Jones, 2007

Table 5-4. Type and number of questions in questionnaires	
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Type of questions type	Local community questionnaire	Visitors questionnaire
Likert scale	35	38
Multiple choices	1	4
Personal information	3	3
Total number of questions	39	45

### Sample description

The sample size was based on the lower age limit of 15 years old. This age limit which is the official minimum age for participation in national referendums in Iran was applied in these questionnaire surveys considering the content and the level of complexity of the questions. This decision was made on the basis of required insight about the development and cultural heritage management for answering the questions. Hereinafter the specification of each sample group and size are going to be described.

#### Sample size (Local community questionnaire survey)

The number of the population in the desired age group was not available in the recent statistics of Census Bureau of Iran. So it was calculated by using the relative numbers presented in the previous national census program. Accordingly, the number of eligible people for participation (statistical population size) in the questionnaire survey was 850, which was considered as statistical population size.

The appropriate sample size for a population-based survey when the population size is known, is calculated through Cochran (Cochran, 1963) equation, Where:

n: sample size

N: statistical population size

P: percentage picking a choice, expressed as decimal (0.5 used for sample size needed)

Z: z value or confidence level

d: confidence interval

$$n = \frac{N(Z^2)p(1-p)}{(N-1)d^2 + (Z^2)p(1-p)}$$

$$n = \frac{850 \ (1.96)^2 \ 0.5 * \ 0.5}{(849)(0.05)^2 + (1.96)^2 \ 0.5 * \ 0.5} = \frac{816.34}{3.0829} = 264.79 \approx 265$$

Considering the above calculations, the sample size was 265 which means for further analysis 265 questionnaires had to be available. Out of 277 circulated questionnaires, 265 were considered as valid.

The twelve questionnaires were excluded from the analysis because they had many empty fields or fake answers by having repeated same choices.

#### Sample size (Visitor questionnaire survey)

For populations that are large, Cochran (1963) developed the following equation to yield a representative sample size:

$$n = \frac{z^2 \times pq}{d^2}$$

Therefore, the sample size for the visitor questionnaire survey will be:

$$n = \frac{(1/96^2) \times 0/5 \times 0/5}{0/05^2} = 384$$

The circulation of questionnaires continued until 384 valid questionnaires were available. Accordingly, 408 questionnaires were circulated. Out of this number, 11 were not returned and 13 were incomplete or not filled in a logical manner.

### Conducting the questionnaire survey

During the two visits and stays in Takht-e Soleyman for collecting archival and observatory data, the management and experts working inside the site became familiar with the current research and the researcher. Therefore, they were collaborative, helpful and positive thinking about conducting the questionnaire surveys. Thus, the researcher was able to arrange the following issues without any delay:

- Getting legal permissions from the management of the site for conducting the questionnaire surveys inside WHS and Nosratabad village,

- Submission of the questionnaires to the management of the site to clarify the contents of the questionnaires and,
- Making in-site arrangements and situating all necessary facilities (finding proper location to be able to reach the visitors, accommodate a desk and few chairs) for circulating questionnaires among visitors.

In conducting the questionnaire survey three persons were assisting the researcher for the duration of 10 days focusing on circulating total number of 685 questionnaires. In circulating the questionnaires among the local community, a resident of the village who was also a personnel of the site had kindly assisted the group. Her presence was helpful not only to build more trust between respondents and the researcher but also to give explanations in the local language, when necessary. Both questionnaires were circulated among the eligible respondent groups (in terms of age), on a random basis.

The residents of Nosratabad village was the target group of local community questionnaire survey. Nosratabad, the nearest village to Takht-e Soleyman WHS is the only village in the UNESCO buffer zone. Thus, the inhabitants of this village are the most influenced among the locals by the presence of the historical site. However, the visitors of Takht-e Soleyman WHS constituted the target group of the other questionnaire survey. They were chosen on the random basis at the end of their visit to the site. The questionnaire survey was conducted in the month of September, which has the highest number of tourists. Therefore, there was possibility of circulating the desired number of questionnaires within the broad range of visitors.

### Limitations

There was not any major concern in circulating the questionnaires. The respondents were very cooperative and willing to participate in the survey. The only point to be mentioned was related to a possible bias caused by consulting very specific issues with the target group who were of various education groups (as will be shown in the analysis of respondents profile in the subsequent sections). It was attempted to minimize this inconvenience by designing the questions in a very understandable manner. Moreover, the respondents were accompanied by survey group members for any necessary clarification.

The main limitation in conducting visitor questionnaire survey was the visitors' time limitation. This might have biased the quality of data collected. This issue was more noticeable when the respondent was a member of a touristic group and had not enough time to fill the questionnaire with enough concentration.

The findings in the empirical part of this study are based on the specific features of the case study. Therefore, the generalizability of the findings has limitations unless the methods are utilized for similar areas according to their features and characteristics of that region.

### Data processing and analysis methods

After collecting the data, the questionnaires were once more reviewed for completeness. Then the responses were coded and converted into numerical form. They were then entered manually into Excel software program to be ready for further statistical analysis. Data analysis is a process for obtaining raw data and converting it into information useful for decision-making by users. Data is collected and analyzed to answer questions, test hypotheses or disprove theories.

The next step was to importing the Microsoft Excel data into the statistical software for analysis. Two statistical software were employed in this research:

- *SPSS (Statistical Package for the Social Sciences)* which is a software package widely used for statistical analysis in social science (Miller & Acton, 2009). In this study SPSS software package 20 was utilized for descriptive and correlation analysis using Pearson correlation, and Spearman's rank correlation analysis.

There are several correlation coefficients, measuring the degree of correlation. The most common one is the Pearson correlation coefficient, which is used for parametric data and is sensitive only to a linear relationship between two variables.

Spearman's rank correlation coefficient is a non-parametric equivalent to Pearson's correlation coefficient. Pearson's is calculated if the two variables are numerical and at least one is distributed normally (Lehmann & D'Abrera, 2006).

- *SmartPLS software* was used to test the conceptual model of this research through structural equation modelling (SEM). SmartPLS is a software for a variance-based SEM using the partial least squares (PLS) method (Henseler, Ringle, & Sinkovics, 2009).

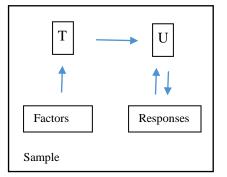
Structural Equation Modelling (SEM) is designed to evaluate how well a proposed conceptual model that contains observed indicators and hypothetical constructs explains or fits the collected data (Bollen, 1989). It also provides the ability to measure or specify the structural relationships among sets of unobserved (latent) variables, while describing the amount of unexplained variance (Hoyle, 1995). Clearly, the conceptual hypothetical model in this study was designed to measure structural relationships among the unobserved constructs that are set up on the basis of relevant findings of interviews and literature review. Therefore, the SEM procedure was an appropriate method for testing the proposed structural model and hypotheses for this study.

Partial least squares (PLS) is a predictive technique, which can handle many independent variables, even when there are more predictors than cases and even when predictors display multicollinearity. It can also relate the set of independent variables to a set of multiple dependent (response) variables. The advantages of PLS include ability to model multiple dependents as well as multiple independents;

ability to handle multicollinearity among the independents; robustness in the face of data noise and missing data; and creating independent latents directly on the basis of cross products involving the response variables, making for stronger predictions. PLS may be implemented as a regression model, predicting one or more dependents from a set of one or more independents; or it can be implemented as a path model, corresponding to structural equation modelling.

Figure 5.1 represents a schematic outline of the method. The overall goal (shown in the lower box) is to use the factors to predict the responses in the population.

This is achieved indirectly by extracting latent variables T and U from sampled factors and responses, respectively. The extracted factors T are used to predict the factors U, and then the predicted factors U are used to construct predictions for the responses. This procedure actually covers various techniques,



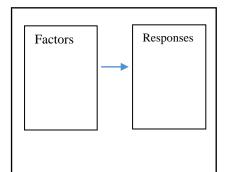


Figure 5.1. Indirect modelling (Source: Tobias, 1995)

depending on which source of variation is considered most crucial (Tobias, 1995).

### Validity-Reliability

Before analyzing any data, prior to testing any subjects, the issues of reliability and validity must be addressed. Reliability and validity are the two most important aspects of precision of the test results.

*Reliability* is one of the most important elements of a test quality. It is defined as the degree to which an assessment tool produces stable, consistent and similar results for the same individuals at different times. In other words, a measure is said to have a high reliability if it produces similar results under consistent conditions. Among several methods to measure the reliability Cronbach's alpha is the most common measure (Cronbach, 1951) which was utilized in this research. This method is most commonly used when there are multiple Likert questions in a survey/questionnaire (Gliem & Gliem, 2003). In this technique, reliability can take on values of 0 to 1.0, inclusive. A low value of alpha could be due to a low number of questions, poor interrelatedness between items or heterogeneous constructs. There are different reports about the acceptable values of alpha, ranging from 0.60 to 0.95 (Tavakol & Dennick, 2011).

In this research, the Cronbach's alpha for 35 Likert scale questions in local community questionnaire was calculated as 0.898 and for 38 Likert scale questions in visitor questionnaire 0.886, which showed high reliability of the technique. The values of Cronbach's alpha for clusters of questions that are tested together will be presented in the sections of empirical findings.

While reliability test is necessary, it alone is not sufficient for a test to be meaningful, it also needs to be valid.

*Validity* refers to how well a test measures what it is expected to measure (Cozby, 2001). In other words, validity deals with the adequacy of a scale and its ability to predict specific events, or its relationship to measures of other constructs (DeVellis, 2012).

There are several ways to estimate the validity of a test including face/content validity (through the agreement among professionals), construct validity (the ability of a measure to confirm a network of related hypotheses generated from a through a panel of experts), criterion-related validity (the degree of correspondence between a measure and a criterion variable, usually measured by their correlation), formative validity (is used to assess how well a measure is able to provide information to help improve the program under study) and sampling validity (similar to content validity ensures that the measure covers the broad range of areas within the concept under study, completed though panel of experts (Moskal & Leydens, 2000; DeVellis, 2012).

In this study, the face/content validity method was utilized. The validity of the semi-structured interviews and self-administered questionnaires were determined by acquiring information from four highly qualified university professors in the field of cultural management and one expert in the field of statistical analysis. They crosschecked the content, design and phrasing of the questions with regard to the aim of the surveys. The modifications were affected following the comments of the experts. In the next step, the questionnaires were tested randomly on a group of local community and visitors to make sure that the questions were understandable for the target group. In few cases, slight modifications were made in the wording by substituting specific terms with a more common one, without losing the content.

# 5.4 Data analysis and empirical evidences

This section is dedicated to the analysis of the data and presenting the empirical evidences. The sequence of developing this chapter is as follows:

In the first part the major and leading achievements of the in-depth interviews with key managers of cultural heritage in Iran are described. In the same part, the theoretical framework of the empirical part, which is based on the literature review and interview results, is presented. Subsequently, the results of the questionnaire surveys are demonstrated in two separate sections:

- Local community questionnaire survey presenting internal reflections
- Visitor questionnaire survey inscribing external issues pertaining to economic development impact

Each section starts with the descriptive analysis, which sheds light on local capacities and concerns for valorization of cultural heritage. It is followed by testing the hypothetical model indicating the ways though which cultural heritage would affect local sustainable development in the area of study. Testing of the hypothetical model would bring the theoretical findings in an empirical context.

Eventually in the last part of this chapter, based on the empirical evidences, the discussions will be made about the concerns and challenges of management system in Takht-e Soleyman cultural landscape. In order to be able to discuss the results more clearly, SWOT analysis were used in the last part.

# 5.4.1 Interviews

The semi-structured interviews were conducted personally with ten key persons in the field of cultural heritage/cultural landscape management. Nine of the interviewees were selected from the cultural heritage management sector among which seven were currently or formerly working at the top management levels in ICHHTO. One interview was conducted with an expert and university professor of natural resources management who is also working at the top management level in Department of Environment of Iran. In selection of the interviewees' expertise different aspects of cultural landscape management were taken into consideration.

The main objectives of conducting the interviews were: identification if real capacities, potentialities and burdens in management of Takht-e Soleyman cultural landscape, recognition of real management approaches at top level management, finding relations between different resources for development in the area, identification of strategies and realizing the possible ways forward.

The interviews were conducted by proposing twelve questions (See Appendix A). The questionnaire main areas of concern were directed to integrated approach to management, valorization of cultural heritage, preservation, participation of different stakeholders, innovation and tourism industry. They were determined on the basis of findings of the theoretical part and contextual study of Takht-e Soleyman area.

The analysis of the interview transcripts showed that all of the interviewees highlighted the role of local community participation as a fundamental factor based on which local sustainable development

can be realized. Moreover, they had consensus on the importance of increasing collective cognition and awareness raising among stakeholders as a precondition for participatory management. All of them acknowledged the rational utilization of cultural heritage (regarded as "valorization" in this research) as the best approach to management of cultural heritage. However, it was emphasized by a number of them that preservation should not be overtaken by utilization. According to them preservation of cultural and natural heritage are interdependent in the area of Takht-e Soleyman.

They had different reflections about the impact of registration of Takht-e Soleyman in UNESCO World Heritage List. Regarding engagement of private sector in management of the cultural heritage of this area, they had interesting reflections, despite the fact that the cultural heritage management is totally affiliated to the governmental sector in Iran. They analyzed this issue from different aspects. Among the reflections they made considering the role of NGOs in awareness raising as well as the cooperative sectors seemed to be striking.

They highlighted tourism as an important potential pillar of the local economy. Cultural and natural heritage were mentioned to be the drivers of the tourism in this area. Furthermore, tourism not only has economic impacts but also brings about higher cultural and social capital through cultural exchange and creating networks. Handicrafts can be regarded not only as a source of economic impact but also innovation. Moreover, the cultural diversity in this area suggests a proper ground to develop innovative activities in the realm of culture and economy.

There are no major tans-disciplinary problems in this area however, there are some inter-disciplinary concerns, like lack of long-term strategies and common visions among three divisions of cultural heritage, handicrafts and tourism sectors of ICHHTO.

Finally, the analyses showed that most of the mentioned concerns were multi-laterally interrelated. These interrelations suggested an integrated management approach consistent with the reflections of all the interviewees about the last question of the interview indicating the necessity of integrated management system for Takht-e Soleyman cultural landscape.

The achievements in this part affirms the findings the theoretical part as a framework for Takht-e Soleyman cultural landscape with a slight modification regarding the inter-disciplinary concerns. Table 5.5 presents the theoretical framework for the area of study.

Strategy	Area of action	Means of action	
Capacity building	Awareness raising	Education, Training, On-site training for visitors	
	Participation	Awareness raising, Empowering marginalized	
		groups (make support/ provisions), Sense of	
		attachment to the place	
	Social inclusion	Promoting dialogue among stakeholders, Local	
		community involvement	
	Culture-based economy	Development of cultural tourism, Cultural	
		products, Handicrafts, Innovative activities,	
		Entrepreneurship	

 Table 5-5. Theoretical framework of the empirical part

	Environmental protection	Integrating traditional knowledge and practices, Seeking synergies between traditional environmental practices and high technologies, Awareness raising, Promoting cultural based economy
Reinforcement of legal		Updating and developing policies and strategies,
dimensions and technical		Monitoring, Competencies
system		
Reducing inter-disciplinary		Awareness raising, Setting long-term strategies,
concerns		Engagement of private and cooperative sectors,
		Setting common visions (among cultural heritage,
		handicraft and tourism sectors of ICHHTO)

The detailed interview findings regarding the concerns and challenges in different aspects of management of the area are used as a reference in the last paragraph of this chapter.

### 5.4.2 Local community questionnaire survey

With a participatory research approach, the opinions of the local community, as the immediate beneficiaries of the WHS, has been included in the empirical study. In this regard, a questionnaire survey was conducted among the inhabitants above 15 years old in Nosratabad village on random basis (See Appendix B). The number of 265 questionnaires were considered for data analysis.

The descriptive analysis and the tests regarding the hypothesis L-1 to L-9 are fulfilled with SPSS software and the hypothetical model (hypothesis L-10) is accomplished by SmartPLS software. The explanations about the software and its applications are presented in Section 5.3.5 of this chapter under "Data processing and analysis methods".

In presenting the results the term "local community" refers to the "local community respondents". The sequence of presenting the analysis results is not necessarily the same as the sequence of the questions in the questionnaire survey.

### **Descriptive analysis**

Respondents' profile

Hereinafter, the profile of the respondents in terms of sex, age, and education will be presented.

Table 5-6. Sex profile of local community respondents

	Frequency	Percent
female	124	46.8
male	141	53.2

Total 265 100.0

Age group	Frequency	Percent	Cumulative Percent
<20	28	10.6	10.6
20-29	172	64.9	75.5
30-39	46	17.4	92.8
40-49	11	4.2	97.0
50-59	4	1.5	98.5
>60	4	1.5	100.0
Total	265	100.0	

Table 5-7. Age profile of local community respondents

Table 5-8. Education profile of local community respondents

Education group	Frequency	Percent	Cumulative Percent
Elementary school & lower	35	13.2	13.2
High school diploma	130	49.1	62.3
Bachelor	84	31.7	94.0
Master and PhD	16	6.0	100.0
Total	265	100.0	

The above tables give an image of the local community respondents who are selected on random basis. The respondents consist of 46.8% of female and 53.3% male individuals. Most of the respondents (92%) were between the age of 15 and 38 years old. Moreover, the profile of the respondents shows that 62.3% has not academic education. Figures C.1 to C.4 in Appendix C presents the charts related to respondents' profile.

The analysis of questions1 to 8, 11 to 16, Level of awareness and willingness to participation are done based of the average value of the responses in Likert scale. The Likert scale in this questionnaire is designed and coded as it is shown in Table 5.9:

Table 5-9. Likert scale in local community questionnaire survey

A lot	Much	To some extend	A little	Not at all
5 (max)	4	3 (mean)	2	1 (min)

According to the coded choices, the average of the responses is compared to the mean value of 3, minimum of 1 and maximum of 5.

#### Attachment to the place

The attachment to the place is assessed by the mean value of responses to question 1. The result show the average of 4.35. The small difference of the result from the maximum of 5, demonstrates high level of attachment to the place among the local community. Table 5.10 summarizes Table C.1 in Appendix C in terms of the impact of education on level of attachment to place:

Table 5-10. Attachment to the place vs. education

	Master and PhD	Bachelor
Mean = 5	100 %	66.7%

According to the above table 100% of the respondents with Master and PhD and 66.7% with Bachelor degree showed maximum attachment to their region. This result suggests that the level of attachment to the place increases by higher education. Table C.2 (Appendix C) describes the relationship between age and attachment to the place. According to this table 100% of the respondents in the age groups: >60, 50-59 showed absolute feeling of attachment to the place (average of answers=5). This might be related to the fact that the younger people who are at working age face problems in finding job and welfare. However, the average response value of the other age groups still indicate high attachment to the place.

### Preservation of Takht-e Soleyman cultural heritage

The analysis of the responses to question 2 with the average of 4.51 reveals that the local community has very positive approach to conservation of cultural heritage in their region.

#### Cultural heritage as a resource for development

The average of 4.07 (question 3) shows that local people consider cultural heritage as a wealth for future generations. This result confirms the finding of the previous question about preservation of the cultural heritage. However, it seems that, a small fraction of respondents do not relate the preservation to the future generations.

The analysis show that local community highly believe that cultural heritage can contribute to the development of their region. This is perceived by considering the average of 4.17 in question 4.

However questions 5 asking about the real impact of cultural heritage in local development makes an opposite reflection. The average of 2.39 demonstrates that although cultural heritage is considered as

driver for development, it has not made a great development impact up to the time according to the local community.

### Impacts of registration in UNESCO World Heritage List

Question 6 reveals the impression of local community about the impact of Takht-e Soleyman as a WHS on local development. The average of 2.32 shows that they feel some impacts of registration although not so high.

In question 7 respondent are asked if the laws and limitations related to the WHS had caused any conflicts with their activities. The average of the responses to this question is 2.76. Among 242 individuals who answered this question, 187 persons has experienced some conflicts. Thus, even if the average is below the mean of 3, but the conflict with personal activities is quite widespread (Table C-5 in Appendix C). This fact has to be considered in the discourse of participatory management to reduce the conflicts by means of creating common visions.

### Conservation and preservation vs. development plans

Question 8 clearly reflects the opinion of the local community about the any possible contradiction between conservation/preservation of cultural heritage and other development plans. The average of 2.98 is very near to the mean value in the Likert scale. Comparing this result with the result of question 4 shows that although local community highly consider cultural heritage as a resource for local development, they do not perceive preservation and conservation consistent with the other development plans. This can be resulted from the limitations considered for constructions within UNESCO zone.

## Level of awareness

The level of awareness of the local community about the role of cultural heritage in local sustainable development is implicitly evaluated by asking if they regard cultural heritage as a resource for the development of their region at present and in the future. In other words how they connect the meaning of valorization of cultural heritage and sustainable development. The numerical analysis is done though aggregation of questions 2, 3 and 4. The level of awareness according to the average 4.25 is quite high.

### Economic benefits of tourism

The average of 2.62 (question 11) shows that local community does not have a high economic benefit from the incoming tourists.

### Ethical issues of incoming tourists

Question 12 refers to the opinion of local community about the incoming tourists in terms of ethic issues. The cultural difference between the mixed local cultures with the visitors who are be from various cultures might be perceived as an unpleasant consequence of tourism. The average of 2.38 shows that some respondents recognize ethical issues, however the majority of the local community have not ethical concerns about the visitors.

### Tourists and visiting the village

In question 13 respondents were asked how much they find the tourists interested to visit their village. The average of responses which is 2.57 implies that according to the local community there is not a high willingness in the tourists to visit the village.

On the other hand, questions 14 reveals the willingness of the local community to receive more tourists inside their village. The average of 3.33 shows that the level of willingness is around the mean point (3). In this question paying attention to the frequencies of the respondents are also important for developing further remarks on participatory activities. Out of the total number of 265 respondents, 61 individuals selected "not at all" and "a little", 8 had no idea about this question and 196 persons showed mean and above the mean willingness for receiving more tourists inside the village. Accordingly, the number of interested people is quite considerable although the average is not very high.

### Willing to participation (WTP) in tourism development

The WTP in promoting tourism is assessed by asking questions 15-1 to 15-6. These questions address the interest of local community to participate in following activities:

- Transportation of visitors to the touristic attraction points
- Providing the visitors with local accommodation
- Preparing and selling local food
- Offering and selling handicrafts to the visitors
- Providing the visitors with information as a local guide
- Contribution to construction of accommodation centres or restaurants

The level of WTP is assessed by aggregating the responses to the above six questions. The WTP has the value of 3.30. It shows that level of WTP is above the average although it is not a very high. According to Table C.4 (Appendix C) WTP in each of the mentioned activities is around 3 and respondents had not very different ideas about the type of participation. This finding bears in mind that they might not have enough cognition about the reality of participation.

### Priority measurements for fostering local development

In question 16 respondents were asked to choose two out of the eight proposed alternatives as the most relevant measures for local development. This question was designed in the form of multiple choices so the respondents crossed in front of their choice without giving a rank to their answers. The proposed choices were as follows:

- Valorizing local cultural heritage
- Creation of new job opportunities
- Promoting agriculture and animal husbandry
- Development of tourism industry
- Development of access and local roads
- Development of mining industry
- Strengthening the environmental protection
- Participatory management of the cultural landscape

Figure 5.2 below summarizes the results of the analysis of the above question. In this chart, the X and Y axis show the type of measures and the number of votes, respectively. As it can be seen the first priority is "Creating new job opportunities" and the second is "Developing agricultural and animal husbandry" and the last one is "Participatory management of cultural landscape".

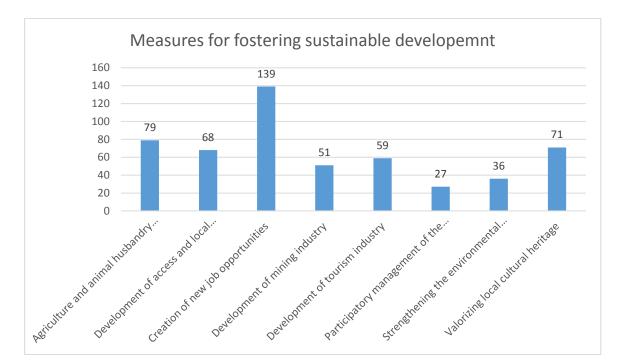


Figure 5.2. Priority measures for local sustainable development

Comparing the result of this question with questions 3, 4, 5 and 15 portrays the perception of the local community about the drivers of local development and the position of cultural heritage in this process. It also reveals their opinion about the active participation in management and development of Takht-e Soleyman cultural landscape.

### **Correlation analysis**

Participation is one of the fundamental discussions in this research, therefore, it is important to discover which actions are more effective in improvement of local community participation in the area of study. With regard to the theoretical framework (Table 5.5) the correlations of willingness to participation (WTP) with both 'level of awareness' and 'place attachment' are analyzed. The details and the results of analysis are going to be explained hereafter.

Before starting the analysis, the reliability of the data related to the determined set of questions (variables) had to be defined. In section 5-3-5, explanations about the measuring the reliability and the Cronbach's alpha for the Likert questions in local community questionnaire is described. In Appendix C, Table C.7 the reliability of the sets of questions are presented. According to that table the Cronbach's alpha for all set of questions (variables) are more than 0.6 which confirms the reliability of the data.

Level of awareness and WTP

• Hypothesis L-1: There is correlation between level of awareness and WTP.

Considering that the data distribution related to "level of awareness" is not normal (See Table C.6, Appendix C) the Spearman rank correlation coefficient was used to test the research hypothesis L-1.

According to Table C.8 in Appendix C:

Significance level (sig.) =  $0.000^{1}$  and, Correlation coefficient =  $0.216^{2}$ 

The hypothesis of existing correlation between 'level of awareness' of the local community and WTP is confirmed although this correlation is relatively weak.

## Sense of attachment to place and WTP

• Hypothesis L-2: There is correlation between the sense of attachment to place and WTP.

According to Table C.6 in Appendix C the data regarding "sense of attachment to place" are not normal. Therefore, the Spearman rank correlation coefficient was used to test the research hypothesis L-2.

Table C.9 in Appendix C shows the result of the test as follows:

Significance level (sig.) = 0.000 and, Correlation coefficient = 0.229

The hypothesis of existing correlation between sense of attachment to the place and WTP among the local community is accepted however, the coefficient reveals that this correlation is relatively weak.

+1: strong correlation in the same direction,

 $<sup>^{1}</sup>$  Sig<0.01 means that correlation is significant at the confidence level of 99% (the hypothesis is approved).

<sup>&</sup>lt;sup>2</sup> Correlation coefficient value is defined between -1 and +1 in which: -1: strong correlation in opposite direction,

<sup>0:</sup> no correlation.

According to Habibpour Gatabi and Safari Shali (2013) when

<sup>0.2&</sup>lt;correlation coefficient<0.35 : relatively weak correlation,

<sup>0.35&</sup>lt;correlation coefficient<0.65: moderate correlation,

<sup>0.65&</sup>lt;correlation coefficient<0.85: relatively strong correlation,

<sup>0.85&</sup>lt;correlation coefficient: strong correlation

## Analysis of the measures affecting valorization of cultural heritage

The reflection of local community about the impact of the defined measures on valorization of Takht-e Soleyman cultural heritage were collected though proposing seven Likert scale questions (questions 10-1 to 10-7 in Appendix B). The seven hypotheses related to each of the questions address the positive impacts of the measures regarding valorization of Takht-e Soleyman cultural heritage. They are classified into two groups based on the normality and non-normality of the data according to which the test methods are determined. Thereupon, the results are going to be presented in two parts according to the applied methods of Binominal and One-sample t-test for non-normal and normal data, respectively. Hereinafter, the hypotheses are presented.

- Hypothesis L-3: There is correlation between infrastructures improvement and valorization of cultural heritage (Q. 10-1).
- Hypothesis L-4: There is correlation between organizing local cultural events for tourists and valorization of cultural heritage (Q. 10-2).
- Hypothesis L-5: There is correlation between preservation of natural heritage and valorization of cultural heritage (Q. 10-3).
- Hypothesis L-6: There is correlation between cultural heritage conservation and preservation and valorization of cultural heritage (Q. 10-4).
- Hypothesis L-7: There is correlation between awareness raising regarding significance of heritage and valorization of cultural heritage (Q. 10-5)
- Hypothesis L-8: There is correlation between exploiting cultural heritage as a source of income generation and valorization of cultural heritage (Q. 10-6).
- Hypothesis L-9: There is correlation between participation of local community and valorization of cultural heritage (Q. 10-7).

According to Table C.6 in Appendix C for the questions with non-normal response data (questions 10-1, 10-2, 10-4) Bi-nominal test is used.

Table C.10 in Appendix C presents the results of Bi-nominal tests. The results show that hypothesies L-3 and L-6 are confirmed and hypothesis L-4 is rejected.

For the hypotheses L-5, L-7, L-8 and L-9 One-sample t-test is applied. In this test, two hypotheses for each of the questions are tested:

H0= Data mean is equal to sample mean (3) H1=Data mean is different from sample mean (3)

According to Table C.11 in Appendix C hypotheses L-5, L-7, L-8 and L-9 are all confirmed.

Therefore, the summary of the analysis of the questions regarding the measures that can improve cultural heritage valorization is presented in Table 5.11. According to this table the positive impact of all the measures except "Organizing cultural events for tourists" are confirmed by the local community.

Measure	Positive impact	
Infra-structures improvement	Yes	
Organizing local cultural events for tourists	No	
Preservation of natural heritage	Yes	
Cultural heritage conservation and preservation	Yes	
Awareness raising	Yes	
Exploiting cultural heritage as a source of income	Yes	
Participation of local community	Yes	

Table 5-11. Test results regarding the impacts of the defined measures on valorization of cultural heritage

#### Hypothetical model

The hypothetical model is framed on the basis of the ways through which valorization of cultural heritage fosters sustainable development. The constructs of cultural heritage as defined in Figure 5.3 are specified with reference to the findings of theoretical findings and interview results.

The opinions of local community respondents regarding the level of impact of the cultural heritage constructs on local sustainable development were asked through question 9 with 10 sub-parts. The collected data were analyzed to test the hypothetical model. Since culture is the focus of this research, it is considered as a separate construct in this model. Furthermore, the role of culture as a transsectorial driver of sustainable development is considered in relation to other constructs of the model.

The analysis of the model was conducted through SEM method by using SmartPLS software. The method makes it possible to analyze structural relationships among sets of unobserved variables. Therefore, the relationships among ten observed variables and the latent variables are measured at the same time. More elaborations about this method and the reasons of its application is presented in Section 5.3.5 of this chapter under "Data processing and analysis methods".

The hypothetical model is going to be tested throughout the following hypothesis:

**Hypothesis L-10**: Cultural heritage can contribute to achieving sustainable development in all dimensions through influence on cultural, social, economic and environmental aspects.

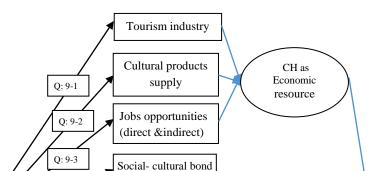


Figure 5.3. Hypothetical model (Impact of cultural heritage on Takht-e Soleyman cultural landscape according to local community and visitors)

In Figure C.6 in Appendix C, coefficient factors show the level of impact on each of the variables. According to Figure C.6 'offering cultural products' (0.881) in 'economic resource' variable, and 'innovative activities' (0.408) in 'social resource' variable have the highest impacts. While among the four variables of economic (0.303), social (0.419), cultural (0.196) and environmental protection (0.349), 'cultural heritage as a social resource' impacted sustainable development more than the other variables. To see whether the correlations between the constructs in the model are meaningful or not, t-value test has been applied. The result of the t-value test is presented in Figure C.7 in Appendix C. The amounts lower than 1.96 in t-value test are indicative of not existing of correlation between two variables. Accordingly the model in the t-value test shows that 'indirect and direct job opportunities' does not have a meaningful impact on 'cultural heritage as an economic resource'. Therefore, this variable has to be eliminated in the hypothetical model.

The last step for finalizing the model is to study the colinearity between the constructs of the model. Multi-collnearity (also colinearity) is a phenomenon in which two or more predictor variables in a multiple regression model are highly correlated, meaning that one can be linearly predicted by the others with a substantial degree of accuracy. Colinearity is measured though Variance Inflation Factor (VIF). If VIF  $\geq$ =5 for any of the variables, it can be eliminated from the model. Table C.12 in Appendix C shows that the level of colinearity for all the variables are less than 5 and all of them will

be included in the final model, except 'job opportunities' which has to be eliminated regarding the result of t-value test.

Consequently, the final model with the revised standard coefficients will be presented as Figure 5.4 below:

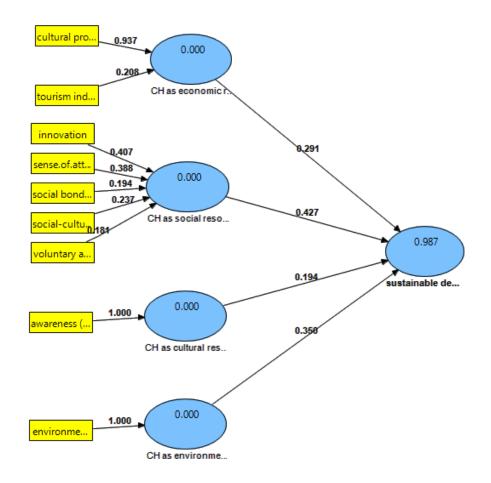


Figure 5.4. Final model with standard coefficients (local community)

The t-value test was repeated for the model to study whether the correlations of the variables in the revised model are meaningful or not. The results of the t-value test are presented in Figure C.8 in Appendix C. The result of the test confirms the correlations between the variables as all the t-values are greater than 1.96.

Therefore, Figure 5.4 is accepted as the final model for the impact of cultural heritage constructs of sustainable development of Takht-e Soleyman cultural landscape according to local community questionnaire survey.

Table 5.12 elaborates the final model presented in Figure 5.4.

Table 5-12. Summary of the test result for hypothetical model

Constructs Standard t-value Support	ed or
-------------------------------------	-------

			coefficient		not supported
Tourism industry	$\rightarrow$	CH as Economic resource	0.208	2.604	supported
Cultural products supply	$\rightarrow$	CH as Economic resource	0.937	21.741	supported
Jobs opportunities (direct &indirect)	$\rightarrow$	CH as Economic resource	0.073	0.504	not supported*
Social- cultural bond with non-local	$\rightarrow$	CH as social resource	0.237	4.056	supported
Social bonds inside local community	$\rightarrow$	CH as social resource	0.194	3.729	supported
Sense of attachment to the place	$\rightarrow$	CH as social resource	0.388	5.658	supported
Innovation	$\rightarrow$	CH as social resource	0.407	5.923	supported
Voluntary activities	$\rightarrow$	CH as social resource	0.181	3.155	supported
Awareness (cultural, historical)	$\rightarrow$	CH as cultural resource	1.00	-	supported
Environmental protection	$\rightarrow$	CH as Environmental protection	1.00	-	supported
CH as Economic resource	$\rightarrow$	Sustainable development	0.291	10.939	supported
CH as social resource	$\rightarrow$	Sustainable development	0.427	14.426	supported
CH as cultural resource	$\rightarrow$	Sustainable development	0.194	3.467	supported
CH as Environmental protection	$\rightarrow$	Sustainable development	0.360	13.716	supported

Assessment of Takht-e Soleyman WHS management for a sustainable development

#### 5.4.3 Visitor questionnaire survey

The second part of the questionnaire survey was dedicated to the visitors of Takht-e Soleyman WHS. The participatory approach in the empirical part had to be accomplished by including the opinions of the visitors as the third group of stakeholders. Therefore, questionnaires were circulated among the visitors with the age of above 15 years old. The questionnaires were prepared in Farsi and English language (Appendix D). The number of 384 questionnaires were considered for the analyses.

The descriptive analysis and the tests regarding the hypotheses V-1 to V-7 are fulfilled by SPSS software and the hypothetical model (hypothesis V-8) is accomplished by SmartPLS software. The explanations about the software and their applications are presented in Section 5.3.5 of this chapter under "Data processing and analysis methods".

#### **Descriptive analysis**

#### Respondents' profile

Hereinafter, the profile of the respondents in terms of sex, age, and education are presented.

	Frequency	Percent
Female	156	40.6
Male	228	59.4
Total	384	100.0

 Table 5-13. Sex profile of visitor respondents

Age group	Frequency	Percent	Cumulative Percent
<20	23	6.0	6.0
20-29	170	44.3	50.3
30-39	91	23.7	74.0
40-49	45	11.7	85.7
50-59	35	9.1	94.8
>60	20	5.2	100.0
Total	384	100.0	

Table 5-14. Age profile of visitor respondents

Table 5-15. Education	profile of	f visitor	respondents

Education group	Frequency	Percent	Cumulative Percent
Elementary school & lower	34	8.9	8.9
High school diploma	95	24.7	33.6
Bachelor	176	45.8	79.4
Master and PhD	79	20.6	100.0
Total	384	100.0	

The above tables give an image of the local community respondents who were selected on random basis. The respondents consist of 40.6% of female and 59.4% male individuals. Half of the respondents were below 29 and 74% under 39 years old. Comparing visitor and local community respondent shows that the respondents in first group were younger than the second. Moreover, the profile of the respondents shows that 42.5% has not academic education. Figures E.1 to E.3 in Appendix E present schematic respondents' profile. Figure E.4 in Appendix E presents the education distribution between male and female respondents, indicating rationale in random sample selection.

The first four questions in visitor questionnaire are in the form of multiple choices that are going to be analysed hereinafter. The rest of the questions (question 5 to 27 with the sub-parts) are proposed in the form of 5-point Likert scale as it is presented in Table 5.16 below.

Table 5-16. Likert scale in visitor questionnaires

		Likert rankings			Question serial No.
Excellent	Good	Acceptable	Poor	Inexistent	5 to 16

				or very bad	
Definitely	Yes	Maybe	No	Not at all	17
A lot	Much	Moderately	A little	Not at all	18, 20
Excellent	Good	Moderate	Poor	Very bad	19
A lot	Much	To some extend	A little	Not at all	21 to 27
5 (max)	4	3 (mean)	2	1 (min)	

#### Sources of knowing Takht-e Soleyman

Questions 1 acquired information about the channels through which the visitors were persuaded to visit Takht-e Soleyman. Table 5.17 summarizes the answers of visitors to this question. As it can be seen in the table, the majority of respondents have become familiar with this place through a friend. The second rank belongs to the visitors who know this place because they live close to this region. This result shows that the representation of the site mostly takes place though social networks. In other words, the representation of the site on the basis of structured processes by means of websites, TV programs, newspapers and journals, or tourism marketing so on, has not yet been built up.

Table 5-17. Sources of knowing Takh-e Soleyman

Book	Internet	ΤV	Newspaper or journal	Tour operator	A friend	Living close to this region
74	50	28	9	21	142	113

#### Motive and main purpose of travelling to Takhte Soleyman

Question two with 8 multiple choices was aimed at collecting information about the main purpose and motives of travelling to Takht-e Soleyman. Table 5.18 shows the summary of the responses to this question.

This table shows that Takht-e Soleyman historical site is the main reason of travelling to this region. However, 'visiting natural and geological attractions' is the second popular reason for visiting this place. Third rank goes to the choice of "This is part of a longer trip" which underlines the potential of integrating Takht-e Soleyman with other nearby touristic attractions. Table 5-18. Main purpose of travelling to Takht-e Soleyman

Visiting Takht-e Soleyman historical site	290
Benefitting from warm water springs	21
Visiting natural and geological attractions	92
Rituals and religious ceremonies	12
Energy therapy	26
Just to explore a new place in Iran	51
This is a part of the larger trip	56
Visiting friends or family members	27

Possible ways to intensify the knowledge gained from this visit

In question 3 visitors were asked about further possible ways through which they would like to intensify their knowledge about this place during the visit. Table 5.19 summarizes the responses to question 3.

Communication with local people	94
Visiting a local museum	98
Availability of guides, brochures, etc.	187
More facilities for a longer stay	83
Participation in cultural or local programs during the stay	58

Table 5-19. Visitors' preferences to know more about Takht-e Soleyman

Availability of guides who give verbal explanations as well as brochures etc. is the most preferred source of knowledge addressed by respondents (187 votes). In other words, the responses indicate lack of sufficient guides and written material for the visitors. Visiting local museum (other than a small museum inside the main site) which is in the second rank (98 votes) show the willingness of visitors to see more of the culture and history of this area. With few less votes (94) respondents expressed their tendency to communicate with local people. The willingness to be in more contact with local community builds capacity for Nosratabad village to be considered in the visitors' trip itinerary for Takht-e Soleyman. While 83 respondents stated that they would have liked to stay more upon adequate facilities, 58 individuals showed interest in participation in cultural or local programs during the stay.

#### Willingness for a longer stay

Through question 4, respondents expressed their idea about staying for longer period in Takht-e Soleyman in case there were enough facilities. Their stay would have been longer according to the data shown in Table 5.20.

Half a day more	One night more	More than a night	I don't like to stay more
71	111	172	30

Table 5-20. Willingness for a longer stay

The results show high interest of the visitors to stay longer in this place. However, at present they do not find adequate facilities for this purpose. This result also indicate an unlocked potential of this area for developing tourism industry.

#### Assessment of infrastructures (level of satisfaction)

Through questions, 5 to 15 visitors were asked to express their assessments about the tourism facilities and infrastructures in this area. The questions were proposed in the form of 5-point Likert scale. Hence, the analysis of the answers are based on the average of the responses as presented in Table 5.21.

Infrastructures and facilities	Assessment
Restaurants	2.44
Accommodation	2.36
Access roads to the region	2.50
Access roads to the cultural attractions in the region	2.67
Access roads to the natural attractions like warm water springs, famous mountains, etc.	2.79
Restrooms	2.98
Health and medical services	2.32
Places for selling of local products	2.01
Facilities for using warm water springs	2.56
Touristic information (maps, signage, etc.)	2.55
Guides (Farsi or English) inside Takht-e Soleyman main site	2.52

Table 5-21. Assessment of infrastructures

The average values show that the assessment of the visitors about the infrastructures are below the mean point (3 in the Likert scale). Comparing this result with the result of question 4 reveals that the current state of infrastructures can affect the tourism largely.

It is worth noting a concern that might have biased the responses to questions 5 to15. Each of the respondents might not have the chance to experience all of the infrastructures mentioned in the questions, so a number of choices might have been made based on the perceptions. For this reason, the standard deviations of each of the data set were controlled. According to Table E.1 in Appendix E, the low standard deviations indicate that the collected data have inconsiderable deviations from the mean value. Hence, despite the possible bias the data are considered valid.

#### Interaction of local people with the visitors

The analysis of question 16 disclosed respondents' reflections about their level of satisfaction about the manner of being communicated by the local community. The average of 3.76 shows an almost 'acceptable' level of satisfaction, although it can be improved, considering the maximum quantitative level of 5.

#### Level of satisfaction of the visit

In question 17 visitors were asked about their general satisfaction of visiting this place. With regard to the results of the questions 5 to 16, it was expected to gain an average satisfaction through data analysis. Interestingly enough, the average of 4.58 reveals a high satisfaction of the respondents of visiting this place. This result bears to mind that although there are many concerns about the tourism facilities and infrastructure, the visitors found this place intrinsically significant and worth visiting. This is a very positive reflection by visitors articulating the fact that this place has peculiar attractions for visitors and is competent for becoming a striking touristic destination.

#### Knowledge gained during the visit

Although in question 15 visitors have been asked about the availability of the guides inside the WHS, in question 18, they have been requested to express how much knowledge they gained during the visit of the site. The average of responses (3.08) shows that their knowledge has been increased 'to some extent' which is consistent with the analysis of question 15.

#### State of preservation and conservation

The respondents assessed the state of conservation and preservation of cultural heritage as acceptable but not at very high level. This was revealed by the analysis of the question 19 by having the average of 3.32. This means that the visitors expect to find the heritage in a better condition.

#### Willingness to visit Nosratabad village

In question 20, visitors were asked to express their willingness to visit Nosratabad village in addition to the main site. The average of the responses to this question was 3.5, which shows they have a moderate interest to enter the village and visit the local social elements.

#### Level of awareness

The level of awareness regarding the importance of cultural heritage in sustainable development was calculated by aggregation of questions 21, 22 and 23. The average of the responses (4.21) encloses high level of awareness among the visitors.

#### Importance of cultural heritage preserve of this region

Question 21 provides complementary information to question 19. In this question, respondents were asked how much they believe that the conservation and preservation of cultural heritage is important. The data analysis reveals the average of 4.20, which shows that they put high value on the issue of conservation and preservation. This finding makes the result of the question 19 more meaningful and advocates the assessment of the visitors about the current state of conservation and preservation.

#### Cultural heritage as a resource for development

The analyses of questions 22 and 23 show that the respondents consider cultural heritage as a resource for future generations and as a resource for development at present, however, this conviction is stronger for the role of cultural heritage for development at the present time. The average of the responses were 4.01 and 4.41 respectively.

On the other hand, question 24 reveals how much cultural heritage have affected the development of this region according to the visitors. The analysis of the data shows the average of 3.68, which means that the impact of cultural heritage is less than expected by the respondents.

#### Impacts of registration in UNESCO World Heritage List

In question 25, the respondents were asked if the level of development of this area is proportional to a place of outstanding universal values. The average of 2.99 shows that the visitors have expected to find this place more developed as a WHS.

#### Analysis of the measures affecting valorization of cultural heritage

Questions 27-1 to 27-7 were designed the same as the questions 10-1 to 10-7 in local community questionnaire. Consistently the purpose of proposing these seven questions was to collect the reflections of visitors about the impact of the defined measures on valorization of Takht-e Soleyman cultural heritage. The seven related hypotheses addressing the positive impacts of the measures regarding valorization of Takht-e Soleyman cultural heritage are going to be mentioned hereinafter.

Before starting the analysis, the reliability of the data related to the determined sets of questions (variables) has to be defined. In section 5-3-5, explanations about measuring the reliability and the Cronbach's alpha value for the Likert questions for visitor questionnaire survey is described. In Table E.3 in Appendix E, the reliability of the sets of questions are presented. According to this table the Cronbach's alpha for all of the clusters of questions (variables) are more than 0.6, which confirms the reliability of the data.

Deciding about the suitable statistical test depends on the normality of data. The study of skewness indicate if the data are normal or not. Thus, for choosing the right statistical test for data analysis, the fundamental task is to characterize the data symmetry through study of skewness of the data. Table E.2 in Appendix E shows the results of the normality (skewness test) of the data.

According to Table E.2 in Appendix E, the normality tests show that the data of question 27-1 to 27-10 are not normal. Hence, the Binominal test is used to test the data. The hypotheses for the above questions are as follows:

- Hypothesis V-1: There is correlation between infrastructures improvement and valorization of cultural heritage (Q. 27-1).
- Hypothesis V-2: There is correlation between organizing local cultural events for tourists and valorization of cultural heritage (Q. 27-2).
- Hypothesis V-3: There is correlation between preservation of natural heritage and valorization of cultural heritage (Q. 10-3).
- Hypothesis V-4: There is correlation between cultural heritage conservation and preservation and valorization of cultural heritage (Q. 27-4).
- Hypothesis V-5: There is correlation between awareness raising regarding significance of heritage and valorization of cultural heritage (Q. 27-5).
- Hypothesis V-6: There is correlation between exploiting cultural heritage as a source of income generation and valorization of cultural heritage (Q. 27-6).
- Hypothesis V-7: There is correlation between participation of local community and valorization of cultural heritage (Q. 27-7).

Table E.4 in Appendix E presents the results of Bi-nominal tests. The results show that all the hypotheses were accepted except the hypothesis V-6. Accordingly, the summary of the analysis of the tests of hypotheses V-1 to V-7 are presented in Table 5.22 below:

Measure	Positive impact
Infra-structures improvement	Yes
Organizing local cultural events for tourists	Yes
Preservation of natural heritage	Yes
Cultural heritage conservation and preservation	Yes
Awareness raising	Yes
Exploiting cultural heritage as a source of income	No
Participation of local community	Yes

Table 5-22. Test results regarding the impacts of the defined measures on valorization of cultural heritage

The above results show that the visitors advocate the impact of the mentioned measures on promoting valorization of cultural heritage in Takht-e Soleyman area except exploiting cultural heritage as a source of income. This results is inconsistent with the findings of question 23 considering that cultural heritage would contribute to local sustainable development also from economic point of view. Therefore, the rejection of hypothesis V-6 could be resulted from the perceptions of the respondents from the 'cultural heritage as a source of income'. This phrase could be perceived as higher ticket and travel costs for tourists, which was not interesting for the visitors.

#### Hypothetical model

The hypothetical model presented in Figure 5.3 is going to be tested among visitors as well as local community. It is framed on the basis of the ways through which valorization of cultural heritage fosters sustainable development. The constructs of cultural heritage as defined in Figure 5.3 are specified with reference to the findings of theoretical findings and interview results. The model is going to be tested by the same method based on the reflection of the visitors.

Since culture is the focus of this research, it is considered as a separate construct in this model. Furthermore, the role of culture as a trans-sectorial driver of sustainable development is considered in relation to other constructs of the model.

The analysis of the model was conducted through SEM method by using SmartPLS software. The method makes it possible to analyze structural relationships among sets of unobserved variables. Therefore, the relationships among ten observed variables and the latent variables are measured at the same time. More elaborations about this method and the reasons of its application is presented in Section 5.3.5 of this chapter under "Data processing and analysis methods".

The model is going to be tested throughout the following hypothesis:

**Hypothesis V-8**: Cultural heritage can contribute in achieving sustainable development in all dimensions through influence on cultural, social, economic and environmental aspects.

In Figure E.5 in Appendix E, calculated coefficient factors represent the level of impact of variables on each of the constructs and constructs on sustainable development. To make sure whether the correlations between the variables and constructs are meaningful or not, t-value test has been applied.

The result of the t-value test is presented in Figure E.6 in Appendix E. The amounts of less than 1.96 in t-value test are indicative of lacking correlation between variables. Accordingly, the model in the t-value test shows that 'Social bonds inside local community' does not have a meaningful impact on 'cultural heritage as a social resource'. Therefore, this variable has to be eliminated in the hypothetical model.

The last step for finalizing the conceptual model is the study of the colinearity between the variables of the model. Multi-collnearity (also colinearity) is a phenomenon in which two or more predictor variables in a multiple regression model are highly correlated, meaning that one can be linearly predicted by the others with a substantial degree of accuracy. Colinearity is measured though Variance Inflation Factor (VIF). If VIF >=5 for any of the variables, it can be eliminated from the model. Table E.5 in Appendix E shows that the level of colinearity for all the variables are less than 5 and all of them have to be included in the final model. In the final conceptual model 'Social bonds inside local community' has to be eliminated.

Consequently, the model with the revised standard coefficients is finalized as in Figure 5.5 below:

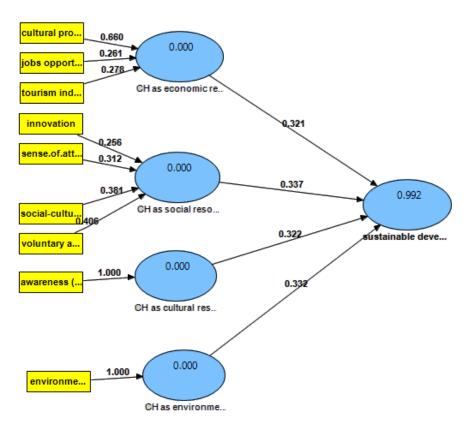


Figure 5.5. Final model with standard coefficients (visitors)

The t-value test was repeated for the model to study whether the correlations of the variables in the revised model are meaningful or not. The results of the t-value test are presented in Figure E.7 in Appendix E. The result of the test confirms the correlations between the variables.

Eventually, according to visitor questionnaire survey, Figure 5.5 is accepted as the final model for the impact of cultural heritage constructs of sustainable development of Takht-e Soleyman cultural landscape.

#### Table 5.23 summarizes the results (hypothesis V-8) as follows:

path			Standard coefficient	t-value	Supported or not supported
Tourism industry	$\rightarrow$	CH as Economic resource	0.278	3.147	supported
Cultural products supply	$\rightarrow$	CH as Economic resource	0.660	6.128	supported
Jobs opportunities (direct &indirect)	$\rightarrow$	CH as Economic resource	0.261	2.245	supported
Social- cultural bond with non-local	$\rightarrow$	CH as social resource	0.381	4.336	supported
Social bonds inside local community	$\rightarrow$	CH as social resource	0.042	.477	Not supported
Sense of attachment to the place	$\rightarrow$	CH as social resource	0.312	3.042	supported
Innovation	$\rightarrow$	CH as social resource	0.256	2.528	supported
Voluntary activities	$\rightarrow$	CH as social resource	0.406	5.185	supported
Awareness (cultural, historical)	$\rightarrow$	CH as cultural resource	1.00	-	supported
Environmental protection	$\rightarrow$	CH as Environmental protection	1.00	-	supported
CH as Economic resource	$\rightarrow$	Sustainable development	0.321	11.128	supported
CH as social resource	$\rightarrow$	Sustainable development	0.337	14.825	supported
CH as cultural resource	$\rightarrow$	Sustainable development	0.322	9.434	supported
CH as Environmental protection	$\rightarrow$	Sustainable development	0.332	11.149	supported

Table 5-23. Summary of the test results for hypothetical model

According to the above table, 'Cultural products supply' is the most effective variable that affects the economic construct of cultural heritage. This result is identical to the reflections of the local community. Although, 'Social bonds inside local community' was not approved in the conceptual model (visitors), 'Social- cultural bond with non-local people' is considered to have highest impact on social construct of cultural heritage.

In the next section, further discussions about the findings of empirical part according to both local community and visitor questionnaire survey are presented. Moreover, some issues resulting from comparing interviewees' reflections and questionnaire surveys analyses will be raised up.

#### 5.5 Discussions

A comprehensive study of the case of Takht-e Soleyman WHS was carried out through a holistic approach by including the perspectives of cultural heritage managers, local community and visitors. On the other hand, the empirical research has been developed on the basis of a participatory approach addressing a process of sequential reflection and action. This approach enabled the researcher to see

the realities from the perspective of different groups of stakeholders and seeks their support for valorization of cultural heritage in that area. Hence, the findings of empirical study would be considered in making a realistic platform for further research and planning.

The discussions about the results of the empirical study are going to be developed regarding internal and external issues including management and policies, social, and economic coordinates of the Takht-e Soleyman cultural landscape.

The upstream national policy documents regarding development of Iran consider the role of culture, history, and cultural heritage in the development process. However, the considerations have been swinging in some of the policy documents like in Fourth and Fifth National Development Plans of Iran. Consistently with the governance system of cultural heritage in Iran, cultural heritage and tourism are considered as two compeer propellant of sustainable development in Document of Development of Cultural heritage and Tourism Sector as well as Development Vision Document of West Azerbayjan Province.

With regard to the policy orientations and findings of the theoretical part, a comprehensive reference was made to the ten key persons in the field of cultural and natural heritage management of Iran. The exquisite discussions which were made through face to face interviews reflected the main concerns about the cultural heritage management especially in the case of Takht-e Soleyman WHS. The discussions addressed a number of concerns about cultural heritage management at institutional and organizational level. Despite the indications in the policy documents, in many cases there are not clear or long-term strategies and plans for fostering the role of cultural heritage in sustainable development. The interviewees had consensus on shifting to modern approach towards cultural heritage in which cultural heritage has an active role in local sustainable development. They acknowledged that rational exploitation of cultural heritage (valorization) is a way to preserve the values of cultural heritage as well. Hence, considering cultural heritage as a resource for development is not in contrary to the preservation approach. There was an interesting interpretation from one of the interviewees to consider cultural heritage as a capacity rather than a resource where capacity is the combination of factors in the place or in administration that can lead to development.

In all the interviews, "awareness raising" and "participatory management" were highly emphasized as the two main concerns of cultural heritage management. Awareness raising and promoting cognition about the values of cultural heritage was highly stressed for all groups of stakeholders. It was referred as a driver for structural alterations in cultural heritage management. It can bring about positive modifications in management approach as well as higher support and participation from different groups of stakeholders.

Moreover, economic impact of tourism industry in as Takht-e Soleyman was highlighted during the interviews. In other words, it was stated by most of the interviewees that the economic capacity of Takht-e Soleyman heritage would be realized mostly through the development of tourism industry. The commitment to tourism development is mentioned in upstream national development policies of Iran. Furthermore, in Development Vision Document of West Azerbaijan Province, the natural, historical, and handicrafts attractions are noted as one of the main development capabilities of the province.

Besides, the participatory management was highly stressed not only in terms of inclusion of local community but also the private and cooperative sectors which has not been yet realized. This fact creates problems at organizational level in which the sovereignty and executive affairs are both conducted by ICHHTO. From policy point of view, participation of all groups of people is considered

in Constitutional Law of Iran. In the Fourth and Fifth National Development plans of Iran the role of public engagement, and non-governmental organizations have been highlighted.

The insight gained through the interviews were used in developing the questionnaire surveys among local community and visitors of Takht-e Soleman WHS. Based on the analysis of the questionnaires data the following social and economic findings were achieved. Hereinafter questionnaire survey for local community and for questionnaire survey visitors are regarded as questionnaire 1 and questionnaire 2 respectively.

The level of awareness about the role of Takht-e Soleyman cultural heritage in sustainable development according to questionnaire 1 and 2 are quite high. Identically, the impact of historical and cultural knowledge on cultural heritage valorization has been acknowledge by both groups of respondents through questions 10-5 and 27-5 in questionnaire 1 and 2 respectively. This result is consistent with the points mentioned during the interviews. These results show that two groups of respondents are quite convinced that cultural heritage can foster the development of Takht-e Soleyman region for today and future generations. They also revealed their high concern for preservation and conservation of the heritage in this area.

However, the correlation analysis showed "relatively weak" correlation between the level of awareness and the sense of attachment to the place in questionnaire 1. In other words, the sense of attachment to the place among the local community is weakly affected by their level of awareness about the importance of cultural heritage for local sustainable development. This finding is inconsistent with the expectation about the correlation of "awareness raising" with the "sense of attachment to the place" which in turn would promote the level of participation (Table 5.5). This inconsistency could be resulted from the fact that the "level of awareness" reflects the understanding of the respondents about the reality and values of cultural heritage but since the development impact of cultural heritage at present is not proportional to what they expect (as expressed through question 5) this factor cannot strongly affect their sense of attachment to the place.

Furthermore, in questionnaire 1, the willingness to participation (WTP) was measured as 3.30, which is in average level. On the other hand, the correlation analysis disclosed "relatively weak" correlation between and (WTP) in tourism development activities. At the same time, local community approved the role of participation in valorization of cultural heritage through question 10-7. This inconsistency reveals that although local community respondents establish a rational relation between participation and valorization but their WTP at present is not so much affected by their level of awareness. Yet again, this result could be related to their low motivations caused by the present development impact of cultural heritage. This result advocates parallel implementation of awareness raising programs and participation plans for future in which the local community be directly engaged in valorization plans.

Further to the above reflection about WTP, question 16 of questionnaire 1 showed that "participatory management of the cultural landscape" was considered as the last priority for local sustainable development.

This result suggests insufficient and unclear perception of the ways and the impacts of participation among the local community. This could be the result of not having real experience of participation and feeling its consequence accordingly.

The inscription of Takht-e Soleyman Site by UNESCO has emerged a number of social, cultural and economic impacts. It is evidenced not only by better representation and preservation of the heritage within that area but also by promoting the level of awareness of the stakeholders about the site. As reflected by the interviewees the process of using the potentials of this place as a WHS has been

started since 2003 but there is still a lot to be unlocked. In this regard, the local community believe that the registration has created some impacts on the development of their region although it was not so much considerable. On the other hand, the reflections of visitor respondents showed an average perception about finding this place as developed as a WHS. Therefore, much of the social, cultural, and economic capacities of Takht-e Soleyman area as a WHS has not yet been exploited.

Takht-e Soleyman as a WHS and as place of mixed cultural-natural features has high capacity of developing tourism industry. As discussed previously, different types of the tourists that refer to this place for the purpose of cultural tourism, health tourism, eco or geo-tourism, belief tourism (religious tourism or energy tourism). Questionnaire 2 shows that "Takht-e Soleyman historical site" is the main reason of travelling to this region and main tourism attraction in this area. However, "visiting natural and geological attractions" is the second popular reason for visiting this place. Third rank goes to the choice of "This is part of a longer trip" which underlines the potential of integrating Takht-e Soleyman with other close destinations for tourism development.

The local people as the hosting community were asked to express their impressions about economic impact of tourism. The analysis of their responses show that the economic impact of the incoming tourists on the local community is quite low.

The results show that local community recognizes some ethnical issues regarding incoming tourists although it is not so high. On the other hand, the visitors expressed that they were communicated by the people in an "acceptable" way which is the mean level in ranking of the responses. This result suggests considerations about improving interactions between local community and visitors. This issue can be improved also through finding more economic impacts of tourism by local community.

The rate of visiting the village by the tourists is not considerable according to the villagers. Moreover, the average of the responses in questionnaire 1 shows medium willingness of receiving more visitors inside the village but it should be considered that the people who disliked the presence of tourists in the village were 23% of the total respondents. On the other hand, only 21% of the visitors showed zero or very low interest to enter and visit the village. The comparison of the two results shows that most of the villagers think positively about receiving more tourists inside the village, while most of the visitors also like to enter the village and visit the vernacular features of that region. This is a great capacity to consider the village as a part of visits of the tourists. It can be regarded for a targeted tourism who wish to experience the local features of that region by staying inside the Nosratabad village.

Most of the visitors showed high motivation to recommend this place to the others. Many of them expressed that their knowledge about this site increased "to some extent" after vising the site.

83% of the visitors expressed that they would have stayed overnight in Takht-e Soleyman in case there were adequate facilities and infra structures. They were asked about their satisfaction about infra structures in terms of restaurants, accommodation, access roads to the region, access roads to the cultural and natural attractions inside the region, restrooms, health and medical services, places for buying local products, facilities to use warm water springs, touristic information (maps, signage, etc.), guides (Farsi or English) inside Takht-e Soleyman main site. Their assessment in average was below or near to the average. This results show the high gap between present situations with satisfactory infra structures.

Therefore, it is quite evident that there is a capacity to develop tourism industry, not only as a significant place searching to be recognized but also regarding the high demand among visitors to refer and stay more inside this region.

It was confirmed by both groups of respondents that preservation of natural heritage has a positive impact on valorization of cultural heritage. This result shows that people are aware of the connections between culture and nature.

The final conceptual model demonstrating the ways through which cultural heritage can contribute in achieving sustainable development in Takht-e Soleyman shows a difference for two groups of respondents. While "direct and indirect job opportunities" factor was not approved as a construct of economic impact of cultural heritage by local community, the conceptual model was approved without sustaining the "social bonds inside the local community" as a construct of social impact by visitors. The first final model shows that local community advocate the economic impact of cultural heritage only in terms of tourism industry and cultural products supply. This analysis show that job opportunities created by cultural heritage valorization are so far away from the local community perception and this is a gap that can be focused in future plans. The final model from visitors' point of view shows that they do not find cultural heritage as a bond among local people although it is perceived to be a bond between local people and non-local and local community with their place.

The discussions made on the basis of views of three groups of stakeholders about the management of Takht-e Soleymn cultural landscape, and considering national policy intentions enabled the researcher to develop a management SWOT analysis. Table 5-24 summarizes the internal and external issues of management of Takht-e Soelyman cultural landscape in terms of strengths, weaknesses, opportunities, and threats.

Table 5-24. SWOT analysis for management of Takht-e Soleyman cultural lan	ıdscape
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	Strength	Weakness	Opportunity	Threat
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Assessment of Takht-e Soleyman WHS management for a sustainable development

Organizational issues	<ul> <li>Existence of upstream national policy supports</li> <li>Existence of management plan for the WHS</li> <li>Uptrend of comprehending the significance of cultural heritage in development process</li> <li>Integration of cultural heritage, tourism and handicraft sectors in one organization (ICHHTO)</li> <li>Support of provincial and local organizations for development plans in this area</li> <li>Management improvements as the result of registration by UNESCO</li> </ul>	<ul> <li>Insufficient cognition and awareness at organizational level</li> <li>Depending on one financing resource (government)</li> <li>Incomprehensive combination of competencies in management of the site</li> <li>Inadequate number of expert personnel inside the site</li> <li>Not involving local community in the management processes</li> <li>Absence of private sector in the management processs</li> <li>Lack of long-term cultural heritage management plans</li> <li>Inter-disciplinary issues caused by the integrations of tourism and handicraft sectors in one organization</li> <li>Insufficient focus on preservation of intangible cultural heritage</li> </ul>	<ul> <li>Using capacities bound to the existence of a WHS for awareness raising, economic development etc.</li> <li>Social capacities for developing participatory management</li> <li>Various cultural endowments for the purpose of awareness raising</li> <li>Developing fundraising programs</li> <li>Improving the existing policies and strategies</li> <li>Developing existing management plan</li> </ul>	<ul> <li>Risk of becoming overwhelmed by inconsistent development patterns</li> <li>Ignoring the capacities of the WHS</li> <li>Losing development opportunities related to cultural resources</li> <li>Marginalization of the local community</li> </ul>
Social issues	<ul> <li>Existing potentials willingness for participation</li> <li>Good awareness about the significance of cultural heritage</li> <li>Having respect for cultural values bound to the natural heritage</li> <li>Strong internal social bonds</li> <li>Strong sense of attachment to the place</li> <li>Potentials for voluntary activities</li> <li>Existing potentials for innovative activities</li> </ul>	<ul> <li>Behavioural differences between local community and non- locals (visitors)</li> <li>Stakeholders' interest conflicts</li> <li>Few chances of participation</li> <li>Less opportunities of participation for the women</li> <li>Lack of awareness about the importance of participation in local development</li> <li>Lack of awareness raising programs for the local community</li> </ul>	<ul> <li>Improvement of interactions among local community with visitors</li> <li>Using WHS as a hub for education and training</li> </ul>	<ul> <li>Difficulties ir making social networks with other cities and centres as a result of access and transportation problems</li> <li>Migration to the big cities for finding job and welfare</li> <li>Increase issues among local community and visitors as a result of social structure differences</li> </ul>

## 6 Conclusion

This research was set out to find the ways towards sustainable development goals in cultural landscapes through an integrated management approach. In this regard, the study has aimed at investigating the values of cultural landscapes as potential resources for local sustainable development, considering an integrated management approach for realization of those resources in the sustainable development process and finally searching for the applications of theoretical findings in a real context in Takht-e Soleyman WHS in Iran.

Landscapes are no longer a notion of geographical territory or even an artistic perception of the land. They are formed and maintained according to the way they are experienced by human being. According to this modern acceptation, cultural landscapes are not only territories of cultural interest to be preserved but also they are understood and considered as an element of competitiveness at both local and national levels in virtue of being an integrated system of cultural, social, and economic values. This is more evident in the case of cultural landscape with rural characteristics based on of their strong community-based value systems and the intrinsic local cultural, social, economic, and environmental values bound to the rural cultural heritage. This concern was more relevant to the case of traditional rural cultural landscapes and even more challenging when they are considered as WHSs.

Therefore, the focus of this study was on increasing the consistency between rural cultural landscape values and external patterns of development, which might not be coherent with the features and identity of those places. The theoretical framework of this study highlighted the role of cultural heritage in strengthening the interfaces between cultural landscape and sustainable development. It acknowledged that cultural heritage, especially in cultural landscapes, have a dominant role in the sustainable development process since it would contribute to:

1- Sustainability of the system: Cultural landscapes are holistic systems of different elements interacting with each other. Valorization of cultural heritage can sustain cultural and natural elements by improving the human experience of the place and promote the ways he interacts with the reality of the landscape.

2- Capacity building for new social and economic activities: Cultural resources have great capacities for entrepreneurship and income generation and can help to reinforce the identity and dynamism of the inherited culture.

Moreover, this research suggested a holistic management approach integrating different values, stakeholders, disciplines, and competencies.

The theoretical findings of this research contribute to consider and improve a number of important global issues at local level by improving management for sustainable development based on local resources. It mainly considers:

- Preservation of cultural diversity by focusing on cultural landscapes as areas of diverse and valuable cultural heritage.
- Environmental protection concerns by considering cultural based economy, which are non-invasive to the environment.

• Highlighting the role of marginalized groups who are central to sustainable development.

Eventually, the theoretical findings were applied to the context of Takht-e Soleyman rural cultural landscape, which is considered a WHS as well. This place is significant for embedding tangible cultural heritage of a long history, sacred features related to an important Persian faith and many other cultural features entangles with natural elements. It also encompasses significant natural elements as well as intangible cultural features. The challenging issue about this place was the low pace of development despite the high potentials and values.

In line with the concern of this research, the empirical part consisting of a set of interviews and two questionnaire surveys were developed based on a participatory approach inclusive of the viewpoints of managers, local community, and visitors in analysis the case of Takht-e Soleyman.

The empirical study reflected several external and internal implications addressing economic, social, cultural, and organizational issues. Although the inadequate tourism infrastructures at place, the reflections of local community and visitors showed high capacity for fostering cultural heritage economic impact in terms of tourism industry. The impact of cultural heritage on social and cultural construct of cultural heritage was partly acknowledged. Moreover, the cognition about the interdependency of cultural land natural features of Takht-e Soleyman disclosed a positive ground for preservation of natural elements.

Reviewing the national policy documents showed indications about the role of cultural heritage in sustainable development as well as the importance of participation of different groups of society in decisions makings. However, the results of the empirical surveys demonstrated that the level of the community participation and economic impact of cultural heritage was not so considerable. Despite the existing policies, the centralized management system at place does not support the participatory approach. The governance and management system of the site is plagued by a hierarchical approach in which the local community does not yield any real influence in the decision-makings process. Thus, the current situation is lacking the benefits of community capacities as well as non-governmental sectors, which results in confined competencies, limited financial resources, and absence of innovative ideas. Consequently, the top-down approach without relying on the role of community and non-governmental sector, short-term strategies and interdisciplinary issues are among the most concerns of the current management system. Hence, Takht-e Soleyman WHS governance and management system has failed to make interfaces between cultural landscape and sustainable development. It bears in mind the traditional approach to cultural heritage to have a passive impact on the local community.

Consequently, Takht-e Soleyman WHS case points out an inconsistency between the theory, the policy documents, and the real governance and management approaches.

The comparison between empirical results and theoretical findings identifies the possible gaps and sheds light on the future steps towards a better situation. Accordingly, the following remarks would be considered to overcome the impeding factors in the area of study:

The awareness-raising program is the fundamental step in making alterations in existing situation. This process should start to be developed through a simultaneous top-down and bottom-up approach. The awareness raising programs are helpful in setting common visions among stakeholders. The value-driven approach inclusive of different stakeholders will be developed based on common visions while it results in producing knowledge at different level of players in sustainable development process.

At management level, the competencies have to be developed through benefitting from experts belonging to all relevant disciplines such as economics and management, tourism management, event planning, conservation and preservation, sociology, psychology, natural sciences, history, archaeology, and ethnology. The awareness raising can be fostered concurrently through education and training programs.

Moreover, it is important to project a vision of joint economic and cultural development by valorising the rich cultural endowments of this region. Furthermore, a strong collaborative initiative is required both at inter and intra organizational level in order to propose the governance, management, planning, measurement and monitoring system, in a long-term view. The outcome would be a joint economic and cultural development mindful of the outstanding cultural and natural heritage of Takht-e Soleyman WHS.

To overcome the above-mentioned issues it seems that there is a need to improve the existing policies, which redesign the governance and management approach in terms of broader emphasis on participation and more practical relevant considerations.

Apart from the national and local policies, the Management Plan of the WHS is an important normative instrument for implementation the relevant strategies. The current management plan can be improved through an integrated approach to all of the natural and cultural endowments of Takht-e Soleyman cultural landscape with more focus on participatory management. In other words, its current role has to be developed in implementation of the existing policies. Moreover, it can be complemented by a section focusing on developing strategies for awareness raising and participation of local community.

To remain as a part of international community, the universal values of Takht-e Soleyman have to be sustained through a constructive interaction between different sources of knowledge and governance and management sphere. The enhancement of policies, strategies, and mechanisms in terms of community-led development could be accelerated and justified by referring to the international policies, trends, and successful practices. The current study as a contribution of academic research, based on theoretical findings and empirical research, have attempted to specify the gaps, and seek to know the ways for a brighter future in Takht-e Soleyman cultural landscape.

In conclusion, cultural landscape has to be considered as a system of cultural, social, and economic values. In this vein, preservation and valorization are mutually reinforcing the development processes and are effective to make a step forward to turn the cultural landscape values into resources for a sustainable development. Valorization is the way to realize the cultural, social, and economic impacts of cultural heritage internally, by improving the daily life experiences of the society, and externally, by making the area unique and protected against global changes. This can come true by means of collective management in which all groups of stakeholders are players in the decision-makings process, transformations, challenges, and consequences.

Conclusion

### References

- Abeyasekera, S. (2005). Quantitative analysis approaches to qualitative data: why, when and how? . In
   J. D. Holland, & J. Campbell (Eds.), *Methods in Development Research; Combining Qualitative and Quantitative Approaches* (pp. 97-106). ITDG Publishing.
- Agnoletti, M. (Ed.). (2012). Italian historical rural landscapes: cultural values for the environment and rural development. Vol. 1. Springer Science & Business Media.
- Antrop, M. (2000). Where are the Genii Loci? In B. Pedroli (Ed.), Landscape—our Home, Lebensraum Landschaft. Essays on the Culture of the European Landscape as a Task (pp. 29– 34). Indigo.
- Antrop, M. (2005). Why landscapes of the past are important for the future. *Landscape and urban planning*, *70*(1), 21-34.
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of planners*, 35(4), 216-224.
- Arntzen, S. (2002). Cultural Landscape and Approaches to Nature–Ecophilosophical Perspectives. *Place and Location*, 2, 27-50.
- Azizi, F., & Norouzi, D. (2011). Annual Performance Report of Takht-e Soleyman WHS. ICHHTO.
- Badia, F., & Donato, F. (2013). Performance Measurement at World Heritage Sites: Per Aspera ad Astra. *International Journal of Arts Management, 16*(1), 20-33.
- Bandarin, F., Hosagrahar, J., & Sailer Albernaz, F. (2011). Why development needs culture. *Journal* of Cultural Heritage Management and Sustainable Development, 1(1), 15-25.
- Bell, S., & Morse, S. (2008). Sustainability indicators: measuring the immeasurable? Earthscan.
- Belluso, R. (2012). The Geographic landscape as Cultural Heritage in the Post-Modern Age. Alma Tourism journal, 5, 17-27.
- Berkes, F., & Davidson-Hunt, I. J. (2006). Biodiversity, traditional management systems, and cultural landscapes: examples from the boreal forest of Canada. *International Social Science Journal*, 58(187), 35-47.
- Bernard, H. R. (1988). Research methods in cultural anthropology. SAGE.
- Besana, A. (2013). Economia del Turismo Culturale. Italia: Edizioni Unicopli.
- Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research*, *17*(3), 303-316.
- Brown, M. F. (2005). Heritage trouble: recent work on the protection of intangible cultural property. *International Journal of Cultural Property*, 1(1), 40-61.

- Brown, S. (2008). *Cultural landscapes and park management: a literature snapshot*. Department of Environment & Climate Change NSW.
- Bruckner, M. (2009). Indicators of Sustainable Development and Monitoring National Sustainable Strategies. In Report on the Institutionalizing Sustainable Development Indicators for Measuring Progress of National Strategies Development Strategies (pp. 43-48). Barbados: UNDESA.
- Camarinha-Matos, L. M., & Macedo, P. (2010). A conceptual model of value systems in collaborative networks. *Journal of Intelligent Manufacturing*, 21(3), 287-299.
- Cantwell, M., & Adams, C. W. (2003). An Aboriginal Planning Initiative. In H. Palang, & F. Gary (Eds.), *Landscape Interfaces* (pp. 163-184). Springer.
- Carlson, A. (2001). Aesthetic preferences for sustainable landscapes: seeing and knowing. *Forests and landscapes-linking ecology, sustainability and aesthetics, IUFRO Researh Series, 6,* 31-41.
- Cernea, M. (2001). Cultural heritage and development. In *A Framework for Action in the Middle East and North Africa*. Washington DC: The World Bank.
- Chhotray, V., & Stocker, G. (2009). *Governance theory and practice, A Cross-Disciplinary Approach*. Palgrave Macmillan UK.
- Clarke, J. (1997). A Framework of Approaches to Sustainable Tourism. Journal of Sustainable Tourism, 5(3), 224–233.
- Claval, P. (2005). Reading the rural landscapes. Landscape and urban planning, 70(1), 9-19.
- Cloke, P. J., Doel, M. A., Matless, D., Thrift, N., & Phillips, M. (1994). Writing the rural: five cultural geographies. SAGE.
- Coburn, A. F., MacKinney, A. C., MacBride, T. D., Mueller, K. J., Slifkin, R. T., & Wakefield, M. K. (2007). Choosing rural definitions: implications for health policy. *Issue brief, 2*, 1-8.
- Cochran, W. G. (1963). Sampling Techniques (2nd ed.). New York: John Wiley and Sons Inc.
- Consortium, T. C. (2015). Cultural Heritage Counts for Europe. Bertelsmann.
- Cornwall, A., & Jewkes, R. (1995). What is participatory research? *Social science & medicine*, *41*(12), 1667-1676.
- Cosgrove, D. (2004). Landscape and Landschaft. German Historical Institute Bulletin, 35, 57-71.
- Council of Europe. (1995). Recommendation No.R(95)9 of the Ministers to Member States on the Integrated Conservation of Cultural Landscape Areas as Part of Landscape Policies.
- Council of Europe. (2000). European Landscape Convention.
- Council of Europe. (2003). Ljubljana Declaration on the territorial dimension of spatial development. European Conference of Ministers responsible for Regional Planning (CEMAT).
- Council of Europe. (2005). Framework Convention on the Value of Cultural Heritage for Society.

- Council of Europe. (2005). The Framework Convention on the Value of Cultural Heritage for Society (Faro Convention).
- Council of Europe. (2006). Landscape and Sustainable Development: Challenges of the European Landscape Convention.
- Council of Europe. (2010). The Eighth Council of Europe Workshops for the Implementation of the European Landscape Convention.
- Council of European. (2006). Recommendation on "reconciling heritage and modernity," made by the Congress of Local and Regional Authorities.
- Cozby, P. C. (2001). Asking people about themselves: survey research. In *Methods in Behavioral Research* (pp. 103-124). Mayfield Publishing Company.
- Creswell, J. W., & Clarck, V. L. (2011). *Designing and Conducting Mixed Methods Research* (2nd ed.). SAGE.
- Cristina Heras, V., Wijffels, A., Cardoso, F., Vandesande, A., Santana, M., Van Orshoven, J., . . . Van Balen, K. (2013). A value-based monitoring system to support heritage conservation planning. *Journal of Cultural Heritage Management and Sustainable Development*, *3*(2), 130-147.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 297-334.
- Dailoo, S. I., & Pannekoek, F. (2008). Nature and Culture: A New World Heritage Context. *International Journal of Cultural Property*, 15(1), 25-47.
- Dakin, S. (2003). There's more to landscape than meets the eye: towards inclusive landscape assessment in resource and environmental management. *The Canadian Geographer/Le Géographe canadien*, 47(2), 185-200. Retrieved from http://www.worldrurallandscapes.org/
- De la Torre, M. (2005). Heritage values in site management: Four case studies. Getty Publications.
- Dematteis, G. (1985). Le metafore della Terra. Milan: Feltrinelli.
- DeVellis, R. F. (2012). Scale development: Theory and applications (Vol. 26) (3rd ed.). SAGE.
- Dewulf, G., Baarveld, M., & Smit, M. (2013). Planning and commitment in cultural heritage projects. *Journal of Cultural Heritage Management and Sustainable Development*, 3(2), 163-174.
- DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical education*, 40(4), 314-321.
- Donato, F. (2013). La crisi sprecata: per una riforma dei modelli di governance e di management del patrimonio culturale italiano. Aracne.
- Donato, F., & Badia, F. (2008). La Valorizzazione dei Siti Culturali e dei Paesaggio. Leo S. OLSCHKI.
- Donato, F., & Gilli, E. (2011). Un approccio "multi-scala" per la gestione del patrimonio culturale italiano. *IL CAPITALE CULTURALE. Studies on the Value of Cultural Heritage*, 2, 197-225.
- Dudley, N. (2008). Guidelines for applying protected area management categories. IUCN.

- Duxbury, N., & Jeannotte, M. S. (2012). Including Culture in Sustainability: an Assessment of Canada's Integrated Community Sustainability Plans. *International Journal of Urban* Sustainable Development, 4(1), 1-19.
- Encyclopædia Britannica Online. (2016). *Takht-e Soleyman*. Retrieved March 10, 2016, from http://www.britannica.com/place/Takht-e-Soleyman-ancient-city-Iran
- Engelhardt, R. A., & Rogers, P. R. (2009). Hoi An Protocols for Best Conservation Practice in Asia: Professional Guidelines for Assuring and Preserving the Authenticity of Heritage Sites in the Context of the Cultures of Asia. Bankok: UNESCO.
- European Commission. (2004). 6th European Commission Conference on Sustaining Europe's Cultural Hritage: from Research to Policy. London.
- European Commission. (2004). Declaration of the European Commission Conference on Sustainable Europe's Cultural Heritage.
- Fairclough. (2014). Managing the historic rural landscape. In J. Grenville (Ed.). Routledge.
- Farina, A. (2000). The cultural landscape as a model for the integration of ecology and economics. *BioScience*, 50(4), 313-320.
- Fidel, R. (1984). The case study method: A case study. *Library and Information Science Research*, 6(3), 273-288.
- Fischer, F. (2006). Participatory Governance as Deliberative Empowerment: The Cultural Politics of Discursive Space", American Review of Public Administration. *36*(1), 19-40.
- Förster, F., Großmann, R., Hinz, M., Iwe, K., Kinkel, H., Annegret Larsen, & Lungershausen, U. (2013). Towards mutual understanding within interdisciplinary palaeoenvironmental research: an exemplary analysis of the term landscape. *Quaternary International*, 312, 4-11.
- Fowler, P. J. (2003). *World Heritage Cultural Landscapes, Paper 6, 1992-2002.* UNESCO World Heritage Centre.
- Gable, G. G. (1994). Integrating case study and survey research methods: an example in information systems. *European journal of information systems*, *3*(2), 112-126.
- Gaviri, S. (1993). "Anahita dar Ostoorehaye Irani" Anahita in Iranian Mythology. Tehran: Qoqnoos.
- Ghadrdan, M. (2009). "Jaygah-e Nour va Atash dar Ayin-e Zartosht" Light and Fire in Zoroastrianism Faith. Shiraz: Ofogh-e Parvaz.
- Giuliani, M. V., & Feldman, R. (1993). Place attachment in a developmental and cultural context. *Journal of environmental psychology*, 13(3), 267-274.
- Gliem, R. R., & Gliem, J. A. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.
- Goldouz, S. S., Ataie, S. A., Brebbia, C., & Pineda, F. (2010). Energy tourism or spiritual tourism case study: Takht-e Soleiman, Iran. In 4th International Conference on Sustainable Tourism, Ashurst, New Forest, England, 5-7 July 2010 (pp. 571-580). WIT Press.

- Gosden, C., & Head, L. (1994). Landscape-a usefully ambiguous concept. Archaeology in Oceania, 29(3), 113-116.
- Gražulevičiūtė, I. (2006). Cultural heritage in the context of sustainable development. *Environmental* research, engineering and management, 37(3), 74-79.
- Greene, J., Caracelli, V. J., & Graham, W. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational evaluation and policy analysis*, *11*(3), 255-274.
- Greffe, X. (2004). Is heritage an asset or a liability? Journal of cultural heritage, 5(1), 301-309.
- Greffe, X. (2010). *Urban cultural landscapes: an economic approach*. Dipartimento di Economia "S. Cognetti de Martiis". International Centre for Research on the Economics of Culture, Institutions, and Creativity (EBLA), Centro Studi Silvia Santagata (CSS).
- Habibpour Gatabi, K., & Safari Shali, R. (2012). Comprehensive Manual for Using SPSS in Survey Researches. Louyeh.
- Halfacree, K. H. (1995). Talking about rurality: Social representations of the rural as expressed by residents of six English parishes. *J. Rural Stud*, *11*(1), 1-20.
- Hall, S. (1997). *Representation: Cultural Representations and Signifying Practices,*. London: Sage/Open University.
- Hassan, F., de Trafford, A., & Youssef, M. (2008). *Cultural heritage and development in the Arab world*. Alexandria,: Bibliotheca Alexandrina.
- Hawkes, J. (2001). *The fourth pillar of sustainability: Culture's essential role in public planning.* Common Ground.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in international marketing*, 20(1), 277-319.
- Hopwood, B., Mellor, M., & O'Brien, G. (2005). Sustainable development: mapping different approaches. *Sustainable development*, *13*(1), 38-52.
- Housing Foundation of IRI. (2008). Development Plan for Nosratabad Village. West Azerbayjan Province.
- Hoyle, R. H. (1995). Structural equation modeling: Concepts, issues, and applications. Sage.
- Hummon, D. H. (1992). Community attachment: local sentiment and sense of place. In I. Altman, & S. Low (Eds.), *Place Attachment* (pp. 253–278). New York: Plenum Press.
- ICHHTO. (2010). Management Plan of Takht-e Soleyman Wourld Heritage Site.
- ICHO. (2002). Takht-E Soleyman Fire Temple of Knights." UNESCO World Heritage Convention Nomination of Properties for Inclusion on the World Heritage List. Iranian Cultural Heritage Organization. Retrieved April 2015, 14, from http://whc.unesco.org/uploads/nominations/1077.pdf
- ICOMOS. (1994). Nara Document on Authenticity.

- ICOMOS. (1998). The Burra Charter: The Australia ICOMOS Charter for Places of Sultural Significance. Australia ICOMOS.
- ICOMOS. (1999). Charter on the Built Vernacular Heritage.
- ICOMOS. (2013). The Burra Charter: The Australia ICOMOS Charter for Places of Sultural Significance. Australia ICOMOS.
- ICOMOS. (2014). The Florence Declaration on Heritage and Landscape as Human Values.
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative science quarterly*, 24(4), 602-611.
- Jokilehto, J. (2004). Sustainability and the integrated urban heritage management. In. Vilnius: The Sustainable Urban Heritage Management–Local Community in Time of Change-Expert Seminar.
- Jones, M. (2003). The concept of cultural landscape: discourse and narratives. In H. Palang, & G. Fry (Eds.), *Landscape interfaces* (pp. 21-51). Kluwer Academic Publishers.
- Jones, M., & Daugstad, K. (1997). Usages of the "cultural landscape" concept in Norwegian and Nordic landscape administration. *Landscape Research*, 22(3), 267-281.
- Kant, I. (1781). *Critique of pure reason*. (P. Guyer, & A. W. Wood, Trans.) Cambridge University Press (1998).
- Karpodini-Dimitriadi, E. (2008). The spirit of rural landscapes: culture, memory and messages ,.Retrieved0112,2016,http://cultrural.prismanet.gr/themedia/File/Rural\_landscapes\_EKD\_1[1].pdf
- Kates, R. W., Clark, W. C., Corell, R., Hall, J. M., Jaeger, C. C., Lowe, I., . . . Kasperson, R. E. (2001). Sustainability science. *Science*, 292, 641-642.
- Kawachi, I., Subramanian, S., & Kim, D. (Eds.). (2008). Social Capital and Health. New York: Springer.
- Kooiman, K. (1993). Modern Governance: New Government-Society Interactions. Sage.
- Kumar, S., & Phrommathed, P. (2005). Research methodology. Springer US.
- Kuzel, A. (1999). Sampling in qualitative inquiry. In B. Crabtree , & W. Miller (Eds.), *Doing Qualitative Research* (pp. 33-45). Thousand Oaks.
- Lapping, M. B. (2006). Rural Policy and Planning. In P. Cloke, T. Marsden, & P. Mooney (Eds.), *Handbook of rural studies* (pp. 104-122). Sage.
- Lehmann, E. L., & D'Abrera, H. J. (2006). Nonparametrics: statistical methods based on ranks. Springer.
- Lennon, J., & Taylor, K. (Eds.). (2012). Managing Cultural Landscapes. Routledge.

Lichtman, M. (2012). Qualitative Research in Education: A User's Guide. Sage.

- Lokocz, E., Ryan, R., & Sadler, A. J. (2011). Motivations for land protection and stewardship: Exploring place attachment and rural landscape character in Massachusetts. *Landscape and urban planning*, *90*(2), 65-76.
- Loosveldt, G. (2008). Face-to-face interviews. In E. D. De Leeuw, & D. A. Dillman (Eds.), *International handbook of survey methodology* (pp. 201-202). Taylor & Francis.
- Loulanski, T. (2006). Cultural heritage in socio-economic development: local and global perspectives. *Environments*, *34*(2), 51-69.
- Loulanski, T. (2006). Revising the concept for cultural heritage: the argument for a functional approach. *International Journal of Cultural Property*, 13(2), 207-233.
- Lowenthal, D. (1978). *Finding valued landscapes*. Working Paper, Perception and Policy Working Group, Institute for Environmental Studies, University of Toronto.
- Lowenthal, D. (1997). European landscape transformations: the rural residue. *Understanding ordinary landscapes*, 180-188.
- Marcucci, D. J. (2000). Landscape history as a planning tool. *Landscape and urban planning*, 49(1), 67-81.
- Marini, M. B., & Mooney, P. H. (2006). Rural Economics. In P. Cloke, T. Marsden, & P. Mooney (Eds.), *Handbook of rural studies* (pp. 91-103). SAGE.
- Mayan, M. J. (2001). An Introduction to Qualitative Methods: A Training Module for Students and Professionals. Institute for Qualitative Methodology.
- Mechtild, R. (2003). Linking Nature and Culture: World Heritage Cultural Landscapes, 14. In *Cultural Landscapes: the Challenges of Conservation* (pp. 10-14). UNESCO.
- Miles, M. B., & Huberman, A. (1984). *Qualitative data analysis: A sourcebook of new methods.* SAGE.
- Millar, S. (2006). Stakeholders and community participation. In A. Leask, & A. Fyall (Eds.), *Managing world heritage sites* (pp. 37-54). Butterworth-Heinemann (imprint of Elsevier).
- Miller, R., & Acton, C. (2009). SPSS for social scientists. Palgrave Macmillan.
- Mitchell, G. (2006). Problems and fundamentals of sustainable development indicators. In M. Redclift (Ed.), *Sustainability: Critical concepts in the social sciences* (pp. 237-256). Routledge.
- Mitchell, N., & Buggy, S. (2000). Protected Landscapes and Cultural Landscapes. *The George Wright Forum*, 17(1), 35-46.
- Mitchell, N., Barrett, B., & Brown, J. (2014). Exploring Opportunities for Enhancing Relevancy and Sustainability through Cultural Landscape. In S. Weber (Ed.), Protected Areas in a Changing World: Proceedings of the 2013 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites (pp. 115-121). George Wright Society.
- Mitchell, N., Rossler, M., & Tricaud, P.-M. (2009). World Heritage paper N° 26, World Heritage Cultural Landscapes: A hand book for conservation and management. UNESCO.

Mohammadi, A. (1997). "Tarikh-e Takab Afshar" Takab Afshar Histoy. Tehran: Hoda.

- Morse, J. M., & Niehaus, L. (2009). *Mixed method design: Principles and procedures* (Vol. 4). Left Coast Press.
- Moskal, B. M., & Leydens, J. A. (2000). Scoring rubric development: Validity and reliability. Practical assessment. *research & evaluation*, 7(10), 71-81.
- Murzyn-Kupisz, M., & Dzialek, J. (2013). Cultural heritage in building and enhancing social capital. Journal of Cultural Heritage Management and Sustainable Development, 3(1), 35-54.
- Naumann, R. (1977). *Die Ruinen Von Tacht-E Suleiman Und Zendan-E Suleiman*. (F. NadjdSamii, Trans.) Tehran: Iranian Cultural Heritage Organization.
- O'Brien, D. (2010). *Measuring the value of culture: a report to the Department for Culture Media and Sport.* Department for Culture, Media and Sport.
- OECD. (2005). Culture and Local Development. OECD Publishing. Retrieved July 2015
- Olwig, K. R. (2000). Historical aspects Malfunctionality in Landscapes: Opposing Views of Landscape. In J. T. Brant (Ed.), *Malfunctional Landscapes: Interdisciplinary Approaches to Landscape Research and Management* (pp. 133-146). Roskilde: Centre for Landscape Research.
- Olwig, K. R. (2002). Landscape, Nature, and the Body Politic. From Britain's Renaissance to America's New World. The University of Wisconsin Press.
- Olwig, K. R. (2005). Editorial: law, polity and the changing meaning of landscape. *Landscape Research*, *30*(3), 293-298.
- Olwig, K. R. (2005). The landscape of 'customary' law versus that of 'natural'law. Landscape Research, 30(3), 299-320.
- Opschoor, H., & Tang, L. (2011). Growth, world heritage and sustainable development: the case of Lijiang City, China. International Journal of Sustainable Development & World Ecology, 18(6), 469-473.
- Osten, H., & Naumann, R. (1959). *Takht-i-Suleiman*. (F. NadjdSamii, Trans.) Tehran: Iranian Cultural Heritage Organization.
- Ostrom, E. (1993). A communitarian approach to local governance. *National Civic Review*, 82(3), 226-233.
- Palang, H., & Fry, G. (2003). Landscape interfaces Introduction. In H. Palang, & G. Fry (Eds.), Landscape interfaces (pp. 1-14). Kluwer Academic Publishers.
- Palang, H., Alumäe, H., & Ülo, M. (2000). Holistic aspects in landscape development: a scenario approach . *Landscape and Urban Planning*, 50(1), 85-94.
- Palang, H., Helmfrid, S., Antrop, M., & Alumäe, H. (2005). Rural landscapes: past processes and future strategies. *Landscape and urban planning*, 70(1), 3-8.

- Papageorgiou, J. F., Karpodini-Dimitriadi, E., Karapidaki, L., Marandola, D., Ciccarelo, G., Zeoli, A.,
  & Pia Graziani, M. (2008). *Promotion of a Cultural Area Common to European Rural Communities*. (J. F. Papageorgiou, Ed., L. Varelidi, & D. Marandola, Trans.) CULT-RURAL.
- Pascual, J. (2012). *Rio+20 and Culture: Advocating for Culture as a Pillar of Sustainability*. An Initiative by the Committee on Culture of United Cities and Local Governments. Retrieved December 2014, from http://www.cities-local governments.org
- Pawłowski, A. (2008). How many dimensions does sustainable development have? Sustainable Development, 16(2), 81-90.
- Perkin, C. (2010). Beyond the rhetoric: negotiating the politics and realizing the potential of community-driven heritage engagement. *International Journal of Heritage Studies*, 16(1-2), 107-122.
- Punch, K. F. (2013). Introduction to social research: Quantitative and qualitative approaches. Sage.
- Putnam, R. D. (2000). Bowling Alone. Simon & Schuster Paperbacks.
- Rattray, J., & Jones, M. C. (2007). Essential elements of questionnaire design and development. *Journal of clinical nursing*, 16(2), 234-243.
- Rauschmayer, F., Omann, I., & Frühmann, J. (2011). Needs, capabilities and quality of life : refocusing sustainable development. In F. Rauschmayer, I. Omann, & J. Frühmann (Eds.), *Sustainable development : capabilities, needs, and well-being* (pp. 1-24). London: Routledge.
- Roca, Z. (2010). Landscapes, Identities and Development. In *Proceedings of Eighth Council of Europe Workshops for the implementation of the European Landscape Convention* (pp. 65-77).
- Rocco, T. S., Bliss, L. A., Gallagher, S., & Pérez-Prado, A. (2003). Taking the next step: Mixed methods research in organizational systems. *Information Technology, Learning, and Performance Journal*, 21(1), 19.
- Rosenau, J. N., & Czempiel, E. O. (1992). *Governance without Government: Order and Change in World Politics*. Cambridge: Cambridge University Press,.
- Rössler, M. (2006). World heritage cultural landscapes: a UNESCO flagship programme 1992–2006. *Landscape Research*, *31*(4), 333-353.
- Rowley, T. D. (2003). The rural identity crisis. Retrieved from http://www.rupri.org
- Rubenstein, J. M. (2011). *Cultural Landscape, The: An Introduction to Human Geography.* Pearson Prentice Hall.
- Ruiz, J., & Domon, G. (2012). Relationships between rural inhabitants and their landscapes in areas of intensive agricultural use: A case study in Quebec (Canada). *Journal of Rural Studies*, 28(4), 590-602.
- Sauer, C. O. (1925). The Morphology of Lnadscape. University of California Press.

Schama, S., & Porter, R. (2004). Landscape and memory. Herper Perennial.

- Selman, P. (2004). Community participation in the planning and management of cultural landscapes. *Journal of environmental planning and management*, 47(3), 365-392.
- Siegrist, J. (2000). Place, social exchange and health: proposed sociological framework. *Social Science and Medicine*, *51*(9), 1283-1293.
- Smith, A., Morgan, A., & van der Meer, A. (2003). Community-driven research in cultural heritage management: the Waanyi women's history project. *International Journal of Heritage Studies*, 9(1), 65-80.
- Sorokin, P. A., Tanquist, M., Parten, M., & Zimmerman, C. C. (1930). An experimental Study of efficiency of work under various specified conditions. *American Journal of Sociology*, 765-782.
- Soubbotina, T. P. (2004). Beyond economic growth: An introduction to sustainable development. World Bank Publications.
- Stephenson, J. (2008). The Cultural Values Model: An integrated approach to values in landscapes. *Landscape and urban planning*, 84(2), 127-139.
- Stewart, J. M., & Sinclair, A. J. (2007). Meaningful public participation in environmental assessment: perspectives from Canadian participants, proponents, and government and management. *Journal of Environmental Assessment Policy*, 9(2), 161-183.
- Stratford, E. (Ed.). (1999). Australian cultural geographies. Melbourne: Oxford University Press.
- Swensen, G., & Stenbro, R. (2013). Urban planning and industrial heritage-a Norwegian case study. Journal of Cultural Heritage Management and Sustainable Development, 3(2), 175-190.
- Tahmouri, A., & Hoseinrazavi, S. (2013). Study about presence of nature in Iranian architecture with analytical approach on water. *World Applied Programming*, *3*(9), 406-416.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. International journal of medical education, 2, 53.
- Taylor, K. (2009). Cultural landscapes and Asia: reconciling international and Southeast Asian regional . *Landscape Research*, 34(1), 7-31.
- Terkenli, T. S. (2001). Towards a theory of the landscape: the Aegean landscape as a cultural image. *Landscape and urban planning*, *57*(3), 197-208.
- Termorshuizen, J. W., & Opdam, P. (2009). Landscape services as a bridge between landscape ecology and sustainable development. *Landscape Ecology*, 24(8), 1037-1052.
- Throsby, D. (2001). Economics and Culture. Cambridge University Press.
- Throsby, D. (2008). Culture in Sustainable Development: Insights for the future implementation of Art 13. *Paper for UNESCO Secretariat*.
- Tilley, C. Y. (1994). A phenomenology of landscape: places, paths, and monuments. Oxford.
- Tobias, R. D. (1995). An introduction to partial least squares regression. Orlando, Florida: SUGI Proceedings.

- Tress, B., Tress, G., Décamps, H., & d'Hauteserre, A. M. (2001). Bridging human and natural sciences in landscape research. *Landscape and Urban Planning*, *57*(3-4), 137-141.
- UCLG. (2004). Agend 21 for Culture.
- UCLG and Barcelona City Council. (2009). *Culture and Sustainable Development: Examples of Institutional Innovation and Proposal of a New Cultural Policy Profile*. Retrieved April 2015, 14, from http://www.agenda21culture.net
- UNCED (United Nations Conference on Development). (1992). Agenda 21.
- UNCED (United Nations Conference on Development). (1992). Rio Decleration.
- UNCSD. (2012). Current Ideas on Sustainable Development Goals and Indicators. *RIO 2012 Issues Briefs, Produced by the UNCSD Secretariat, 6.*
- UNESCO. (1972). Convention Concerning the Protection of the World Cultural and Natural *Heritage*. UNESCO.
- UNESCO. (1982). Mexico City Declaration on Cultural Policies.
- UNESCO. (1984). Eighth Council of Europe Workshops for the implementation of the European Landscape Convention. UNESCO. Retrieved from http://whc.unesco.org/archive/repcom84.htm
- UNESCO. (1992). Sixteenth Session of Word Heritage Committee. UNESCO.
- UNESCO. (2001). Preamble to the UNESCO Universal Declaration on Cultural Diversity. UNESCO.
- UNESCO. (2001). Universal Declaration on Cultural Diversity.
- UNESCO. (2003). Convention for the Safegaurding of the Intangible Cultural Heritage. UNESCO.
- UNESCO. (2004). Recommendations of the Conference on Linking Universal and Local Values: Managing a Sustainable Future for World Heritage. Amsterdam: World Heritage Center.
- UNESCO. (2005). Declaration on the Role of Sacred Natural Sites and Cultural Landscapes in the Conservation of Biological and Cultural Diversity. UNESCO.
- UNESCO. (2005). Ten Keys to the Convention on the Protection and Promotion of the Diversity of Cultural Expressions. UNESCO.
- UNESCO. (2008). Operational Guidelines for the Implementation of the World Heritage Convention. UNESCO.
- UNESCO. (2011). Historic Urban Landscape Recommendation.
- UNESCO. (2012). UN System Task Team on the post-2015 UN Development Agenda: Culture: a driver and an enabler of sustainable development.
- UNESCO. (2013). The Hangzhou Declaration: Placing Culture at the Heart of Sustainable Development Policies.

- UNESCO. (2015). Operational Guidelines for the Implementation of the World Heritage Convention. UNESCO. Retrieved September 08, 2015, from http://whc.unesco.org/en/guidlines/
- United Cities and Local Governments. (2012). Rio+20 and Culture.

United Nations. (1992). Convention on Biological Diversity. United Nations.

- UNRISD & UNESCO. (1997). Towards a World Report on Culture and Development Constructing Cultural Statistics and Indicators.
- UNWCED. (1987). Our common Future (Brundtland Report). Oxfor University Press.
- Van Schuur, W. H. (2003). Mokken scale analysis: between the Guttman scale and parametric item response theory. *Political Analysis*, 11(2), 139-163.
- Vileniske, I. G. (2008). Influence of built heritage on sustainable development of landscape. *Landscape research*, 33(4), 425-437.
- Volpe, G. (2015). Patrimonio al futuro. Electa.
- Vos, W., & Meekes, H. (1999). Trends in European cultural landscape development: perspectives for a sustainable future. *Landscape and urban planning*, 46(1), 3-14.
- Weaver, D. B. (2001). Ecotourism as mass tourism: Contradiction or reality? *The Cornell Hotel and Restaurant Administration Quarterly*, 42(2), 104-112.
- World Bank. (1998). *Culture and Sustainable Development. A Framework for Action.* Washington: The World Bank.
- World Bank. (2001). Cultural Heritage and Development A Framework for Action in the Middle East and North Africa. The World Bank.
- Yung, E. H., & Chan, E. H. (2011). Problem issues of public participation in built-heritage conservation: Two controversial cases in Hong Kong. *Habitat International*, *35*(3), 457-466.

# Appendix A

#### Questions for the interview with managers

Title of the research: Management of cultural landscapes for sustainable development: the Case of Takht-e Soleyman World Heritage Site in Iran

- 1. Can cultural heritage (tangible and intangible) be considered as a resource for local sustainable development?
- 2. Is consideration of cultural heritage as a resource for development in contradiction with preservation and conservation approach?
- 3. How can the role of conservation and rational exploitation of cultural heritage (valorization) be realized in moving towards sustainable development goals in Takht-e Soleyman cultural landscape?
- 4. How can tourism industry be promoted in Takht-e Soleyman?
- 5. How much are innovative activities for promotion of tourism industry (like local tours, traditional ceremonies, local music performances, establishment of local accommodations etc.) supported by the ICHHTO and the local community?
- 6. Are adequate capacity building at place for participatory management of Takht-e Soleyman cultural landscape?
- 7. If no, how this capacity can be built?
- 8. How can the private sector be engaged in valorization of Takht-e Soleyman cultural heritage?
- 9. Does the significance of Takht-e Soleyman cultural heritage dependent on the natural elements?
- 10. How much are the management concerns in Takht-e Soleyman related to inter-disciplinary and trans-disciplinary issues?
- 11. How much is the management system in Takht-e Soleyman influenced by registration as a WHS?
- 12. Can "integrated management system" be considered as a solution for improving the current management concerns?

# **Appendix B**

#### Local Community Questionnaire

I am thankful for devoting your time to improve this PhD research. Each of your careful responses is important for attaining reliable results in this research.

Research title: Management of cultural landscapes for sustainable development: the Case of Takht-e Soleyman World Heritage Site in Iran – Researcher: Anahita Lohrasbi

\* There is no need to write your name.

\*\* In this questionnaire, cultural heritage refers not only to the built and monumental heritage but also to traditions, beliefs, handicrafts, local arts, vernacular architecture.

Serial No.: - - -

Date:

# Please answer the following questions by marking under one of the six columns: "A lot", "Much", "To some extend", "A little", "Not at all" and "No idea".

	A lot	Much	To some extend	A little	Not at all	No idea
1- How much are you in favour of your native culture and local community?						
2- How much is it important to pay attention to conservation and preservation of Takht-e Soleyman cultural heritage?						
3- How much do you believe cultural heritage of Takht-e Soleyman is a wealth for the future generations?						
4- How much can it be considered as resource of development at present?						
5- How much has it caused the economic, cultural, and social development of the region to enhance?						
6- How much has your region improved due to registration of Takht-e Soleyman site in UNESCO World Heritage List?						
7- Following the registration, a number of laws have to be respected within the UNESCO zone. Have they caused any conflicts with your activities or interests?						
8- Does the conservation and preservation of the World Heritage Site have any contradiction with the development plans in your region?						
9- How much can the cultural heritage of Takht-e Soleyman affect the following items <u>positively</u> ?						
9-1 Development of tourism industry in the region						
9-2 Creation of new job opportunities (direct and indirect)						
9-3 Income generation through selling cultural products (e.g. handicrafts)						

Ar	opendix	В
r		

	A lot	Much	To some extend	A little	Not at all	No idea
9-4 Development of socio-cultural bonds with non-local people						
9-5 Strengthening internal social bonds among the local community						
9-6 Cultural and historical awareness raising						
9-7 Strengthening the sense of attachment to the place						
9-8 Increasing incentives for voluntary activities among local community						
9-9 Making incentives for innovating ideas/activities/products based on traditional skills, beliefs, etc.						
9-10 Better conservation of natural heritage (water resources, mountains, plants, springs, etc.)						
10-How much the valorization of cultural heritage can be improved through the following measurements?			_			
10-1 Improving tourism infrastructures						
10-2 Organizing local cultural events for tourists (like local music, rituals, ceremonies etc.)						
10-3 Preservation of natural heritage (like Takht-e Soleyman lake, warm water springs, important mountains)						
10-4 Conservation and preservation of cultural heritage						
10-5 Awareness raising regarding significance of heritage in this area						
10-6 Considering cultural heritage as a source of income generation for local people						
10-7 Participation of local community in preservation and valorization of the cultural heritage						
11- How much do you benefit economically from incoming tourists?						
12- Have any ethical issues been created by the incoming tourists?						
13- How much are the tourists willing to visit your village as well the World Heritage Site?						
14- How much are you interested in receiving more tourists inside the village?						
15- On condition that you have the necessary supports, how much are you interested in offering tourism services by your own facilities, through following activities?						
15-1 Transportation of visitors to the touristic attraction points						
15-2 Providing the visitors with local accommodation						
15-3 Preparing and selling local food to the visitors						
15-4 Offering and selling handicrafts to the visitors						
15-5 Providing the visitors with information as a local guide						
15-6 Contribution in construction of accommodation centres or restaurants						

Appendix B							
16- In your opinion, what are the two first priorities to foster the development in your region?							
☐ Agriculture and anim	al husbandry developmer	nt 🗆	Developmen	t of access and local roads			
$\Box$ Creation of new job of	opportunities		Developmen	nt of mining industry			
$\square$ Development of tour	ism industry		Participator	y management of the region			
□ Strengthening the env	vironmental protection pla	ans 🗆	Valorizing l	ocal cultural heritage			
			-	-			
Personal information	n:						
Approximate age:	☐ Less than 20 ☐ 40 to 49	□ 20 to □ 50 to		☐ 30 to 39 ☐ 60 and above 60			
Sex:	□ Male	🗌 Fem	ale				
Level of Education:	☐ Elementary school ar ☐ Bachelor degree	nd lower		school diploma r degree or higher			

### Appendix C

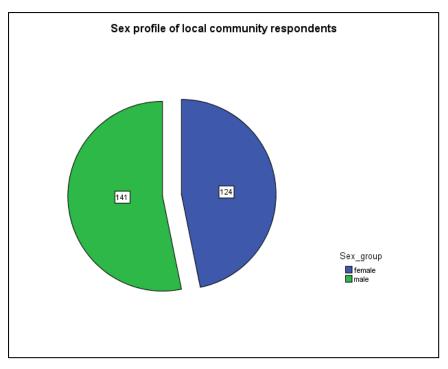


Figure C.1. Sex distribution of local community respondents

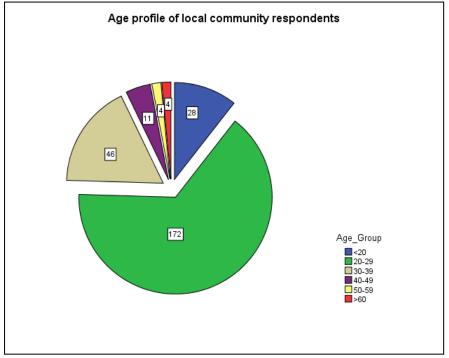


Figure C.2. Age distribution of local community respondents

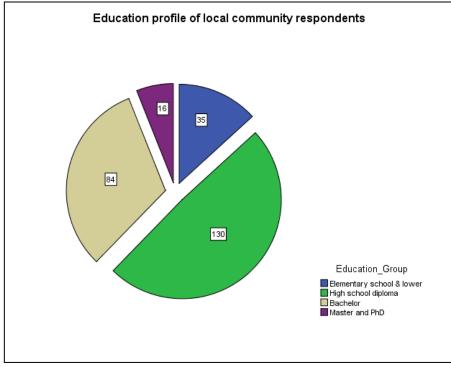


Figure C.3. Education distribution of local community respondents

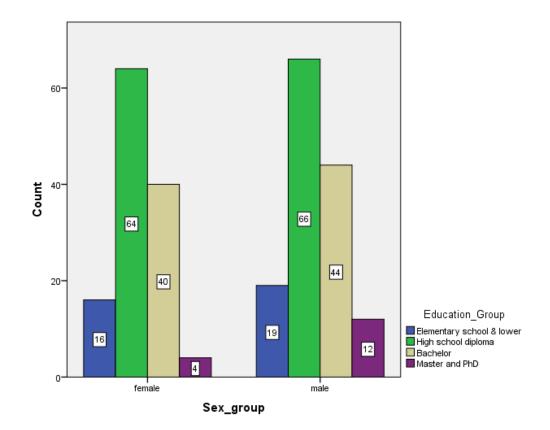


Figure C.4. Education vs. sex profiles

		Q1					
		Not at all	A little	To some extend	Much	A lot	
		Row N %	Row N %	Row N %	Row N %	Row N %	
	Elementary school & lower	0.0%	0.0%	20.0%	22.9%	57.1%	
Education	High school diploma	3.1%	3.1%	14.6%	24.6%	54.6%	
Group	Bachelor	0.0%	4.8%	19.0%	9.5%	66.7%	
	Master and PhD	0.0%	0.0%	0.0%	0.0%	100.0%	

Table C-1. Place attachment vs. education

Table C-2. Place attachment vs. age (cumulative percentage)

		Q1					
		Not at all	A little	To some extend	Much	A lot	
		Row N %	Row N %	Row N %	Row N %	Row N %	
	<20	0.0%	0.0%	14.3%	28.6%	57.1%	
Age Group	20-29	0.0%	4.7%	14.0%	18.6%	62.8%	
	30-39	8.7%	0.0%	30.4%	8.7%	52.2%	
	40-49	0.0%	0.0%	0.0%	36.4%	63.6%	
	50-59	0.0%	0.0%	0.0%	0.0%	100.0%	
	>60	0.0%	0.0%	0.0%	0.0%	100.0%	

Table C-3. Place attachment vs. age (means)

	Ν	Valid	28
<20	Mean		4.43
20.20	Ν	Valid	172
20-29	Mean		4.40
20.20	Ν	Valid	46
30-39	Mean		3.96
10.10	Ν	Valid	11
40-49	Mean		4.64
50.50	Ν	Valid	4
50-59	Mean		5.00
	Ν	Valid	4
>60	Mean		5.00

Average=4.35

	Transportation	Local accommodation	Local food	Handicrafts	Local guide	Investment
Ν	265	265	265	265	265	265
WTP	3.03	3.53	3.54	3.40	3.26	3.08

Table C-4. Willingness to participation in tourism related activities (WTP)

Table C-5. Conflict of interests with preservation rules

		Frequency	Valid Percent
	Not at all	55	22.7
	A little	48	19.8
	To some extend	75	31.0
	Much	28	11.6
	A lot	36	14.9
	Total	242	100.0
Missing	I have no idea	23	
Total		265	

#### Table C-6. Normality test results <sup>1</sup>

Item (Question)	SD	Skewness	Skewness test	Normality
Awareness	1.01	-1.32	-8.85	Non-normal
2- How much is it important to pay attention to conservation and preservation of Takht-e Soleyman cultural heritage?	.993	-2.06	-13.73	Non-normal
3- How much do you believe cultural heritage of Takht-e Soleyman is a wealth for the future generations?	1.21	-1.11	-7.42	Non-normal
4- How much can it be considered as resource of development at present?	1.18	-1.38	-9.22	Non-normal
Willingness to participation	.89	.262	1.75	Normal
15-1 Transportation of visitors to the touristic attraction points	1.08	040	27	Normal

<sup>&</sup>lt;sup>1</sup> When skewness is zero, it means that the data distribution is soundly symmetric. When it is smaller than 0.5, the distribution is normal. Moreover, the proportion of skewness coefficient to standard error is considered as a Normality testing. If the skewness test is <-2 or >+2 the normality assumption is rejected.

		-	1	1 1
15-2 Providing the visitors with local accommodation	1.04	.246	1.64	Normal
15-3 Preparing and selling local food to the visitors	1.22	178	-1.18	Normal
15-4 Offering and selling handicrafts to the visitors	1.31	172	-1.14	Normal
15-5 Providing the visitors with information as a local guide	1.16	214	-1.42	Normal
15-6 Contribution in construction of accommodation centres or restaurants	1.11	344	-2.29	Non-normal
Sense of attachment to the place				
1- How much are you in favour of your native culture and local community?	.954	-1.38	9.2	Non-normal
Economic resource	.934	408	-2.72	Non-normal
9-1 Development of tourism industry in the region	.801	-1.15	-7.66	Non-normal
9-2 Creation of new job opportunities (direct and indirect)	1.42	350	-2.33	Non-normal
9-3 Income generation through selling cultural products	1.31	093	-0.62	Normal
Social resource	.772	269	-1.79	Normal
9-4 Strengthening social bonds with non-local people	.997	343	-2.28	Non-normal
9-5 Strengthening social bonds with local people	1.09	562	-3.74	Non-normal
9-7 Strengthening the sense of attachment to the place	1.21	426	-2.84	Non-normal
9-8 Voluntary activities	.765	.220	1.46	Normal
9-9 Innovation	1.33	230	-1.53	Normal
Cultural resource			1.00	N
9-6 Awareness raising	.949	.254	1.69	Normal
Natural heritage conservation				N 1
9-10 Better conservation of natural heritage	1.03	334	-2.22	Non-normal
10-1 Improving the infrastructures for tourists	1.11	745	-4.96	Non-normal
10-2 Organizing local cultural events for tourists	1.15	318	-2.12	Non-normal
10-3 Preservation of natural heritage	.940	254	-1.69	Normal
10-4 Conservation and preservation of cultural heritage	1.66	320	-2.13	Non-normal
10-5 Awareness raising regarding significance of heritage in this area	1.07	223	-1.48	Normal

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10-6 Considering cultural heritage as a source of income generation for local people	1.29	.043	0.286	Normal
10-7 Participation of local community in preservation and valorization of the cultural heritage	1.04	246	-1.31	Normal

Table C-7. Reliability test results

Variable	Number of questions in a cluster	Cronbach's Alpha
Awareness	3	0.904
Willingness to participation	6	0.859
Sense of attachment to the place	1	-
Economic resource	3	0.658
Social resource	5	0.703
Cultural resource	1	-
Environmental protection	1	-
Measures for valorization of cultural heritage	7	0.760

Table C-8. Correlation test results for Level of awareness and WTP (Hypothesis 1)

			Awareness	Participation
Spearman's rho		Correlation Coefficient	1.000	.216
	Awareness	Sig. (2-tailed)		.000
		Ν	265	265
		Correlation Coefficient	.216	1.000
	Participation	Sig. (2-tailed)	.000	
		Ν	265	265

Table C-9. Correlation test results for Sense of attachment to place and WTP (Hypothesis 2)

			Attachment to place	Participation
	-	Correlation Coefficient	1.000	.229
pla Spearman's rho	Attachment to	Sig. (2-tailed)		.000
	place	Ν	265	265
	Participation	Correlation Coefficient	.229	1.000
		Sig. (2-tailed)	.000	
		Ν	265	265

		Category	N	Observed Prop.	Test Prop.	Asymp. Sig. (1-tailed)	Final result	
Infra-structures improvement (Hypothesis L-3)	Group 1	<= 3	87	.3	.6	.000	Accepted*	
	Group 2	> 3	178	.7				
	Total		265	1.0				
Organizing local cultural events	Group 1	<= 3	133	.5	.6	.010	Rejected	
(Hypothesis L-4)	Group 2	> 3	132	.5	-			
(Hypothesis L-4)	Total		265	1.0				
Cultural heritage conservation and	Group 1	<= 3	117	.4	.6	.000	Accepted*	
preservation	Group 2	> 3	148	.6				
(Hypothesis L-6)	Total		265	1.0				

Table C-10. Bi-nominal test results for hypotheses 3, 4 and 6.

\* sig < 0.05 & Group 2 observed prop. >=Test prop.

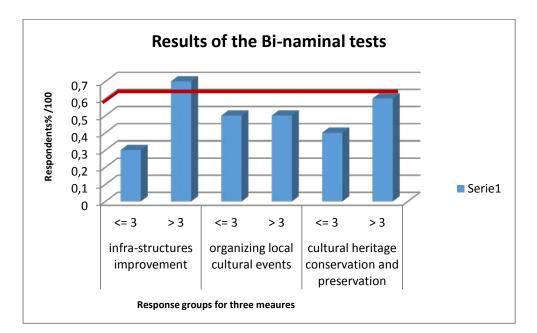


Figure C.5. Schematic presentation of the results of bi-nominal tests for hypotheses 3, 4 and 6

One-Sample Test								
	Test Va	lue = 3						
	Mean	t	(2- Difference Interval of the Difference					
				tailed)	·	Lower	Upper	Final result
Preservation of natural heritage	3.85	14.770	264	.000	.853	.74	.97	Accepted*
Awareness	3.61	9.332	264	.000	.613	.48	.74	Accepted*
Exploiting cultural heritage as a source of income	3.16	1.980	264	.049	.157	.00	.31	Accepted*
Participation of local community	3.54	8.482	264	.000	.543	.42	.67	Accepted*

Table C-11. One-sample t-test results for hypotheses 5, 7, 8 and 9.

\* sig < 0.05 & t-value > 1.96

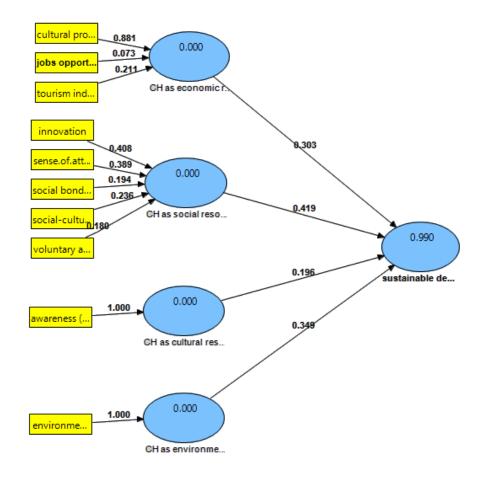


Figure C.6. Testing the model with standard coefficient (level of impacts)

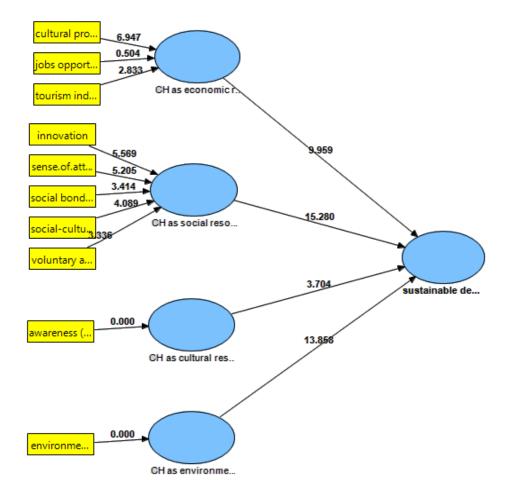


Figure C.7. t-value test for the revised model (correlations between variables)

Colinearity result	amount VIF	Index	
Tourism industry	1.046	No colinearity	
Cultural products supply	4.467	No colinearity	
Jobs opportunities (direct &indirect)	1.005	No colinearity	
Social- cultural bond with non-local	1.059	No colinearity	
Social bonds inside local community	1.039	No colinearity	
Sense of attachment to the place	1.178	No colinearity	
Innovation	1.200	No colinearity	
Voluntary activities	1.033	No colinearity	
Awareness (cultural, historical)	-	-	
Environmental protection	-	-	

Table C-12. Colinearity between variables of conceptual model

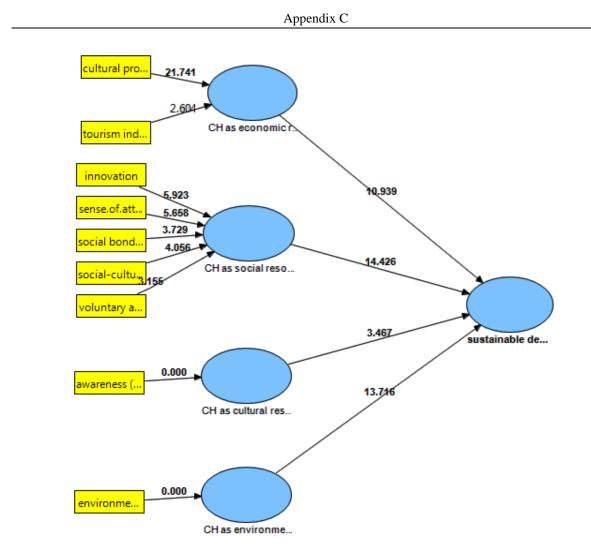


Figure C.8. t-value test for the revised model (correlations between variables)

### **Appendix D**

#### **Visitor Questionnaire**

I am thankful for devoting your time to improve this PhD research. Each of your careful responses is important for attaining reliable results in this research.

Research title: Management of cultural landscapes for sustainable development: the Case of Takht-e Soleyman World Heritage Site in Iran – Researcher: Anahita Lohrasbi

\* There is no need to write your name.

\*\* In this questionnaire, cultural heritage refers not only to the built and monumental heritage but also to traditions, beliefs, handicrafts, local arts, vernacular architecture.

Serial No.: - - -

Date:

1- How did you get to k	now about this site?			
□ Books	Internet	Television	□Newspape	er or journal
☐ Tour operator	□A friend [	Living close to th	nis region	
2- What is your purpose	e of travelling o this r	egion?		
□ Visiting Takht-e Sol	eyman historical site	Benefitting	from warm v	water springs
$\Box$ Visiting natural and	geological attractions	□ Rituals and	religious cer	remonies
Energy therapy		☐ Just to exp	lore a new pl	ace in Iran
$\Box$ This is a part of the $\Box$	arger trip	□Visiting frie	ends or famil	y members
3- Apart from visiting h	istorical places in this	s area, how do you	ı like to knov	w more about this region?
Communication with	n local people	□Visiting a l	ocal museum	1
□Availability of guide	es, brochures, etc.	□More facili	ties for a lon	ger stay
Participation in cultu	ral or local programs	during the stay		
4- If there were sufficie	nt and satisfactory fac	cilities, how much	more you we	ould like to stay to visit this
region?				
☐ Half a day more	One night more	$\Box$ More than	one night	☐ I don't like to stay more

# Please indicate your assessment about the following items by crossing under one of the six columns:

	Excellent	Good	Acceptable	Inexistent or very bad	No idea
5- Restaurants					
6- Accommodation					
7- Access roads to the region					
8- Access roads to the cultural attractions in the					
region					
9- Access roads to the natural attractions like					
warm water springs, famous mountains, etc.					
10- Restrooms					

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11- Health and medical services			
12- Places for selling of local products			
13- Facilities to use warm water springs			
14-Ttouristic information (maps, signage, etc.)			
15- Guides (Farsi or English) inside Takht-e			
Soleyman main site			
16- Interaction of local people with visitors			

#### Please express your idea about the following issues:

17- Do you recommend others to visit this	Definitely	Yes	Maybe	No	Not at	No idea
place?					all	
18-How much did your information improve	A lot	Much	Moderately	A little	Not at	No idea
after visiting the site?					all	
19-What is your assessment about the state of	Excellent	Good	Moderate	Poor	Very	No idea
preservation and conservation of Takht-e					bad	
Soleyman world heritage site?						
20-How much are you interested in visiting	A lot	Much	Moderately	A little	Not at	No idea
the nearby village (Nosratabad)?					all	

## Please share your opinion about the following questions:

	A lot	Much	To some extend	A little	Not at all	No idea
21- How much is it important to pay attention to conservation and preservation of Takht-e Soleyman cultural heritage?						
22- How much do you believe that cultural heritage of Takht-e Soleyman is a wealth for the future generations?						
23- How much can it be considered as resource of development at present?						
24- How much has it caused economic, cultural and social development of the region to enhance?						
25- How much is this region developed as a registered site in UNESCO World Heritage List?						
26- How much can the cultural heritage of Takht-e Soleyman affect the following items <u>positively</u> ?						
26-1 Development of tourism industry in the region						
26-2 Creation of new job opportunities (direct and indirect)						
26-3 Income generation through selling cultural products (e.g. handicrafts)						
26-4 Development of socio-cultural bonds with non-local people						
26-5 Strengthening internal social bonds among the local community						
26-6 Cultural and historical awareness raising						
26-7 Strengthening the sense of attachment to the place						
26-8 Increasing incentives for voluntary activities among local community						
26-9 Making incentives for innovating ideas/activities/products based on traditional skills, beliefs						
26-10 Better conservation of natural heritage (water						

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	A lot	Much	To some extend	A little	Not at all	No idea
resources, mountains, plants, springs, etc.)						
27-How much can the valorization of cultural heritage be improved through the following measurements?						
27-1 Improving tourism infrastructures						
27-2 Organizing local cultural events for tourists (like local music, rituals, ceremonies etc.)						
27-3 Preservation of natural heritage (like Takht-e Soleyman lake, warm water springs, important mountains)						
27-4 Conservation and preservation of cultural heritage						
27-5 Awareness raising regarding significance of heritage in this area						
27-6 Considering cultural heritage as a source of income generation for local people						
27-7 Participation of local community in preservation and valorization of the cultural heritage						

Personal information:			
Approximate age:	☐ Less than20 ☐ 40 to 49	□ 20 to 29 □ 50 to 59	
Sex:	□ Male	□Female	
Level of Education:	☐ Elementary school and ☐ Bachelor degree	lower	☐ High school diploma ☐Master degree or higher

## Appendix E

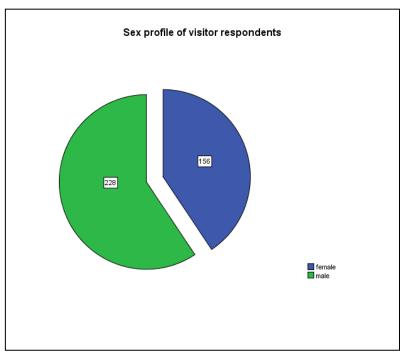


Figure E.1. Sex distribution of visitor respondents

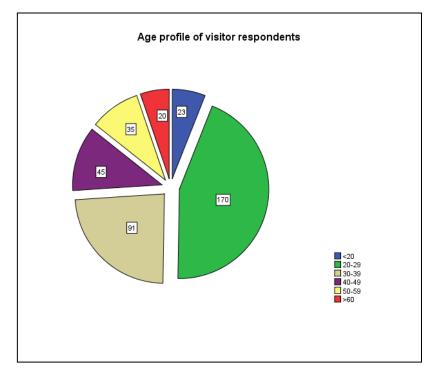


Figure E.2. Age distribution of visitor respondents

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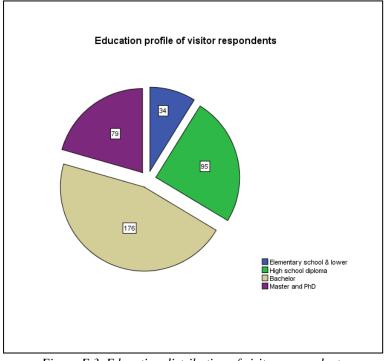


Figure E.3. Education distribution of visitor respondents

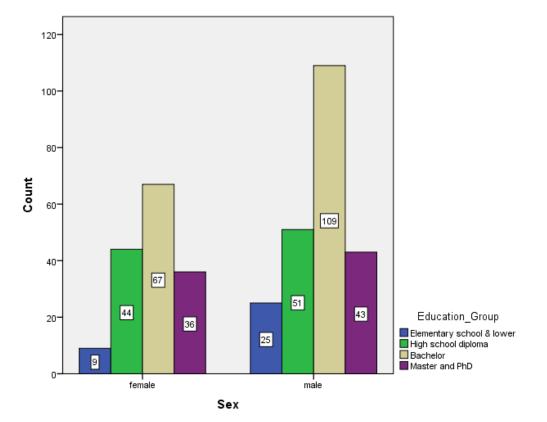


Figure E.4. Education vs. sex profiles

	(Q5)	(Q6)	(Q7)	(Q8)	(Q9)	(Q10)	(Q11)	(Q12)	(Q13)	(Q14)	(Q15)
	384	384	384	384	384	384	384	384	384	384	384
Std. Deviation	.9419	.9494	.8978	.8967	.8584	.7931	.7685	.7882	.8813	.9368	1.1151

Table E-1. Standard deviations for questions 5 to 15

Table E-2. Normality test results<sup>1</sup>

Item (Question)		Skewness	Skewness test	Normality
Economic resource	3.681	.737	0.000	Normal
26-1 Development of tourism industry in the region	4.521	.646	-8.096	Non-normal
26-2 Creation of new job opportunities (direct and indirect)	3.176	1.093	-0.696	Normal
26-3 Income generation through selling cultural products	3.347	.947	-0.656	Normal
Social resource	3.42	.657	-2.064	Non-normal
26-4 Strengthening social bonds with non-local people	3.402	.864	-3.88	Non-normal
26-5 Strengthening social bonds with local people	3.748	.851	-1.336	Normal
26-7 Strengthening the sense of attachment to the place	3.615	.964	-7.616	Non-normal
26-8 Voluntary activities	3.132	.999	-0.544	Normal
26-9 Innovation	3.249	1.034	-0.272	Normal
Cultural resource 26-6 Awareness raising	2.760	.807	0.04	Normal
Natural heritage conservation26-10 Better conservation of natural heritage	3.371	1.088	-2.448	Non-normal
27-1 Improving the infrastructures for tourists	3.802	1.064	-6.328	Non-normal

<sup>&</sup>lt;sup>1</sup> When skewness is zero, it means that the data distribution is soundly symmetric. When it is smaller than 0.5, the distribution is normal. Moreover, the proportion of skewness coefficient to standard error is considered as a Normality testing. If the skewness test is <-2 or >+2 the normality assumption is rejected.

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27-2 Organizing local cultural events for tourists	3.534	.923	-8.248	Non-normal
27-3 Preservation of natural heritage	3.611	.832	-6.48	Non-normal
27-4 Conservation and preservation of cultural heritage	3.511	.896	-6.744	Non-normal
27-5 Awareness raising regarding significance of heritage in this area	3.954	1.004	-5.968	Non-normal
27-6 Considering cultural heritage as a source of income generation for local people	3.387	.986	-4.592	Non-normal
27-7 Participation of local community in preservation and valorization of the cultural heritage	3.526	.976	-5.536	Non-normal

#### Table E-3. Reliability test results

Variable	Number of questions in a set	Cronbach's Alpha
Economic resource	3	0.731
Social resource	5	0.733
Cultural resource	1	-
Environmental protection	1	-
Valorization of cultural heritage	7	0.801

#### Table E-4. Bi-nominal test results for hypotheses 1 to 7

		Category	Ν	Observed Prop.	Test Prop.	Asymp. Sig. (1-tailed)	Final result
infra-structures	Group 1	<= 3	127	.3	.6	.000	Accepted*
improvement	Group 2	> 3	257	.7			
(Hypothesis V-1)	Total		384	1.0			
organizing local cultural	Group 1	<= 3	125	.3	.6	.000	Accepted
events	Group 2	> 3	259	.7			
(Hypothesis V-2)	Total		384	1.0			
Preservation of natural heritage	Group 1	<= 3	131	.3	.6	.000	Accepted
(Hypothesis V-3)	Group 2	> 3	253	.7			
	Total		384	1.0			
cultural heritage conservation and	Group 1	<= 3	153	.4	.6	.000	Accepted
preservation	Group 2	> 3	231	.6			
(Hypothesis V-4)	Total		384	1.0			

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Awareness (Hypothesis V-5)	Group 1	<= 3	112	.3	.6	.000	Accepted
(Hypothesis V-5)	Group 2	> 3	272	.7			
	Total		384	1.0			
exploiting cultural heritage as a source of	Group 1	<= 3	188	.5	.6	.000	Rejected
income	Group 2	> 3	196	.5			
(Hypothesis V-6)	Total		384	1.0			
Participation of local community	Group 1	<= 3	145	.4	.6	.000	Accepted
(Hypothesis V-7)	Group 2	> 3	239	.6			
	Total		384	1.0			

\* sig < 0.05 & Group 2 observed prop. >=Test prop.

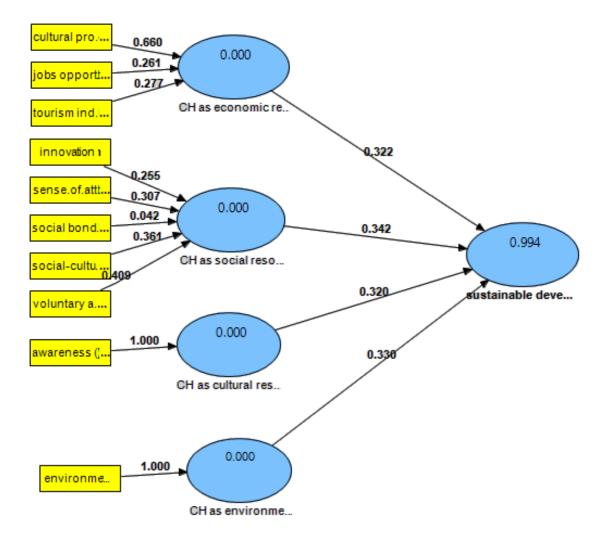
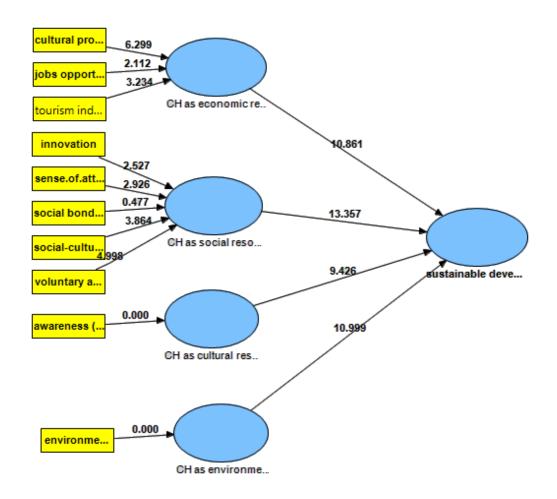


Figure E.5. Testing the model with standard coefficient (level of impacts)



*Figure E.6. t-value test for the revised model (correlations between variables)* 

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Table F-5	Colinearity	hotwoon	variables	of conceptua	ul model
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Colinearity result	amount VIF	Index
Tourism industry	1.083	No colinearity
Cultural products supply	1.771	No colinearity
Jobs opportunities (direct &indirect)	1.073	No colinearity
Social- cultural bond with non-local	1.149	No colinearity
Social bonds inside local community	1.001	No colinearity
Sense of attachment to the place	1.104	No colinearity
Innovation	1.069	No colinearity
Voluntary activities	1.200	No colinearity
Awareness (cultural, historical)	-	-
Environmental protection	-	-



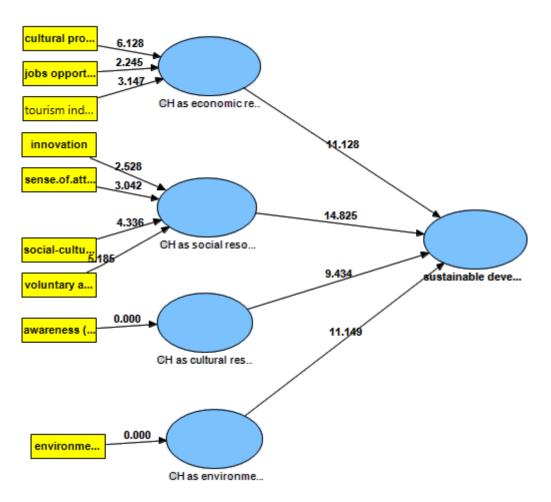


Figure E.7. t-value test for the revised model (correlations between variables)