

**MODELING THE SOCIOECONOMIC AND ENVIRONMENTAL
IMPACTS OF NATURE-BASED TOURISM TO THE HOST
COMMUNITIES AND THEIR SUPPORT FOR TOURISM
PERCEPTIONS OF LOCAL POPULATION: MAZANDARAN, NORTH OF IRAN**

Roozbeh Mirzaei

**A thesis submitted in partial fulfillment of the requirements of
University of Giessen for the degree of Dr. rer.nat.**

September 2013

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2. Gutachter: Prof. Dr. Eckart Ehlers

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**I dedicate this thesis to my wife and my children who stand by me all
through with patience and tolerance**

Abbreviations

CA= Community Attachment

CC= Community Concern

DANEA: Department of Ancient Near Eastern Art

DOE: Department of Environment

ECRC=Economic Benefits Remain in the Community

FRWO: Forest, Range & Watershed Organization

ICHTO: Iran Cultural Heritage & Tourism Organization

ITTO: Iran Travel & Tourism Organization

IUCN: International Union for the Conservation of Nature.

NEI: Negative Environmental Impacts

NSEI: Negative Socioeconomic Impacts

PBO: The plan and budget organization of Iran

PEI: Positive Environmental Impacts

PSEI: Positive Socioeconomic Impacts

SCI: Statistics Centre of Iran

ST= Support for Tourism Development

TIES: The International Ecotourism Society

UNEP: United Nations Environment Programme

UNESCO: United Nations Educational, Scientific, and Cultural Organization

UT: Utilization of Tourism Resources

WCED: World Commission on Environment and Development

WTO: World Tourism Organization

WTTC: World Travel & Tourism Council

Abstract

Mazandaran province became one of the first tourism-oriented provinces in Iran in the last decades. In these years, Mazandaran has continued to attract people's attention to its tourism opportunities and especially towards its nature-based tourism potentials. Given the importance of understanding local community attitudes, this thesis provide a model to assess local population's perceptions of socioeconomic and environmental impacts of nature-based tourism and its relationship with support for tourism development in Mazandaran.

In order to examine local community perceptions of nature-based tourism impacts in Mazandaran and their support for tourism development, local residents who have lived at least for one consecutive year in Babolsar or Kelardasht were sampled. The thesis findings suggest that residents appreciated tourism for increasing job opportunities, development of recreational facilities and spaces, creating a positive feeling about area among tourists, and enhancing social relationships between tourists and residents.

However, unbridled, unplanned, and unmanaged development of tourism in Mazandaran in past years has led to widespread environmental degradation and the destruction of tourism resources and has intensified increasing the cost of living of local people. Because of the uncontrolled construction, there have been major changes in coastal areas. In other words, public and private villas, shops, restaurants, airport, and hotels cover around 95% of coastal areas in touristic regions that are not accessible to tourists and seashore has become the "exclusive courtyard" for tourist villas.

The occupation of beaches, water pollution and impose severe restrictions for tourists in coastal zones, has led to the "*counter-beach*" phenomenon in Mazandaran. The change in the flow of coastal tourists affects the neighboring regions particularly Caspian plain, forests and mountainous areas and resulted in major environmental and social degradations.

Environmental degradation, deforestation, and destruction of coastal areas are increasing and the nature-based tourism resources of mazandaran are declining. Therefore, implications and recommendations derived from the results and based on proposed model are suggested.

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Chapter 1: Introduction

1.0 Introduction

While tourism development requires resources (well developed attractions and tourism superstructures) and developed infrastructure, hospitality of the local residents is very important and essential. Lack of residents' support of tourism development or apathy and annoyance of local community can lead to negative reactions to tourists and in turn result in their avoidance of visiting the destinations where they feel uncomfortable (Fridgen, 1991).

Identifying residents' perceptions of tourism, and the factors affecting the formation of these perceptions are important for gaining public support for tourism development. Over the last half century, the growth and development of tourism as both a social and economic activity has been remarkable (Sharpley, 2009). Tourism is now a global industry involving hundreds of millions of people in international as well as domestic travel each year (Mason, 2003, p.3).

Tourism development is generally viewed as an important set of economic activities for improving local economies (Wan Ko & Stewart, 2002), and many nations promote nature-based tourism to promote and sustain both environment and economics (Hearne & Salinas, 2002). Over recent decades, travel and tourism have been large contributors to the world economy. International tourism has been growing at a slightly faster pace than the world economy and this seems likely to continue in the long-term despite the current recession (OECD, 2010, p.7).

“The evolution of research on tourism has paralleled the evolution of development studies as a whole, with an early emphasis on economic aspects now increasingly being complemented with a more balanced perspective incorporating environmental and sociocultural matters” (Wall, 2005, p.31).

Recently, in tourism literature increasing attention has been focused on ‘tourism impacts’. A number of studies have examined host residents' perception of the impact of tourism development on their community, and it continues to be an important issue (Wan Ko &

Stewart, 2002). The main reason for growing interest has been the increasing evidences that tourism development leads not only to positive, but also to negative outcomes at the local level (Lankford & Howard, 1994). Liu, Sheldon and Var (1987, p.18) noted that tourism development is usually justified on the basis of economic benefits and challenged on the grounds of social, cultural, or environmental destruction.

Additionally, the economic benefits traditionally associated with tourism development are now being measured against its potential for social disruption (Cooke, 1982, p.22). Huang and Stewart (1996) argued that tourism development changes relationships among community members and transforms their interactions between each other and to their community. Since tourism relies heavily upon the goodwill of the local residents; consideration of their support, perceptions and attitudes toward tourism impacts is essential for its development, successful operation, and sustainability (Ap, 1992; Gursoy, Jurowski & Uysal, 2002).

An extensive array of research has been conducted on resident attitudes and reactions toward tourism (McGehee & Andereck, 2004). The results of such studies suggest that a host is influenced by the perceived impact of tourism in three basic categories of benefits and costs: economic, environmental, and social (Medlik, 2003; Goeldner & Ritchie, 2009; Gursoy et al., 2002).

Furthermore, many studies have focused on host communities' perception and attitudes towards tourism (Allen, Hafer, Long & Perdue, 1994; Avcikurt & Soyballi, 2001; Berno, 1999; Brayley, 2000; Caneday & Zeiger, 1991; Carmichael, 2000; Fredline & Faulkner, 2000; Gursoy et al., 2002; Infield & Namara, 2001; Iroegbu & Chen, 2001; Kang, Long, & Perdue, 1996; Kayat, 2002; Keough, 1989; Kuvan & Akanb, 2005; Lankford, 1994; Lankford & Howard, 1994; Lindberg, Andersson, & Dellaert, 2001; Mason & Cheyne, 2000; Mcgehee & Andereck, 2004; McKercher, 2001; Mill & Morrison, 1985; Snaith & Haley, 1999; Snepenger, O'Connell, & Snepenger, 2001; Teye, Sonmez, & Sirakaya, 2002; Walpole & Goodwin 2001).

Despite these numerous studies which focus on residents' attitudes toward tourism development, there is still only a limited understanding of residents' responses to the impacts of tourism (Carmichael, 2000), and the examination of local population's attitudes and perceptions of tourism impacts is still lacking.

In Iran's oil oriented economy, most of its provinces have relied on establishing manufacturing plants and agriculture for their economic development; however, Mazandaran has set a different tone. It promoted tourism as one of its primary economic activities. In fact, Mazandaran province became one of the first tourism-oriented provinces in Iran in the last decades. In these years, Mazandaran has continued to attract people's attention to its tourism opportunities and especially towards its nature-based tourism potentials.

However, what has really happened in Mazandaran in these years? Since tourism development in Mazandaran is seventy-five years old, it is an appropriate time to evaluate the impacts tourism has on the local population. For this purpose, this study aims to examine socioeconomic and environmental impacts of nature-based tourism in Mazandaran and factors predicting residents' support for tourism development according to notion of social exchange theory.

According to Ap (1992), social exchange theory is "a general sociological theory concerned with understanding the exchange of resources between individuals and groups in an interaction situation" (p. 668). This study will be the first study which assesses factors influencing residents' perceptions of nature-based tourism (NBT) impacts and support for tourism development in Mazandaran.

1.1 Statement of purpose and objectives

The main purpose of this study is to understand local population perceptions of socioeconomic and environmental impacts of nature-based tourism and the factor predicting residents' support for tourism development in Mazandaran, Iran. The investigation of local community perceptions of tourism impacts enables researchers, planners, and public bodies to better understand the attitudes, perceptions, and values of local communities who host tourists in the destination.

The overall goals of this study include:

- To understand residents' perceptions and attitudes regarding socioeconomic and environmental impacts of nature-based tourism in Mazandaran, and

- To recognize factors predicting local communities support for nature-based tourism development in Mazandaran.

In order to achieve the research goals the objectives of research are:

- To study the relationship between residents' perceptions of nature-based tourism impacts and their support for tourism development in Mazandaran,

- To examine the relationship between community concern and perception of nature-based tourism impacts and support for tourism development,

- To examine the relationship between attachment to the community and perception of nature-based tourism impacts and support for tourism development,

- To study the relationship between utilization of tourism facilities by residents and their perception of nature-based tourism impacts and support for tourism development,

- To examine the relationship between residents' understandings of economic benefits of tourism remainaining in the society and their perception of nature-based tourism impacts and support for tourism development,

- Examine the relationship among residents' socio-demographic characteristics, type and level of involvement in tourism and their relation to perception of NBT's impacts.

1.2 Research questions

Based on research aim and objectives this study will answer the following questions:

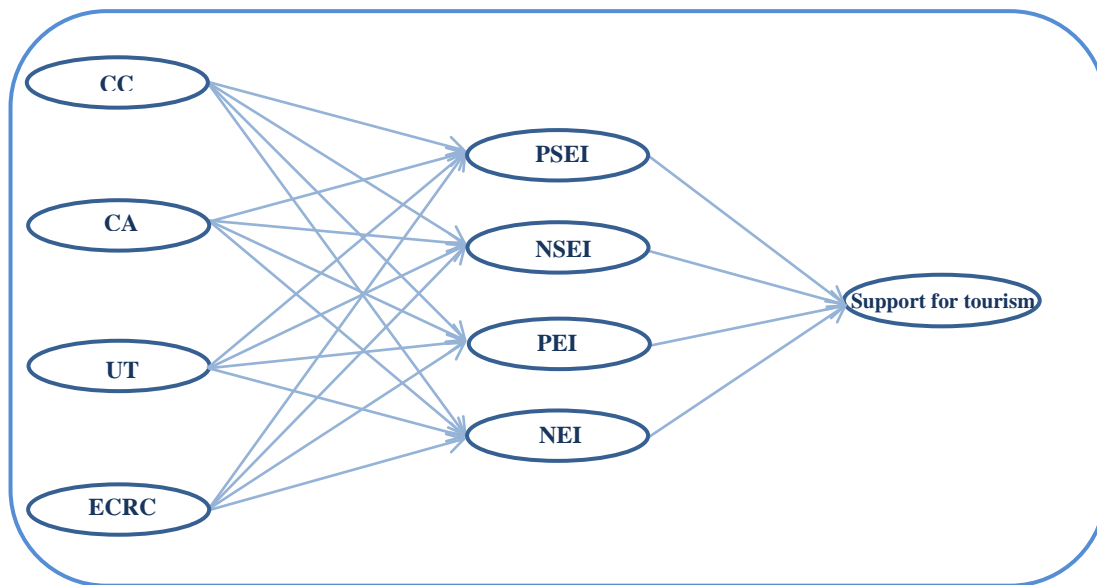
- 1) What are the residents' perceptions of the socioeconomic impacts of NBT in Mazandaran?
- 2) What are the residents' perceptions of the environmental impacts of NBT in Mazandaran?
- 3) How does community concern affect perceived socioeconomic impacts of NBT in Mazandaran?
- 4) How does community concern affect perceived environmental impacts of NBT in Mazandaran?
- 5) How does attachment to the community affect perceived socioeconomic impacts of NBT in Mazandaran?
- 6) How does attachment to the community affect perceived environmental impacts of NBT in Mazandaran?
- 7) How does utilization of tourism facilities by residents affect perceived socioeconomic impacts of NBT in Mazandaran?
- 8) How does utilization of tourism facilities by residents affect perceived environmental impacts of NBT in Mazandaran?
- 9) How do residents' understandings of the amount of economic benefits remaining in their society affect the perceived socioeconomic impacts of NBT in Mazandaran?
- 10) How do residents' understandings of the amount of economic benefits remaining in their society affect the perceived environmental impacts of NBT in Mazandaran?
- 11) How are the overall socioeconomic and environmental impacts of NBT related to each other?
- 12) How do residents' socio-demographic (e.g., gender, age, level of education, location of residence, length of residence) profiles relate to their perception of impacts?
- 13) How does residents' involvement in nature-based tourism relate to their perceptions of impacts?
- 14) How do perceived positive socioeconomic impacts of NBT affect support for tourism?
- 15) How do perceived negative socioeconomic impacts of NBT affect support for tourism?

- 16) How do perceived positive environmental impacts of NBT affect support for tourism development?
- 17) How do perceived negative environmental impacts of NBT affect support for tourism development?
- 18) How is community concern related to support for NBT development in Mazandaran?
- 19) How is community attachment related to support for NBT development in Mazandaran?
- 20) How does utilization of tourism facilities by residents affect support for NBT development in Mazandaran?
- 21) How do residents' understandings of the amount of economic benefits remaining in society affect support for NBT development in Mazandaran?

1.3 Scope of the study

Based on Cochran equation (1977) a sample of respondents in Babolsar and Kelardasht were chosen to take part in this research. Based on literature review and local characteristics, community concern (CC), community attachment (CA), utilization of tourism facilities (UT), and general understanding of tourism's economic benefits remaining in the society (ECRC) were selected as the factors by which residents perceptions of tourism impacts and their support for tourism development were measured. These factors were assessed based on the conceptual model of support for tourism development (Figure 1).

Figure 1.1 conceptual model of support for tourism development



Source: own compilation based on literature review

PSEI: Positive Socioeconomic Impacts, **NSEI:** Negative Socioeconomic Impacts

PEI: Positive Environmental Impacts, **NEI:** Negative Environmental Impacts

Socio-demographic characteristics were examined as intervening variables in predicting support for tourism development and local communities' perception of nature-based tourism impacts. To complement the findings the interviews, qualitative data from observation and field trips were used.

1.4 Significance of the study

The fast growth of international tourism after World War II has resulted in raising of concerns over how the cultural and natural environments of destinations are affected by tourism (Holden, 2000, p.64). As a result, Similar to the trends in development theory of dissatisfaction with development philosophies (Telfer, 2002), many tourism analysts turned away from past methods of tourism development in favor of 'alternative tourism' (Brohman, 1996a).

After the Earth Summit held in Rio de Janeiro in 1992, pressure has grown for the tourism industry to lift its environmental performance on par with other economic sectors, and to work towards ecologically sustainable forms of tourism development (Pigram & Wahab, 2005, p. 14).

In recent years, arising from changing attitudes toward the nature of the tourist experience together with the growing realization that tourism takes place in fragile areas, arose the notion that tourism consumes environmental resources (Mason, 2003). Increasingly, groups of tourists became more concerned and felt more responsibility for the impacts that their activities were having on the environment; this led to the growth of what some consider as more environment-friendly forms of tourism, such as ecotourism (Wearing & Neil, 1999 cited in Mason, 2003).

On the other hand, one of the main principles of sustainable tourism development involves placing emphasis on the local community and the environmental, social, and economic impacts of tourism and their management. Sustainable tourism as an emerging paradigm seems to enhance the existing conceptual frameworks on tourism planning and development by making the residents its focal point. Indeed, both direct and indirect support of community residents' participation is the foundation of the sustainability paradigm (Butcher 1997; Hunter 1997; Jamieson & Jamal, 1997).

Unbridled, unplanned, and unmanaged development of tourism in Mazandaran in past years has led to widespread environmental degradation and to the destruction of tourism resources. Thus, in order to manage tourism impacts and to sustain tourism activities it is necessary to understand the local communities' perception of tourism impacts and the factors that predict their support for tourism development in Mazandaran.

1.5 Outline of the study

This research is presented in six chapters. Following this current introductory chapter, Chapter Two provides a literature review of the impacts of tourism on communities, and of different tourism development paradigms. In Chapter Three, the research plan and related methods and techniques used for analyzing data are discussed in detail. Chapter Four, presents the results and findings of the research. In Chapter Five, the tourism development stages in Iran and their characteristics, the main types of tourism, resources and challenges in Mazandaran are presented. Finally, Chapter Six provides a discussion on the implications for tourism planning and development and on directions for future research.

1.6 Definitions of terms

- **Nature-based tourism (NBT):** Nature-based tourism is defined as any non-consumptive or consumptive tourist activity (Shafer & Choi, 2003) that takes place in natural settings. NBT includes tourism that based on the specific aspects and elements of the natural environment and tourism that is developed in order to conserve and sustain natural areas (Hall & Boyd, 2005).

- **Sustainable tourism:** Sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments. Sustainability principles refer to the environmental, economic and socio-cultural aspects of tourism development. A suitable balance must be established between these three dimensions to guarantee its long-term sustainability (UNWTO, 2005).

- **Tourism impact:** tourism development brings with it inevitable positive and negative impacts (McKercher, 1993) which arise from the interrelationship between host communities, visitors and the natural environment (Lindberg, Andersson & Dellaert, 2001; Mathieson & Wall, 1982). Tourism impacts usually are measured by social, economic, and environmental aspects (Mathieson & Wall, 1982).

- **Local community:** A member of local community in this study is a person who has lived in a Mazandaran for more than one consecutive year.

CHAPTER 2: LITERATURE REVIEW

2.0 Tourism and its significance

Tourism is an important economic, sociocultural, and environmental phenomenon in today's world (Inskeep, 1991). International tourist arrivals grow by an overall rate of 7.3% per annum (Wanhill, 1997), despite occasional shocks, experienced continued expansion over the last six decades from 25 million in 1950, to 1,035 million in 2012 (UNWTO, 2013).

Over the last half century, the growth and development of tourism as both a social and economic activity has been remarkable (Sharpley, 2009, p.1). In 1950, the international tourist arrivals were around 25 million; in 2000, the number raised to more than 687 million and during the past decades the international tourism has continued its steady growth. In 2009, over 880 million international arrivals were recorded (UNWTO, 2010).

Tourism is now a global industry involving hundreds of millions of people in international as well as domestic travel each year (Mason, 2003, p.3). Millions of people all over the world involved directly in tourism industry and many more are employed in industry related activities. A large number of world populations in form of 'host communities' involved in producing final tourism products, as they live in destination areas. Governments and tourism companies spend Millions of dollars every year to increase their income and promote holidays and tourism products (Weeks & Hetherington, 2006).

According to the Organization for Economic Co-operation and Development (OECD) over the past years, travel and tourism have been an important economic sector in the world economy. The economic growth rate of international tourism has been faster than the world economy and this trend seems likely to continue in next decades (OECD, 2010).

The World Travel and Tourism Council (WTTC) for more than 20 years has been assessing the travel and tourism contribution to world economy. According to WTTC report, travel and tourism is one of the world's largest industries and a main provider of job opportunities (WTTC, 2012).

Table 2.1 depicts the most recent WTTC world estimates for 2010 and forecasts for 2020. In 2010 the global travel and tourism industry was expected to generate \$5.75 trillion of economic activity and over 235.8 million direct and indirect jobs (WTTC, 2011). Travel and tourism is estimated to grow to \$11.15 trillion of economic activity and over 303 million jobs by 2020. Globally in 2011, the travel and tourism provided 255million jobs, 8.1 percent of total employment, or 1 in every 11.9 jobs. By 2020, this should be 303,019,000 jobs, 9.2 percent of total employment, or 1 in every 10.8 jobs. The world travel and tourism economy's contribution to gross domestic product is expected to rise from 9.2 percent (\$5.75 trillion) in 2010 to 9.6 percent (11.15 trillion) in 2020.

Table 2.1 World economic impact estimates and forecasts

worldwide	2010			2020		
	US \$ bn	% of Total	Growth ¹	US \$ bn	% of Total	Growth ²
Personal Travel & Tourism	3,111	8.4	1.6	5,793	8.8	4.1
Business Travel	819	1.3	-1.8	1,589	1.4	4.3
Government Expenditures	436	3.8	2.6	744	4.0	3.1
Capital Investment	1,241	9.2	-1.7	2,577	9.4	5.3
Visitor Export	1,086	6.1	0.9	2,160	5.2	5.2
Other Exports	850	4.8	5.9	1,908	4.5	6.5
T & T Demand	7,543	9.4	1.1	14,950	9.5	4.7
Direct Industry GDP	1,986	3.2	0.7	3,650	3.2	4.0
T & T Economy GDP	5,751	9.2	0.5	11,151	9.6	4.4
Direct Industry Employment ³	81,913	2.8	-0.1	104,740	3.2	2.5
T & T Economy Employment ³	235,758	8.1	-0.3	303,019	9.2	2.5

¹real growth adjusted for inflation (%); ² 2011-2020 annualised real growth adjusted for inflation (%); ³000

Source: WTTC, 2011

2.1 Tourism history

The history of tourism can be traced back thousands of years. Tourism has passed through different stages. The invention of money by the Sumerians (Babylonians) and the development of trade beginning about 4000 B.C.E. mark the beginning of the modern era of travel (Goeldner & Ritchie, 2009, p.37). The Olympic Games, the first organized form of athletic tourism, first held in 776 BC. In Persia (now Iran), the remains of Achaemenid Empire (550 BC) include extensive and well developed road networks, the King Road which connected all the cities and provinces to the capital, Susa, and was used for exploration, military purposes, transporting tribute, and for pleasure trips and recreation. These road networks show that

travel has long flourished in Iran. According to Herodotus stations and guesthouses were located about every four Farsang¹ (18 km) along this road system (cited in Briant, 1998).

With the fall of the Roman Empire in the fifth century A.D the middle class population mostly disappeared, the transportation network disintegrated and trips were dangerous all resulting in much diminish travel within Europe and the Mediterranean region (Inskeep, 1991, p.5).

After the European Renaissance, tourism has experienced a rapid growth. The “Grand Tour” by the eighteenth century was well developed (Kershaw & Lickorish, 1958, p. 22). After the industrial revolution, the railway, steam trains and steamships transformed travel opportunities. Rapid growth of population and wealth created an enormous new market in a short period of time and mass travel was invented. Due to the development of recreational facilities and services, accommodation sectors, transportation systems and car ownership expansion, a substantial growth in foreign travel occurred (Goeldner & Ritchie, 2009). Once again expansion and experimentation was hindered by the great depression of 1930 and finally brought to a halt by the Second World War in 1939–45 (Lickorish & Jenkins, 1997).

The period from 1945, through the postwar years up to the present time has been an era of revolution in technology, massive industrial development and change, which resulted in related acceleration in wealth creation and escalation of disposable incomes (Lickorish & Jenkins, 1997, p.12). Tourism in the 1960s and 1970s was in the form of mass tourism by fast social and economic changes as the main driving forces (Lonides & Debbage, 1997). The new paradigm (sustainable tourism) from the early 1990s onwards emerged by focusing on people making the process of the development more diverse, complex and dynamic (Chambers, 1997).

¹ A Persian scale equal to 4.5 km

2.2 The nature of development

Development is a term with various aspects which has different meanings in different societies. The term is complicated integrating a mix of material and moral ideas encompassing both present and future states; the current situation and how it came to be and the future perspective (Wall, 2005). At the early stages of its development the economic aspects were considered. However, according to Binns today in addition to economic issues, it encompasses social, environmental and ethical considerations and its measurement may incorporate indicators of poverty, unemployment, inequality and self-reliance (cited in Wall, 2005, p.30).

Along with the changing in notion of development the measurement tools have changed also and encompassed environmental, socio-cultural and ethical aspects. According to Wall (2005, p.31) “the evolution of research on tourism has paralleled the evolution of development studies as a whole, with an early emphasis on economic aspects now increasingly being complemented with a more balanced perspective incorporating environmental and socio-cultural matters”.

Andriotis (2000, p.13) argued that the concept of development has been discussed for many years and referred to the Friedmann (1980, p.4):

“ Development is always of something, a human being, a society, a notion, an economy, a skill ... It is often associated with words, such as under or over or balanced: too little, too much, or just right ... which suggests that development has a structure, and that the speaker has some idea about how this structure ought to be developed. We also tend to think of development as a process of change or as a complex of such processes which is in some degree lawful or at least sufficiently regular so that we can make intelligent statements about it”.

According to Goldsworthy (1988) the term “development” can be considered in three aspects: a process, the result of that process, and the activities that support the process, each of which surrounded by social, economic, political and environmental ideological perspectives. This study focused primarily on the outcomes of nature-based tourism development.

Rostow (1967) identified five stages which all societies have to pass them if they want to be developed: the traditional society, the precondition for take-off, the take-off, the drive to maturity and high mass production. As development theory and tourism have evolved along similar time lines (Telfer, 2002) it is a useful tool to explain different stages in tourism development.

According to Andriotis (2000, p.14) “tourism can offer to a destination a natural path to economic growth through various stages, ranging from traditional non-tourism where no tourists visit the destination, to the precondition to take off where explorers and drifters make their appearance, to maturity where the destination is visited by mass individual tourists, to the final stage of mass consumption where the destination is visited by mass organized tourists”.

2.3 Evolution of development paradigms: the path to sustainability

Development theory is described in chronological sequence. In other words, the approaches to development over the time displaying a shift and evolution from traditional models with top-down economic growth-based approach through to more broad based approaches focusing on bottom-up and people-centered strategies within environmental (Sharpley, 2009, p.38), social and economic limits.

Although there is a range of different approaches to development theories in this study the main broad approaches to development have been identified according to Sharpley (2009), which constitute a very rough evolution in the sequence of ideas concerning development. They are: modernization, dependency, neo-liberalism and alternative /sustainable development. Table 2.2 outlines development theories and their component.

2.3.1 *Modernization*

Modernization has been defined as a socioeconomic evolutionary transition from a traditional to a modern society (Telfer, 2002). Modernization includes spread of growth impulses from developed areas to a number of other regions (Andriotis, 2000; Auty, 1995; Rostow, 1990; Sharpley, 2009). During the modernization new industries expanding rapidly, the new classes of entrepreneurs expand; the economy exploits natural resources (Rostow, 1967) and means of livelihood shifts from rural to urban (Telfer, 2002). Modernization

theorists have tended to view societies as passing through a series of development stages similar to those experienced by many western countries (Wahab & Pigram, 2005). According to the opinion that all societies follow an evolutionary path from traditional to modern structures, modernization is considered as the ‘take-off stage’ (Rostow, 1967). “Development has often been equated with growth arising from relatively developed areas, and concepts such as stages of economic growth, growth poles, spread and backwash effects, and circular and cumulative causation” (Wahab & Pigram, 2005, p.31).

Table 2.2 The evolution of development theories

Time guide	Development paradigms	Theoretical perspectives and concepts
1950s-1960s	Modernization	<p>Stages of growth: pass through western development stages</p> <p>Diffusion: growth impulse from developed areas; growth poles; trickledown effect, state involvement</p>
1950s-1960s	Dependency	<p>Neocolonialism: underdevelopment caused by exploitation by developed countries; western cultural influence</p> <p>Dualism: Poverty is functional to global economic growth; rich and poor between countries and within countries; regional inequalities</p> <p>Structuralism: Domestic markets, state involvement, import substitution, social reforms, protectionism</p>
Mid 1970s-1980s	Economic neoliberalism	<p>Free market: free competitive markets; privatization; supply side macroeconomics</p> <p>Structural adjustment: focus on market sources and competitive exports</p> <p>One world: new world financials systems; deregulation internationalization of production</p>
1970s-early 1980	Alternative/sustainable development	<p>Basic needs: focus on food, housing, water, health and education</p> <p>Grassroots: people-centered development; local control of decision making, empowerment, NGOs</p> <p>Gender: woman in development, gender relations;</p> <p>Sustainable development: environmental management; meet the needs of present generation without compromising future needs</p>

Sources: Tefler (2002, p.39) and Sharpley (2009)

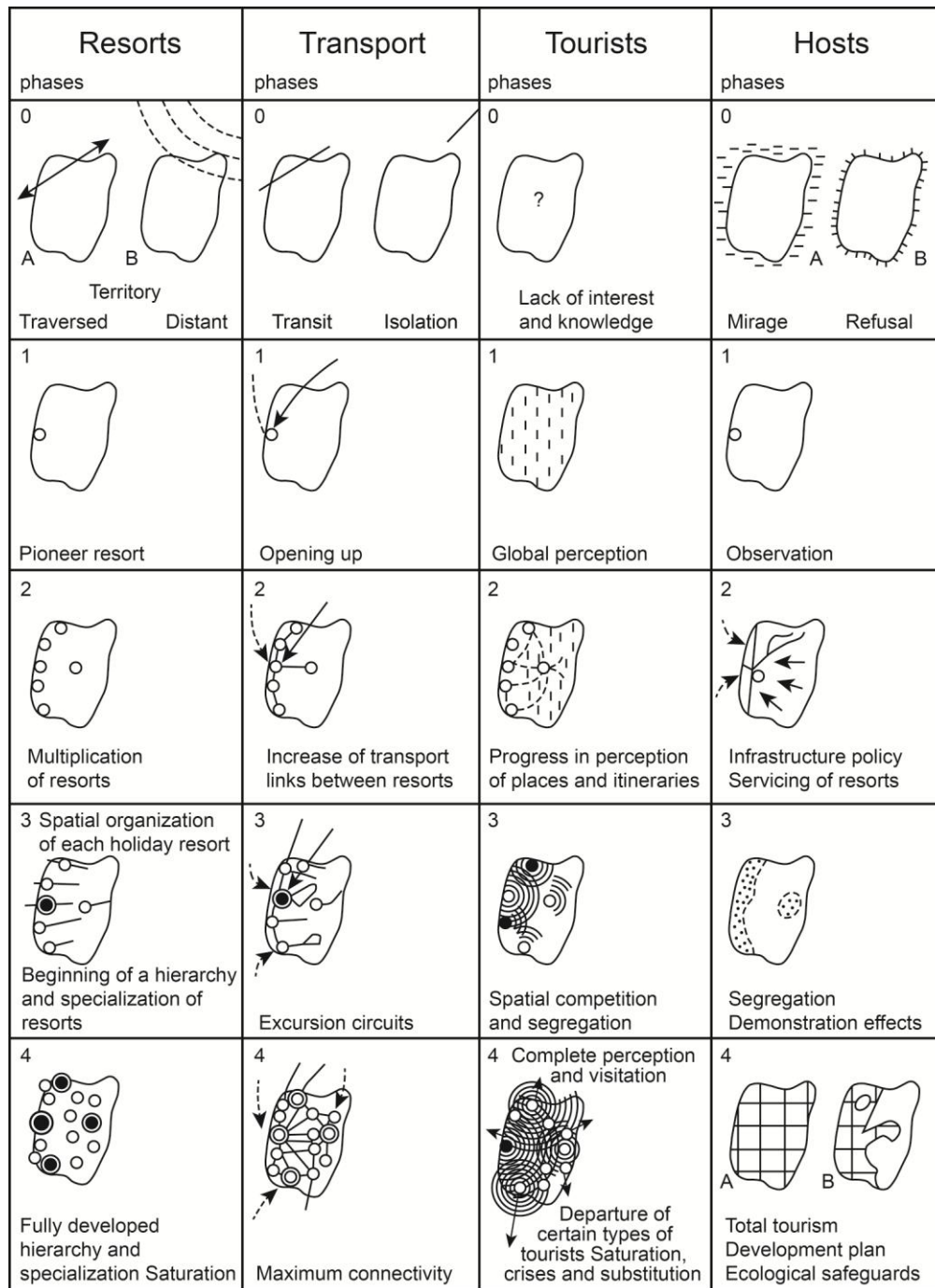
In tourism context, dramatic rise of mass tourism in the 1960s and 1970s represents mass production and consumption (Shaw & Williams, 2004). The key benefits of mass tourism were income and employment generation (Vanhove, 1997). During the 1960s, tourism was basically equated with development which was part of modernization framework and tourism productions under modernity take the form of consumption (Telfer, 2002, p.50). The final product was experience and pleasure. Tourism has been developed as a strategy which creates more jobs, increases income and tax revenues, generates foreign exchange, increases rate of investment, generates a large multiplier effect that stimulated the local economy (Davis, 1968; Peppelenbosch & Templeman, 1973; Graburn and Jafari, 1991; Telfer, 2002) and promotes a modern way of life with western values (Harrison, 1992).

Miossec developed a model of tourism regional development (Figure 2.1), represents the structural evolution of a tourism destination through time and space (cited in D. Pearce, 1989, P.17). Miossec focused on changes in the provision of facilities in forms of resorts and transportation networks (D. Pearce, 1989) and in the tourist behavior pattern and attitudes of local population and host governments (Howie, 2003). Miossec explained that the development process takes place in five phases. In the early phases (phase 0 and 1) the region is unknown to tourists and there is little or no infrastructure, so a limited number of visitors visit the area, tourists have an unclear image of the destination while the host community and planners have no specific attitude toward tourism and its consequences (D. Pearce, 1989). When the area was discovered a 'pioneer resort' will be established (Howie, 2003).

Established the pioneer resorts will provide the groundwork for further development. Multiplication of resorts together with more transport links between them and better understanding of tourists' behavior are the main characteristics of second phase (D. Pearce, 2003). A hierarchy or specialisms of services arise in resorts and the new character of the place is attractive for most of the visitors (Howie, 2003). Attitudes toward tourism development vary and may lead to the complete acceptance of tourism, the adoption of planning controls or even the rejection of tourism (D. Pearce, 2003). The final would be the saturation of resorts with maximum routes between different them.

What is clear is that through these phases host communities attitudes toward tourism development change that may lead to support of tourism or to oppose to tourism development (Andriotis, 2000).

Figure 2.1 Miossec's model of tourist development



Source: Pearce (1989, p. 17)

Along with tourism expansion, the process of diffusion from hub centers to peripheral areas takes place while the development of tourism implies greater interaction of the 'trickle-down effects' and the possibility of regional disparity adjustment. (Andriotis, 2000, p.17). Since tourism is a multidimensional phenomenon with high multiplier impact, likely improve local community welfare in most of the destinations. However, in some areas the development of tourism has not only improved the economic situation, but also intensified the social and economic inequalities among local population (Andriotis, 2000). Consequently, the benefits of tourism development does not appear over the entire country and there are areas where diffusion emerges first, in others later, and in some never (Andriotis, 2000).

2.3.2 Dependency

The dependency paradigm emerged in the 1960s as modernization paradigm was criticized because it could not be adopted in the structural conditions which exist in under developed areas (Andriotis, 2000; Auty, 1995; Briton, 1989; Browett, 1980; Erisman, 1983; Lea, 1988; Milne, 1997; Oppermann & Chon, 1997; Wilkinson, 1997) and is one of the best-known neo-Marxist development theories (Schuurman, 1993). Whilst modernization theory attempts to explain how development may occur as the result of capitalist economic growth, dependency theory suggests why such development or modernization fails to occur (Sharpley, 2009, p.41).

Dependency theorists believe that lack of development is a result of external forces more than internal causations (Wall, 2005; Wilkinson, 1987). According to the dependence model, countries of the periphery have socioeconomic and political structures that keep them in a dependent position relative to developed countries that distinguished it from the capitalist development in the core (Andriotis, 2000; Hunt, 1989; Potter, Binns, Elliott & Smith, 1999; Telfer, 2002). "In other words, global political-economic relations are such that wealthy, industrialized nations (the metropolitan 'center') are able to exploit weaker, peripheral nations, hence restricting developmental opportunities in the latter" (Sharpley, 2009, p. 41).

Because of the above-mentioned relationship between core and periphery, the periphery trapped in a vicious circle of poverty (Andriotis, 2000; Myrdal, 1957; Potter et al., 1999). "The dependency thesis emphasizes dualism between the rich and poor, the powerful and the powerless, both between and within developed and developing countries, and believe that

development process should be implemented by the favoring of domestic markets, import substitution, protectionism and social reforms “(Wall, 2005, p.32).

Tourism development structure in a number of developing countries matches to dependency model. Generally, such countries had to borrow money from international organizations or invite global companies to invest in large-scale tourism projects (Telfer, 2002). As a result, western global companies rule the tourism industry of developing countries and exploit their resources in the form of tourist enclaves (Andriotis, 2000). Foreign ownership and investment in important destinations shapes a kind of structural dependency in developing countries (Britton, 1989) which in turn, transfer tourism benefits from destinations to core countries.

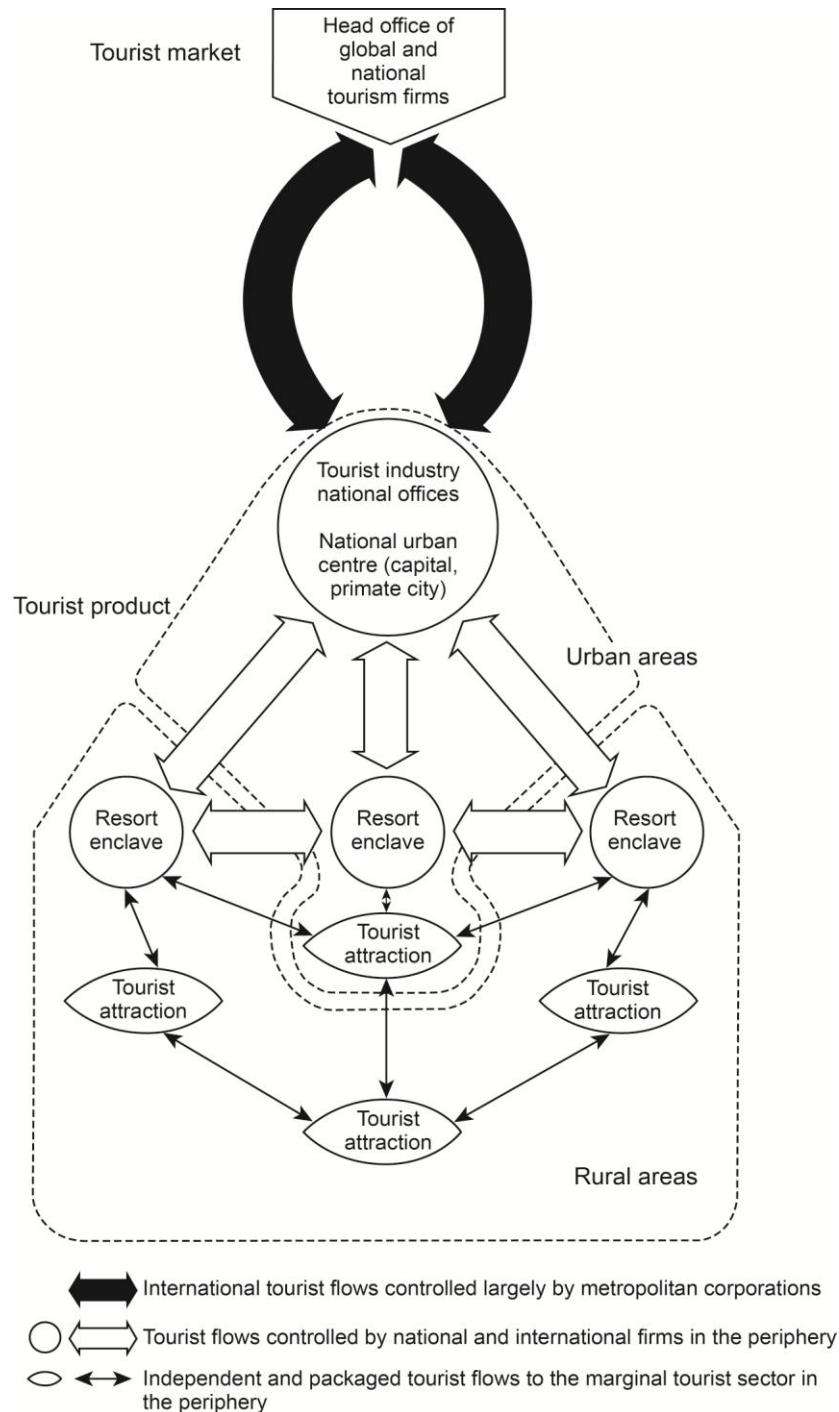
Center- periphery relationships in tourism have been studied by number of researchers (Andriotis, 2000; Britton, 1982, 1987a, 1987b, 1989; Christaller, 1963; Hills & Lundgren, 1977; Hoivik & Heiberg, 1980; Husbands, 1981; Keller, 1984; Mathews & Richter, 1991; Mathieson & Wall, 1982; Murphy, 1985; Smith, 1989; Telfer, 2002; Turner, 1976; Wellings & Crush, 1983; Wu, 1982;).

As large tourism companies are mainly located within the principal tourist markets they could contact with tourists directly (Andriotis, 2000; Britton, 1982; IUOTO, 1976). They rule major component of tourism such as marketing and promotion, package design, airlines and accommodation establishments and control the tourists flow. Control over tourism components allows global tourism companies to influence the volume of tourist flows to different destination where they may have more interest. These companies are able to design, integrate, implement and market the travel packages and provide tourism products (Britton, 1982; Telfer, 2002).

Britton (1982) developed enclave model to explain the dependency structure for tourism development in developing countries (Figure 2.2). According to his model, the structure of international tourism consists of a three-tiered hierarchy namely headquarter of metropolitan market, branch offices in developing countries and small tourism enterprises of destination (Britton, 1982).

He argued that tourism destinations rely on global tourism companies for developing tourism infrastructures and tourists and have little or no control over their tourism system (Telfer, 2002).

Figure 2.2: The enclave model of tourism development in developing countries



Source: Britton, 1982

The global tourism companies in major tourism generating areas design and sell the tour packages. Consequently, According to Britton, there is a “capacity of the dominant tourism sectors to control tourist expenditures through the control of tourist movements, to the relative exclusion of the petty producer sectors” (cited in Andriotis, 2000). The large global companies in the hierarchy are able to control the lower firms and penetrate their markets (Britton, 1982; Telfer, 2002).

On the other hand, Weaknesses of existing infrastructure in the sectors of manufacturing, agriculture, and services in many developing countries lead to the lack of the quality products and permanent supply of inputs to the different sectors of tourism system that in turn results in the reliance on imported supplies for tourist facilities (Telfer, 2002). “The apparent market competence of these metropolitan companies renders them natural recipients of destination government aid, cooperation and subsidization” (Hiller, 1977, p.116).

Therefore, many of the developing countries obliged to accept a high degree of foreign ownership, retention of tourist receipts in the metropolitan countries and leakage of foreign incomes (Britton, 1982; Hills & Lundgren, 1977; Hoivik & Heiberg, 1980; IUOTO, 1976). It is metropolitan tourism capital which is the most important element determining the structure and characteristics of tourism in developing countries (Britton, 1982).

consequently, the control over the tourism system and local resources shifts from the local population and host community, that are most affected by environmental, socio-cultural and economic impacts of tourism development, to the developed countries which are the owners of large tourism companies (Andriotis, 2000; Hall, 1994, 1996). According to Brohman, “Local community find themselves “enmeshed in a globally integrated system of resource use over which they cannot exercise control” and they become “the targets of top-down decision-making by elitist bodies exogenous to the community” (cited in Andriotis, 2000). In effect, dependency paradigm has been one of the main development theories used in context of tourism studies particularly in scope of negative impacts of tourism (Telfer, 2002).

2.3.3 *Neo-liberalism*

During the 1970s, some economists suggested that economic growth and development was being restricted by excessive state intervention in economic affairs (Sharpley, 2009, p. 42). They argued and stressed the role of privatization and the free competitive market (Willis, 2005). Consequently, a shift occurred in development thinking, rejecting the Keynesian fiscal approach underpinning modernization and economic growth policies and moving towards a liberal, free market approach (Sharpley, 2009) referred to neo-liberalism.

The development of economic neo-liberalism was a response to state intervention policies including principles of structural dependency theory (Telfer, 2000). According to Brohman, neo-liberalism employs neoclassical economic theory which ‘treats people as atomistic individuals who are bound together only through market forces’ (cited in Telfer, 2002). It also has some common basis with Adam Smith’s opinions and his principle of laissez-faire and David Ricardo’s theory of comparative advantage, which both focused on minimum state involvement in economic transactions (Telfer, 2002).

Some scholars emphasize on the role of irrational government interventions in the problems faced by developing countries (Brohman, 1996b; Lal, 1985; Telfer, 2002). As a result, according to Brohman emphasis shifts on “supply-side factors, private investment, market-led growth and outward development while turning away from older developmentalist policies based in demand stimulation, import substitution, state intervention and centralized development planning” (sited in Telfer, 2002, p.45).

Neo-liberalism paradigm considered less by tourism scholars compare to the other three paradigms. Important aspects of this development paradigm include an emphasis on competitive exports and the use of Structural Adjustment Lending Programmes (SALPs) (Telfer, 2002).

2.3.4 Alternative and Sustainable Development

The alternative development model emerged in response to the obvious failure of abovementioned economic-growth based models to consider the needs of the local population and the importance of environmental and cultural conservation in development process (Telfer, 2002). In other words, alternative development paradigm represents an alternative to top-down economic growth models of development, which see development as the modernization of the world, adopting instead a bottom-up approach to development that focuses primarily on human and environmental concerns (Sharpley, 2009).

The main principal of alternative development is that development should protect natural environment and fulfill needs of local community, therefore, it should be indigenous (Telfer, 2002). As well, in alternative development model, the promotion of human well-being does not have to depend upon the destruction of nature (Baker, 2006). Supporters of alternative development place emphasis on the satisfaction of basic needs: food, housing, water, health, and education (Wall, 2005). Therefore, alternative development is a people oriented paradigm that concentrates not only on the basic needs of local population but also on the incorporate local conditions and knowledge systems to strengthen the developmental process (Chipeta, 1981; Schafer, 1989; Sharpley, 2009; Telfer, 2002).

In other words, this approach supports decentralization and in turn local community involvement in decision-making processes (Murphy, 1983; 1985). This, in turn, is seen to contribute to the empowerment of local communities (Sharpley, 2009). With development being increasingly linked with environmental sustainability, from the late 1980s alternative development effectively became synonymous with sustainable development (Sharpley, 2009, p.43).

The word ‘sustainable development’ has been important in discussions about environmental issues since the mid-1980s. The main focus of sustainable development is on society, and its aim is to include environmental considerations in the steering of societal change, especially through changes to the economic activities.

According to Sharpley (2009, p.45) the three key principles underpinning sustainable development are that

“ (a) an holistic perspective is required, both development and environmental sustainability are global challenges; (b) the emphasis should be on the long-term future; and (c), although the focus of development should be people-centered, the challenge is to achieve both intra and inter-generational equity; development should be fair and equitable for all people both within and between generations”.

Baker argued that “ adopting sustainable development principles is about steering societal change at the interface between:

- *The society perspectives:* this relates to human mores and values, relationships and institutions.
- *The economic perspectives:* this concerns the allocation and distribution of scarce resources.
- *The environmental perspectives:* this includes the contribution of both the economic and the social perspectives and their effect on the environment and its resources” (2006, p.7).

These are known as the three aspects of sustainable development (Ekins, 2000), that meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development, 1987, p.43). Sustainable development insures that next generations all over the world will have enough resources to adequately sustain themselves and maintain a reasonable quality of life (Harris, Griffin & Williams, 2002; Keyser, 2002).

The term ‘sustainable development’, initially offered in the International Union for Conservation of Nature (IUCN) World Conservation Strategy (IUCN, 1980) and later on generalized by the Brundtland Report (WCED, 1987). Many tourism scholars and organizations have outlined sustainable tourism principles and frameworks (Eber, 1992; Gunn, 1988; Inskeep, 1991; Swarbrooke, 1999; Pigram, 1990; Wall, 2005; Wheeler, 2006; WCED, 1987; WTO, 1993).

The fast growth of international tourism after the World War II has resulted in the raising of concerns over how the cultural and natural environments of destinations are affected by tourism (Holden, 2000, p.64). As a result, Similar to the trends in development theory of dissatisfaction with development philosophies (Telfer, 2002), many tourism analysts turn away from past methods of tourism development in favor of ‘alternative tourism’ (Brohman, 1996a).

Sustainable development defined by the World Commission on Environment and Development, Brundtland Commission, in 1987 as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ (WCED, 1987, p.4). After the Earth Summit held in Rio de Janeiro in 1992, pressure has grown for the tourism industry to lift its environmental performance in common with other economic sectors, and to work towards ecologically sustainable forms of tourism development (Pigram & Wahab, 2005, p. 14).

The core notion of sustainability is to consider the capacity of environment and support it (Jacobs, 1995). UNWTO (2005) suggested sustainable tourism development as:

“Sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments. Sustainability principles refer to the environmental, economic and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability”.

Thus, according to UNEP & UNWTO sustainable tourism should:

- “Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity.
- Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance.

- Ensure viable, long-term economic operations, providing socioeconomic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation.

Achieving sustainable tourism is a continuous process and it requires the constant monitoring of impacts, introducing the necessary preventive and/or corrective measures whenever necessary. Sustainable tourism should also maintain a high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about sustainability issues and promoting sustainable tourism practices amongst them.” (2005, p.11).

The above-mentioned definition is much emphasis on local community and environmental, social and economic impacts of tourism and their management. Sustainable tourism as an emerging paradigm seems to enhance the existing conceptual frameworks on tourism planning and development by making the residents its focal point. Indeed, both direct and indirect support of community residents’ participation is the foundation of the sustainability paradigm (Butcher 1997; Hunter 1997; Jamieson & Jamal, 1997).

In recent years, changing attitudes toward the nature of the tourist experience together with the growing realization that tourism takes place in fragile areas was the notion that it consumes environmental resources (Mason, 2003). Increasingly, groups of tourists became more concerned and feel more responsibility about the impacts of their activities were having on the environment, this led to the growth of what some consider as more environment-friendly forms of tourism, such as ecotourism (Wearing & Neil, 1999 cited in Mason, 2003).

2.4 Natural areas

The earth includes both land and water environments. Different environments distributed on the earth according to precipitation and temperature. Each climatic region has different natural areas including desserts, Steppes, tropical forests, Tundra and Taiga, the Arctic and the Antarctic. In addition, there are many valuable natural areas which have been designed in form of under protected areas.

Protected areas defined by IUCN as: *“An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means”* (IUCN, 1994).

IUCN nominates a six category system of protected areas (IUCN, 1994). Table 2.3 shows that some kinds of tourism activities are eligible in every category of protected areas. It also shows that although biodiversity protection is a critically important function of many protected areas, it is not the only purpose and is often not the primary purpose of a protected area (Eagles, McCool & Haynes, 2002, p.11). Protected areas are to conserve nature and at the same time prepare humans opportunities for recreation, inspiration, education and understanding (Newsome, Moor & Dowling, 2002).

Table 2.3 IUCN management categories of protected areas

Category	Description
I	Strict Nature Reserve/Wilderness Area: Protected area managed mainly for science or wilderness protection
Ia	Strict Nature Reserve: Protected area managed mainly for science.
Ib	Wilderness Area: Protected area managed mainly for wilderness protection.
II	National Park: Protected area managed mainly for ecosystem protection and recreation.
III	Natural Monument: Protected area managed mainly for conservation of specific natural features.
IV	Habitat/Species Management Area: Protected area managed mainly for conservation through
V	Protected Landscape/Seascape: Protected area managed mainly for landscape/seascape conservation and recreation.
VI	Managed Resource Protected Area: Protected area managed mainly for the sustainable use of natural ecosystems.

Source: IUCN, 1994

After the industrial revolution, the livelihood pattern shifted from rural to urban and man was more distanced from the nature. The process of urbanization lead to removing people from nature and one strategy for being close to nature is tourism (Holden, 2000). That is why natural destinations and activities associated with natural environment has been increasingly popular (Tourism Canada, 1995).

2.4.1 Nature-based tourism

Nature-based tourism growing by an estimated 10 to 30 percent per annum is one of the fastest growing sectors in the tourism industry (Mckercher, 1998). It takes place in natural areas. Many visitors including those who are environmentally sensitive and a wide range of other type of tourists visit these areas (Arnegger, Woltering & Job, 2010; Ryan, Hughes & Chirgwin, 2000; Wheeler, 2006).

Nature-based tourism is defined as any non-consumptive or consumptive tourist activity (Shafer & Choi, 2003) that takes place in natural settings, tourism that based on the specific aspects and elements of the natural environment and tourism that is developed in order to conserve and sustain natural areas (Hall & Boyd, 2005). In its broadest sense, nature-based tourism involves experiencing natural places, typically through outdoor activities (Tourism New South Wales, 2006, p. 1).

According to Goodwin “Nature, or nature-based, tourism encompasses all forms of tourism - mass tourism, adventure tourism, low-impact tourism, ecotourism - which use natural resources in a wild or undeveloped form- including species, habitat, landscape, scenery and salt and fresh-water features” (1996, p.287). Hall and Weiler (1992, p.143) defined nature-based tourism as “a broad spectrum of touristic activities, often commercialized and involving an interaction with the natural environment away from the participant’s home range.”

Nature-based tourism encompasses a broad scope including adventure tourism, ecotourism, alternative tourism, educational tourism, sustainable tourism, responsible tourism and many other forms of non-mass tourism (McKercher, 1998, p. 1). Therefore, Nature-based tourists cannot be sorted in one group because their activities and characteristics may overlap with other forms of tourism (Weaver, Faulkner, & Lawton, 1998). Table 2.4 shows different forms of nature-based tourism.

Table 2.4 Scope of nature-based tourism

Scope of nature-based tourism	
Nature-oriented tourism	Nature travel
Environment-friendly tourism	Wildlife tourism
Environmental pilgrimage	Ecotourism
Ethical tourism	Nature tourism
Soft tourism	Special interest tourism
Agro tourism	Green tourism
Agricultural tourism	Farm tourism
Alternative tourism	Adventure tourism
Sustainable tourism	Educational tourism

Source: own compilation

Regardless of the nature-based tourist activity practiced, some infrastructure and superstructure is required to complement or enhance the natural attraction for nature-based tourism such as accommodation, transportation, water supply and specific visitor facilities (Pirskin, 2001). Although, nature-based tourism is reliant on the natural attractions of an area (Burr, Zeitlin, Chase, Ramaswamy, Green & Dougherty, 2010), the presence of these facilities can improve visitors' experience and contribute to maintenance of environmental quality (Pearce, 1989). Furthermore, lack of facilities and services in natural destinations may discourage people from revisiting a site (Pirskin, 2001, p. 642).

2.4.2 Nature-based tourism typology

Generally, it is the quality of a natural area's living or biotic element (the flora and fauna or wildlife) that plays a primary role in attracting tourists to specific destinations (Newsome et al., 2002, p. 14). The visitors have different motives and are interested in doing a variety of activities. Many activities are placed under the nature-based tourism activities including: biking, boating, canoeing, kayaking, fishing, hiking, horseback riding, hunting, mountain biking, sightseeing, auto tours, snowmobiling, skiing, wildlife/bird watching, off-road driving, walking, sledding, water skiing, sailing and scuba diving, (Arnegger et al., 2010; Burr et al., 2010; Ching Yang, 2006; Goodwin, 1996; Hall & Boyd, 2005; Hall & Weiler, 1992; Holden,

2000; McKercher, 1998; Ryan et al., 2000; Weaver et al., 1998). Table 2.5 illustrates the categorization of nature-based tourism activities.

According to Wearing and Neil (2009), nature-based tourism includes activities for which the natural setting is the basis, those that are reliant on nature and those that are enhanced by nature. Although, nature-based tourism tends towards small-scale tourism, embraces the sustainable approach and fosters ‘responsible tourism’, but it can become mass tourism in many natural areas (Newsome et al., 2002, p.13).

Table 2.5 Nature-based tourism activities

Activities	examples
Adventure	Hiking, orienteering, backpacking, mountain climbing, rock climbing, caving, horseback riding, off-road driving, rafting
Water based	Rafting, Boating, Sailing, Canoeing, Kayaking, Rowing, Floating, Sail board, Wind surfing, Water skiing, Snorkeling, Scuba diving, Swimming,
Hard and consumptive	Hunting (big and small game, birds), Fishing
Fitness	Biking, Walking, jogging
Viewing	Wildlife viewing, Bird watching, Fish viewing, Sightseeing
Snow and ice related	Skiing, Snowboarding, Snowmobiling,
Outdoor	Camping, Picnicking

Source: own compilation

2.5 Ecotourism

Ecotourism is one of the most popular forms of nature-based tourism (Buckley, 2009). It tries to limit the negative impacts of large scale tourism on host communities and ecosystems (Stronza & Durham, 2008). Increasingly ecotourism has been described as a form of nature-based tourism (Dittmann, 2013), that represents or at least promotes, sustainable forms of tourism (Simmons & Becken, 2004). According to this point of view, ecotourism has been defined by Ceballos-Lascurain (1996, p.14) as:

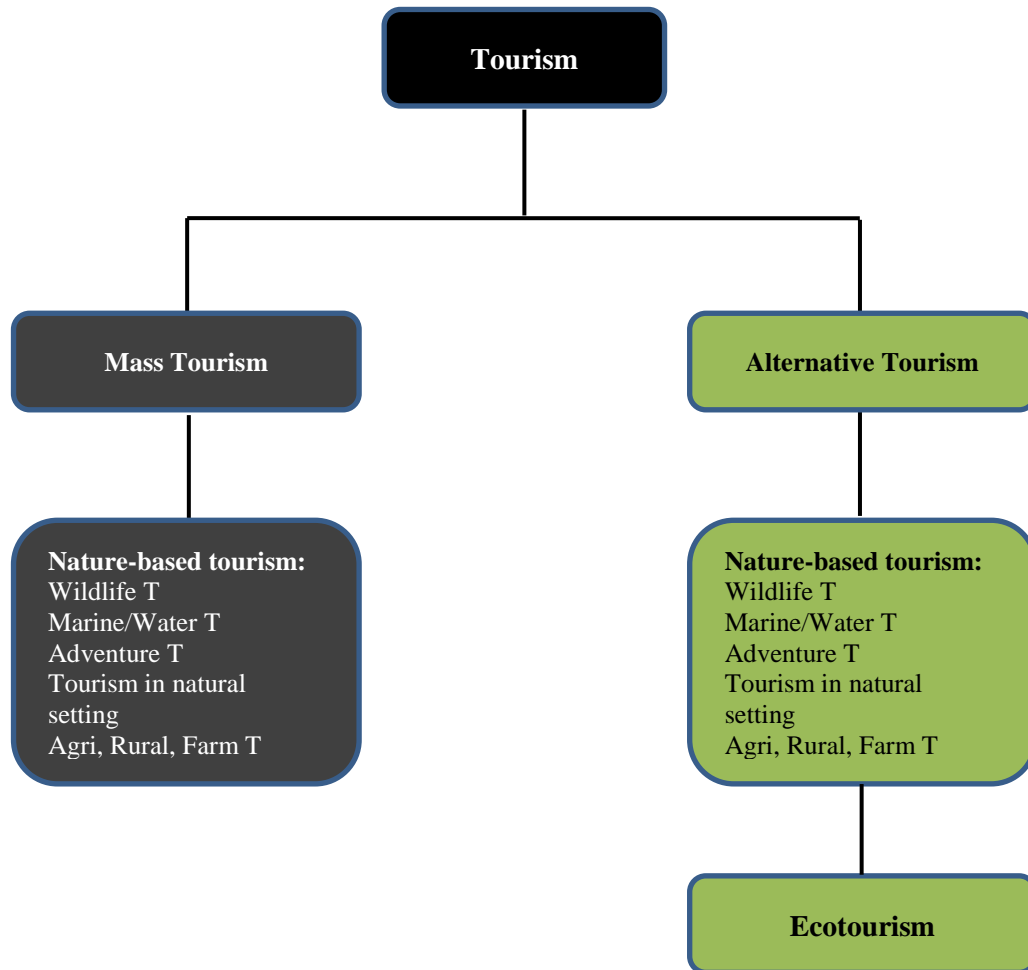
“environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features – both past and present) that promotes conservation, has low visitor impact, and provides for beneficially active socioeconomic involvement of local populations”.

The international ecotourism society (1991a, b) defined ecotourism as responsible travel to natural areas which conserves the environment and improves the well-being of local people.

Ross and Wall (1999) and Pedersen (1991) proposed five functions for ecotourism; (I) protection of natural areas (II) education (III) generation of money (IV) quality tourism and (V) local participation. These functions are basic elements in almost all different definitions of ecotourism.

While conservation may be important to nature-based tourism in the long run, it is not as critical to the tourist activity as it is in ecotourism (Burr et al., 2010). Ecotourism can be described as a sustainable form of nature-based tourism (Arnegger et al., 2010). The terms nature-based tourism and ecotourism are often used interchangeably (Mehmetoglu, 2007; Arnegger et al., 2010) despite ecotourism is one form, a sustainable form, of nature-based tourism.

Fennel (2008) suggests that ecotourism involves those form of tourism which is more dependent upon nature and natural areas as the main attraction or motivator for travel than cultural resources. A number of scholars have criticized ecotourism. Wheeler (1993, cited in Mason, 2008, p.117) argued about ecotourism “it is more likely to make the ecotourist feel better about their involvement than actually bring benefits to the environment and local communities.” According to Butler (1991), all forms of tourism in the long term to go unsustainable and towards mass tourism. Figure 2.3 depicts an overview of nature-based tourism and ecotourism.

Figure 2.3 Overview of nature-base tourism and ecotourism

Source: own compilation

Despite much debate over the concept of ecotourism, conflicting viewpoints about the term and its applications have obstructed the development of the concept and its practical realization in many destinations (Bottrill & Pearce, 1995; Malloy & Fennell, 1998; Lindberg et al., 1997; Nelson, 1994; Ross & wall, 1999 a; Scace, 1992).

Limited evidence is available concerning whether a site is meeting the multiple goals associated with ecotourism or not (Ross & Wall, 1999b). Therefore, terms such as responsible tourism and ecotourism may be little more than marketing brands which appeal to consumers

and this in turn may help sell more holidays (Fennell, 1999; Mason, 2008; Mason & Mowforth, 1996; Ross & Wall, 1999 a).

2.6 Nature-based tourism impacts

Tourism as a human activity takes place in the space and environment. Human activities, including tourism, have environmental, socio-cultural and economic impacts. The significance of tourism industry to local economies is likely to increase and most importantly effects local community (Lankford, Williams & Knowles-Lankford, 1997).

The rapid growth in the number of visitors after World War II has resulted in the rising of concerns over the impacts of tourism on cultural and physical environment (Holden, 2000). In fact, tourism development bring with it inevitable positive and negative impacts (McKercher, 1993) which arise from interrelationship between host communities, visitors and natural environment (Lindberg, Andersson & Dellaert, 2001; Mathieson & Wall, 1982). These impacts sometimes are very noticeable and evident in destination areas where visitors have interaction with local society in forms of economic, socio-cultural or environmental activities.

The nature of tourism impacts is depend on different factors, including type of tourism, the place where it is happening, when it is happening, as well as infrastructures of the area (Mason, 2008) and tourism superstructures. Therefore, it is important to consider different characteristics of tourism industry, tourists and local population. McKercher (1993) supposed some “fundamental truths” about tourism as major influences on tourism impacts (table 2.6). He discussed that these structural realities explain why many of socio-cultural, economic, and environmental impacts of tourism are inevitable.

Table 2.6 some fundamental truths about tourism

Statement
<ul style="list-style-type: none"> - As an industrial activity, tourism consumes resources, creates waste and has specific infrastructure needs. - As a consumer of resources, it has the ability to over consume resources. - Tourism, as a resource dependent industry must compete for scarce resources to ensure its survival. - Tourism is a private sector dominated industry, with investment decisions being based predominantly on profit maximization. - Tourism is a multi-faceted industry, and as such, it is almost impossible to control. - Tourists are consumers, not anthropologists. - Unlike other industrial activities, tourism generates income by importing clients rather than exporting its product. - Tourism is entertainment

Source: McKercher (1993, p.7)

In a sustainable tourism development, attention should be given to the impact of tourism on the community as a whole and the individuals who form that community (Fredline, Deery & Jago, 2006). Local communities in tourism destinations are affected by tourism. These include an increased number of people, increased use of roads, and various economic and employment-based effects (Gursoy, Jurowski & uysal., 2002).

In recent years more studies have focused on host communities' perception and attitudes towards tourism impacts and development (Allen, Hafer, Long, & Perdue, 1994; Allen, Long, Perdue & Kieselbach, 1988; AP & Crompton, 1993, 1998; Avcikurt & Soyballi, 2001; Belisle & Hoy, 1980; Brant & Courtney, 1999; Brayley, 2000; Carmichael, 2000; Doxey, 1975; Fredline & Faulkner, 2000; Gursoy et al., 2002; Gursoy, Chen & Yoon, 2000; Hudman & Hawkins, 1989; Huh & Vogt, 2008; Iroegbu & Chen, 2001; Johnson, Snepenger & Akis, 1994; Jurowski, Uysal, & Williams, 1997; Kang, Long, & Perdue, 1996; Kaul, 1985; Kayat, 2002; Lankford, 1994; Lankford & Howard, 1994; Lankford et al., 1997; Lindberg et al., 2001; Liu, Sheldon & Var, 1987; Maddox, 1985; Mason & Cheyne, 2000; McCool & Martin, 1994; McKercher, 2001; Mill & Morrison, 1985; Murphy, 1981, 1983; Pizam, Milman & King, 1994; Ross, 1992; Snaith & Haley 1995, 1999; Ryan & Montgomery, 1994; Walpole & Goodwin, 2001; Yoon, Chen & Gursoy, 1999).

According to studies in the field of tourism impacts, host communities are influenced by the perceived impacts of tourism in three main categories of benefits and costs: economic, environmental and sociocultural (Ching Yang, 2006; Gee, Mackens & Choy, 1989; Jafari, 1973; Kang et al., 1996; Liu, Var & Timur, 1987; Long, Perdue & Allen, 1990; Medlik, 2003; Pizam, 1978; Stokowski, 1996; Young, 1973). It is usually difficult and undesirable to try to separate socioeconomic and physical components of environment (Inskip, 1991, p. 339). In almost all studies on tourism impacts separate examination of these components is made. On the other hand, there are close interrelationships between sociocultural and economic impacts (Inskip, 1991) therefore, in this study impacts of tourism have been examined in the form of environmental and socioeconomic.

2.6.1 Environmental impacts of nature-based tourism

Environment is a fundamental component of tourism (Holden, 2000) and acting as a major attraction for tourists. According to Inskip the “tourism-environment relationship has three aspects:

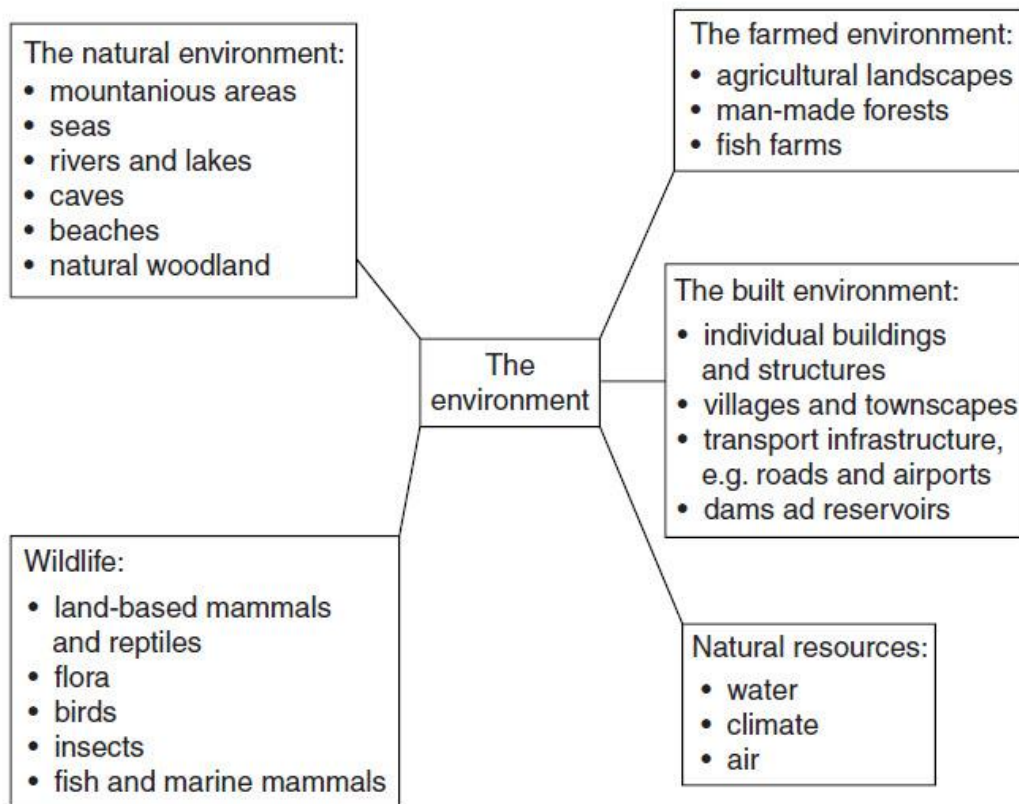
- Many features of physical environment are attractions for tourists.
- Tourist facilities and infrastructure constitute one aspect of built environment.
- Tourism development and use of tourist use of an area generate environmental impacts.” (1991, p. 339).

After World War II and beginning of mass tourism in 1950s, the relationship between tourism and environment has been unstable and tourism has become one of the main causes of environmental damage (Mason, 2003). Since tourism usually developed in vulnerable environment such as mountain and marine areas, islands and historical sites visitors’ activities potentially can led to huge damages to environment (Andriotis, 2000).

Environment has different aspects which according to Swarbrooke (1999) (figure 2.4) these aspects are: the natural resources, farmed environment, built environment, natural environment and wildlife. It should be noticed that the five aspects are related to each other and working as a system. It means that when actions taken in one part of the system have consequences for its other component parts (Holden, 2000), as a result the overall impact on

environment can be much more intense. Since tourists use all different aspects of environment, tourism impacts on the environment can be very widespread.

Figure 2.4 Components of environment



Source: Swarbrooke, 1999

Depends on where, when and how tourism activities take place (Mason, 2003) and type and intensity of tourism development, the type and extent of tourism impacts will be different (Inskip, 1991). Tourism has positive, negative and even no environmental impacts depending on its type of planning and management (Inskip, 1991). Tourism in developed destinations, which are managed according to sustainable development principles, can generate positive environmental impacts.

Positive impacts are stimulate activities, which can protect environment, landscape, and wildlife; support conservation of natural and cultural monuments, promote establishment of protected areas and national parks; generate income for maintain under protected areas.

Negative environmental impacts of NBT have been mentioned as traffic congestion; air, water and environment pollution; footpath erosion; drop litter; environment and habitat degradation; disturb natural landscapes and land use problems. Table 2.7 shows the items used for assessing residents' perception of environmental impacts of tourism

Table 2.7 Environmental impacts of nature-based tourism

NO.	Environmental impacts of tourism	References
1	Traffic congestion	1,2,3,5,6,7,8,9,10,11,12,13,16,17,18,21,22,23,26,27,28,29
2	Tourism has not contributed to a decline in the ecological environment (or damage to natural areas)	1,2,6,11,12,13,26,28
3	Tourism provides an incentive for conservation of natural resources	3,13,14,18
4	Construction of hotels and other tourist facilities has destroyed the natural environment	3,13,14,29
5	Tourist increases litter in area (environmental contamination)	4,5,9,11,12,13,16,17,18,21,26,27,28,29, 30
6	Tourist increases noise	4,5,10,12,13,16,17,21,26,28,29,30
7	Preserves environment and improves the appearance (image) of an area	12,18,20,24
8	Improves living utilities infrastructure (supply of water, electric and telephone)	12,13,15
9	Improves public facilities (pavement, traffic network and civic center)	12,13,15
10	Tourism helps to increase local awareness and appreciation of the environment	13,15
11	Quality of garbage disposal	17, 19

1: Sheldon & Var (1984); **2:** Liu & Var (1986); **3:** Akis et al. (1996); **4:** Lankford et al. (1997); **5:** Duffield (1982); **6:** Chris choi & Sirakaya (2005); **7:** Pizam & Pokela (1985); **8:** Tosun (2002); **9:** McGehe & Andereck (2004); **10:** Ap & Crompton (1998); **11:** Gilbert & Clark (1997); **12:** Wanko & Stewart (2002); **13:** Sanchez, Meji & Bueno, (2009); **14:** Andriotis & Vaughan (2003); **15:** Sirakaya, Teye & Somez, (2002); **16:** Pizam (1978); **17:** Caneday & Zeiger (1991); **18:** Andereck & Vogt (2000); **19:** Belisle & Hoy(1980); **20:** Allen et al. (1988); **21:** Kavallinis & Pizam (1994); **22:** Milman & Pizam (1988); **23:** King, Pizam & Milman, (1993); **24:** Perdue, Long & Allen, (1987); **25:** Ross (1992); **26:** Williams & Lawson (2001); **27:** Ritchie & Inkari (2006); **28:** Tovar & Lockwood (2008); **29:** Chen (2001); **30:** Lankford & Howard (1994).

2.6.2 Socioeconomic impacts of nature-based tourism

Like environmental impacts, the type and extent of socioeconomic impacts depends on the type and scale of tourism development, on the socio-demographic and economic characteristics of host communities and how tourism is planned, developed, and managed (Inskeep, 1991, p. 366). However, it should be noted that tourism development, as is the case with other forms of development, brings inevitable changes for the societies. These changes are not essentially negative but can help to establish sustainability in societies (Mason, 2003).

Socioeconomic impacts have been more researched than environmental impacts (Mason, 2008). In past years many researchers concentrate on socioeconomic impacts of tourism (Andriotis, 2000; Archer, 1977, 1982, 1988, 1995; Archer & Fletcher 1988, 1990, 1996; Baretje, 1982; Buckley & Geyikdagi, 1993; Edgell, 1990; Gould, 1994; Hughes, 1983; Inskeep, 1991; Jackson, 1986; Jenkins, 1997; Mathieson & Wall, 1982; Oosterhaven & van Der Knijff, 1988; Pizam & Milman, 1986; Richards, 1983; Ruiz, 1985; Seward & Spinard, 1982; Sinclair, 1991, 1998; Singh, 1984; Smith, 1995; Smith & Jenner, 1992; Telfer & Wall, 1996; Teye, 1987; Wanhill, 1988; WTTC, 1995).

Early studies on socioeconomic impacts were concentrated on positive economic impacts of tourism (Ap, 1992; Jafari, 1987; Mathieson & Wall, 1982; Pizam, 1978). This period coincided with the optimistic viewpoints to tourism development in 1960s. However, after the occurrence of negative impacts of tourism in many destinations in 1970s, the consequences of tourism were examined more critically by anthropologists and sociologists (Ap, 1992).

Tourism impacts often results from host-tourist interactions. According to Inskeep, specific types of impacts results from host community-tourists interactions can be categorized as following:

- 'Some types of socioeconomic impacts are the normal changes resulting from tourism development even in domestic tourism that tourists and local community are of the same culture.
- Other impacts results from socioeconomic differences between tourists and host communities of either the same or different cultural background.

- The impacts result from considerable cultural differences between host communities and tourists' (1991, p. 366-368).

Another factor that intensifies the host community-tourist interaction is that there are several tourist cultures and there may be different host cultures, all of which may interact with one another (Inskeep, 1991).

Tourism can generate both positive and negative socioeconomic impacts. Positive types of socioeconomic impacts include economic benefits, conservation of cultural heritage, renewal of cultural pride, cross-cultural exchange (Inskeep, 1991). Lack of system approach in tourism planning can result in generating negative impacts including loss of potential economic benefits, economic and employment distortions, overcrowding and loss of amenities for residents, cultural impacts and social problems (Inskeep, 1991).

The degree to which impacts of tourism influence local communities depend on a number of factors including the area which tourism taking place, the number and type of tourists, activities of tourists, infrastructure exists for tourism development, since when tourism has been established and the pace of development. Mathieson and Wall argued that 'the social and cultural impacts of tourism are the ways in which tourism is contributing to changes in value systems, individual behavior, family relationships, collective lifestyles, safety levels, moral conduct, creative expressions, traditional ceremonies and community organizations' (1982, p.133).

As Mason (2003) suggest positive socioeconomic impacts of tourism on society are job creation, the recovery of poor regions, the revival of local arts, handicrafts and traditional cultural activities, social and cultural life of the local population, the renewal of local architectural traditions, and the encouragement of the need to conserve areas of exceptional beauty which have aesthetic and cultural value. Tourism has some negative socio-cultural impacts including demonstration effect and acculturation (Mason, 2008).

Table 2.8 shows the items used for assessing residents' perception of socioeconomic impacts of tourism in previous studies.

Table 2.8 Items used for assessing socioeconomic impacts of tourism

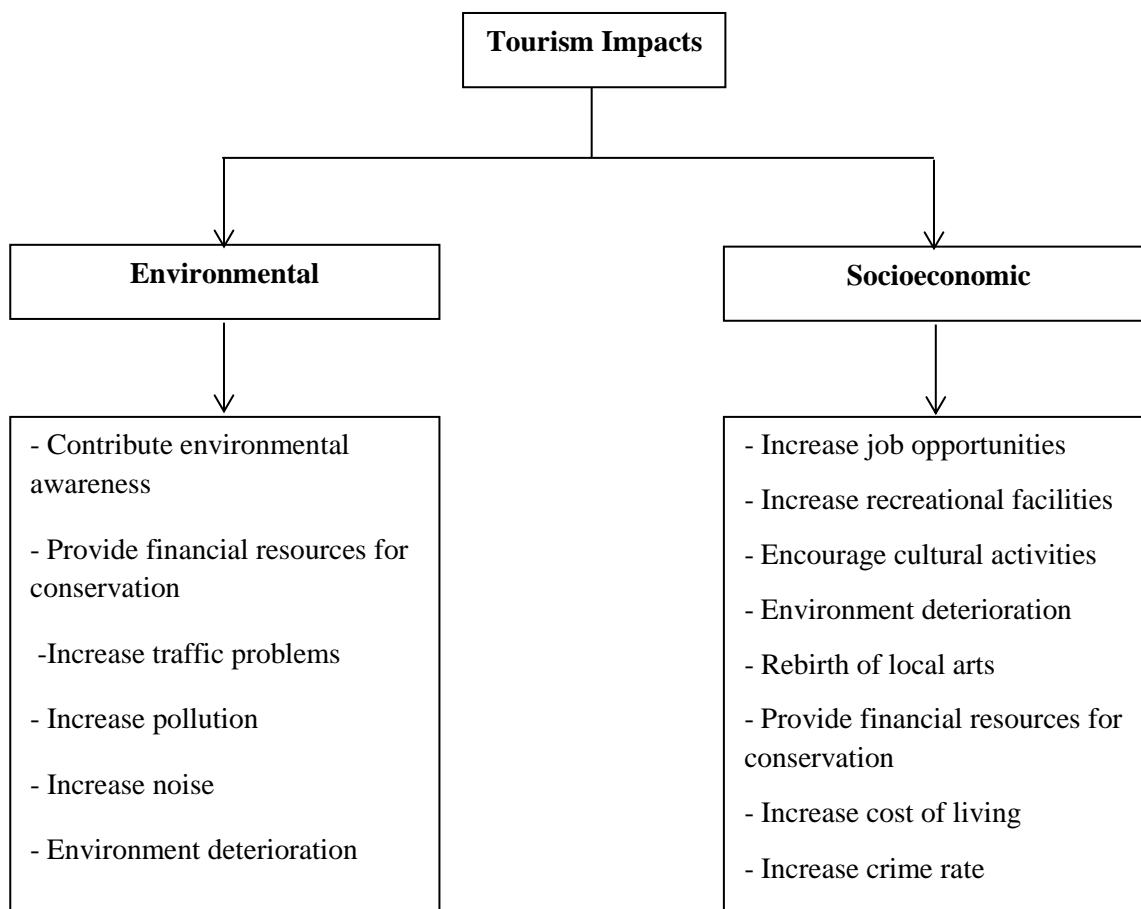
NO.	Socioeconomic impacts of tourism	References
1	Tourist spoils natural and historic sites (or improve it)	1,6,13,15,18,19,27
2	Tourism causes changes in traditional cultures	1,3,9,13,16,17,18,26,29
3	Tourism increases drug addiction	1,2,7,8,16,17,19,22,23,27
4	Opportunity to learn from tourists (language,...)	1,2,19
5	Tourism provides more job opportunities	1,2,4,5,7,8,9,10,11,12,13,15,16,17,19,20,22,23,26,27,28,29,30
6	Presence of recreational facilities and spaces	1,2,3,4,5,7,9,12,13,16,17,18,20,25,26,27,28,30
7	Public facilities are kept in good condition because of tourism (roads,	1,2,3,4,7,9,13,17,19,26,28,30
8	Tourists disrupt the peace and tranquility of public parks	1,2,10,15,28,30
9	Tourism has resulted in unpleasantly overcrowded beaches, footpaths, parks and outdoor places	1,2,3,6,9,10,11,13,15,17,19,24,28,29,30
10	Tourism encourages a variety of cultural activities by the local population (crafts, arts, music)	1,2,9,12,13,14,18,26,27,29
11	Tourists' keen interest in natural and cultural sites result in these sites are cared for than they otherwise would be.	1,9,11
12	Tourism led to more vandalism in area	1,2,5,9,12,13,16,17,18,29
13	Tourism prevents local language from being use as much as it otherwise would	1
14	Tourism results in more cultural exchange between local community and tourists, which give residents a better understanding about world	1,2,9,11,15,16,18,26,29
15	Standard of living increases considerably because of the money that tourists spend in area (quality of life)	2,3,4,5,7,8,9,11,12,13,14,17,18,19,22,23,24,27,29,30
16	Prices of many goods and services in area have increased because of increases in tourism	2,3,4,5,7,9,11,12,13,14,15,16,17,18,19,20,25,26,27,28
17	Tourism could create a positive feeling about area among tourists	2,8,9,15,18,28
18	Opportunity for local community to learn about other cultures	1,2,5,10,12,16,26,29
19	Meeting tourists from all over the world is definitely a valuable educational experience	1,2,3,29
20	Local businesses are the ones which benefit most from tourists	2
21	Tourists have a positive impact on the area's cultural identity	2,9,10,13,26,27,29
22	The state of area's (Mazandaran) residents are courteous and friendly to tourists	2,8,11
23	Tourism has led to more prostitution	2,7,12,13,15,16,17,19,22,23
24	The local residents are the people who really suffer from living in a tourist area (have lower quality of life)	1,2,3,6,13,15,27,29
25	The different types of culture that tourists bring to the area are more important than the social costs created by tourism	2
26	Because of tourists the crime rate in area (Mazandaran) has increased	2,4,7,8,9,11,12,18,19,22,23,24,25,26,27,30
27	During the peak tourist season it is harder to get tickets for the	2,6,10,15

	theater, movies, concerts and athletic events	
28	Local community are being exploited by tourism	2,9,28,13,18
29	Tourism creates more jobs for foreigners than local community	3,13,14
30	Tourism gives benefits to a small group of people in the region	3,13,14,15,18,26,28
31	High-spending tourists have an undesirable effect on our way of life	3,29
32	As a result of tourism I have more money to spend(more income)	4,5,8,10,12,17,26,29,30
33	Police protection is better	4,12,13,16,17,18
34	Increases cost of land and housing	7,11,12,13,16,17,19,24,27,28
35	Cost of public services	7,13
36	Tourists negatively affect a community's way of life (or positively)	9,18,19
37	Tourism development improves the appearance of an area	9,28
38	Tourism has led to an increase of infrastructure for local people	14
39	It is associated with some people behaving inappropriately, perhaps in a rowdy or illegal way	28
40	Tourism makes local residents feel more proud of their town and makes them feel good about themselves and their community	28

1: Sheldon & Var (1984); **2:** Liu & Var (1986); **3:** Akis et al. (1996); **4:** Lankford et al. (1997); **5:** Duffield (1982); **6:** Chris choi & Sirakaya (2005); **7:** Pizam & Pokela (1985); **8:** Tosun (2002); **9:** McGehe & Andereck (2004); **10:** Ap & Crompton (1998); **11:** Gilbert & Clark (1997); **12:** Wanko & Stewart (2002); **13:** Sanchez, Meji & Bueno, (2009); **14:** Andriotis & Vaughan (2003); **15:** Sirakaya, Teye & Somez, (2002); **16:** Pizam (1978); **17:** Caneday & Zeiger (1991); **18:** Andereck & Vogt (2000); **19:** Belisle & Hoy(1980); **20:** Allen et al. (1988); **21:** Kavallinis & Pizam (1994); **22:** Milman & Pizam (1988); **23:** King, Pizam & Milman, (1993); **24:** Perdue, Long & Allen, (1987); **25:** Ross (1992); **26:** Williams & Lawson (2001); **27:** Ritchie & Inkari (2006); **28:** Tovar & Lockwood (2008); **29:** Chen (2001); **30:** Lankford & Howard (1994).

Based on literature review, in this study tourism impacts were categorized into environmental and sociocultural. Figure 2.5 depicts positive and negative tourism impacts.

Figure 2.5 Impacts of tourism



Source: our compilation

2.7 Factors affecting perceived impacts of NBT

Perceived impacts of NBT have been studied by many researchers. During the last decades, examining the factors that are likely to influence perceived impacts of tourism also have been a growing area of research (Gursoy & Rutherford, 2004). The factors that influence the perception of local population toward tourism development and its impacts can be classified under the following headlines.

2.7.1 *Socio-demographic characteristics*

The relationship between socio-demographic characteristics and attitudes towards tourism impacts and development were assessed by a number of scholars (Andriotis, 2004; Andriotis & Vaughan, 2003; Brougham & Butler, 1981; Chen, 2000, 2001; Ching Yang, 2006; Davis, Allen & Cosenza, 1988; Haralambopoulos & Pizam, 1996; Harrill, 2004; HSU, 1998; Inbakaran & Jackson, 2003, 2004; Jackson & Inbakaran, 2006; Johnson et al., 1994 ; Lankford, 1991; Liu & Var, 1986; Madrigal, 1993, 1995; Mason & Cheyne, 2000; Milman & Pizam, 1988; Perdue, Long & Allen, 1990 ; Pizam, 1978; Ritchie, 1988; Sirakaya et al., 2002; Tomljenovic & Faulkner, 1999; Williams & Lawson, 2001).

Findings of these studies vary and no clear trend can be identified, but the main independent variables for analyzing demographic and socioeconomic factors are age, gender, level of education, occupational situation, length of residence in the area and level of income.

Tomljenovic and Faulkner's (1999) examined residents' attitudes in Gold Coast in Australia found that older residents were less concerned about tourism's negative environmental impacts and generally had more positive attitudes toward tourism development than young residents had.

The Andriotis (2004) study on Cretan residents showed that the two most important discriminators of residents' attitudes toward tourism were education and reliance on tourism employment. Highly educated residents were more negative about the impacts of tourism on the environment. Those who were relying on tourism employment believed that tourism brings benefit to the whole community.

Chen (2001) supposed that demographic characteristics influence residents' perceptions of tourism impacts. He argued that wealthier residents tended to view tourism more positive. On the other hand, findings of Johnson et al., (1994) and Perdue et al., (1990), revealed that rural communities apart from socio-demographic characteristics have a tendency to perceived impacts of tourism development in similar way.

In another study, Andriotis and Vaughan (2003) discussed that among the socio-demographic variables education and employment in tourism sectors affecting the attitudes of residents towards tourism development. According to their findings, highly educated residents are less favorable towards tourism impacts and more likely to be concerned about negative social and environmental impacts of tourism and medium educated residents are probably to be more supportive of tourism development. Furthermore, residents reliant to tourism jobs had more favorable attitudes toward tourism development. In their study, no important relation between other variables including age, gender, income, place of residence, length of residence and perceived tourism impacts were found.

Jackson and Inbakaran (2006) who evaluated residents' attitudes toward tourism development in Regional Victoria, Australia, noted that there were no relationships between socio-demographic variables and negative perceived impacts but they founded significant relationships between demographic indicators and support for tourism development. They argued that male, single, older, educated and long term residents are likely to be more supportive for tourism development and those who are not directly involve in tourism sector are more likely to be involved in tourism promotion than the residents with some tourism jobs connection. In addition, those who are female, mid-30s years old, married and without strong business connection to tourism are act positively or negatively in response to tourism development.

Mason and Cheyne (2000) found that, while women appreciated positive impacts, including the provision of a community facility and benefits by tourism, to a greater extent than men, they were more opposed to tourism development because of the perceived negative impacts.

Williams and Lawson (2001) examined residents' perceptions of the effects of tourism on their community. They segmented the sample into four different opinion groups by using

cluster analysis. According to their findings those residents least in favor of tourism consider great importance for the community related issues than the other residents. They found no relationship between socio-demographic characteristics and perceived tourism impacts.

Ritchie and Inkari (2006) conducted a study in the Lewes District of southern England. They examined attitudes of the host community towards tourism development. According to the results of their study, levels of income and proximity to the tourist center were major influencing factors. The Haralambopoulos and Pizam (1996) study in Greek island of Samos showed that younger residents have more positive perceptions towards the tourism development.

2.7.2 Community concern

Previous research suggests that the level of concern about the community is likely to affects the perception of tourism impacts and support for tourism development (Allen et al., 1988; Gursoy & Rutherford, 2004; Gursoy et al, 2002; Perdue et al., 1990). Concerns about local issues such as the environment, educational and health status, security and recreational opportunities may affect the perceived overall positive and negative impacts of tourism (Gursoy et al., 2002).

According to Gursoy and Rutherford (2004, p. 511), residents with a higher level of concerns about their community and community issues are more likely to perceive tourism as creating economic and cultural benefits for their community. Gursoy et al. (2002) suggested the greater the concern the residents feel for their community, the more they support tourism development.

2.7.3 Community attachment

The community attachment measures level of social bonds such as social participation, friendships (Gursoy et al., 2002) and host community's sentiments toward their community (Jurowski et al., 1997).

A number of scholars have suggested that attachment to the community is one of the factors that affects people's perception of tourism impacts and in turn their support for tourism

development (Gursoy & Rutherford, 2004; Gursoy et al., 2002; Jurowski et al., 1997; Mason & Cheyne, 2000; McCool & Martin, 1994; Um & Crompton, 1987; Williams et al., 1995).

The results of the study conducted by Jurowski et al. (1997) showed a direct relationship between community attachment and perceived economic, social and environmental impacts of tourism.

Gursoy and Rutherford (2004, p. 510) found that people who are more attached to their community are more likely to view tourism as having positive economic and social impacts. Their Findings also suggested residents who are highly attached to their community are more likely to view the state of the local economy favorably than residents who are not highly attached.

Mason and Cheyne (2000) studied residents' attitudes in a rural area in New Zealand, reported relation between levels of community attachment and perceived positive and negative impacts of tourism. In a study of New Braunfels, Texas, Um and Crompton (1987) found there were significant negative correlations between residents' perceptions of overall tourism impacts and their attachment level. The more attached residents were to the community the less positively they perceived impacts of tourism. Findings of the studies conducted by Williams et al. (1995) and McCool and Martin (1994) were proposed similar results.

McCool and Martin (1994, p. 33), suggested people highly attached to communities viewed the costs and impacts of tourism with more concern than those relatively unattached.

2.7.4 Utilization of tourism facilities and services

Having the advantage of using tourism facilities and services by residents may affect their perceptions of tourism impacts and support for tourism development. They may perceive more positive impacts and support more tourism development if they find tourism as a phenomenon provides more recreational opportunities for the community (Allen et al., 1994; Gursoy & Rutherford, 2004; Jurowski et al., 1997). Jurowski et al. (1997) supposed that the resource user believes that tourism development will bring economic and social benefits to the community and more importantly, will improve the natural environment.

Gursoy et al. (2002) did not find any relation between utilization of tourism facilities and the perceived benefits of tourism. Similar to this study, the findings of Gursoy and Rutherford (2004) also showed that use of tourism facilities and services by residents did not have any significant relationship with the economic benefits, social costs, social benefits, or cultural benefits, but is likely to influence the cultural costs of tourism.

Lankford and Howard (1994) argued that perceptions of how tourism affects their own personal welfare and lifestyle are the main discriminator of the extent to which local residents accept or reject tourism impacts.

O'Leary suggested that residents who participated in outdoor recreation would have perceived the negative impacts of tourism higher and the positive impacts lower (cited in Gursoy & Rutherford, 2004).

2.7.5 General understanding of economic benefits of tourism remaining in the society

Social representation theory is based on the concept that “residents have representations of tourism which underpin their perception of impacts, formed by direct experiences, social interaction and other sources of information, such as the media” (Ritchie & Inkri, 2006, p.30). One of the most important representations for local community is economic benefits of tourism. This factor is about the residents’ perception of tourism benefits, such as increasing household income, job opportunities for residents, and those who received these benefits.

General understanding of economic benefits of tourism was examined in few similar studies as an exogenous variable that affects perceived tourism impacts or support for tourism development. Jurowski et al. (1997) found a direct positive relationship between economic gain and support for tourism development. According to their study, potential for economic gain also positively influences the perceived tourism impacts.

Andriotis (2004) suggested that highly educated Cretan agreed that tourism benefits a small group of people in the region.

2.8 Community support for tourism development

For successful tourism development, host communities support is critical and tourism must have the support of local community (Allen et al., 1988; Andereck & Vogt, 2000; Andriotis,

2002; Ap, 1992; Cooke, 1982; Davis & Morais, 2004; Huh & Vogt, 2008; Inskeep, 1991; Ko & Stewart 2002; Lankford, 1994; McGehee & Andereck, 2004; Murphy, 1985; Ritchie, 1993; Sirakaya et al., 2002; Williams & Lawson, 2001).

According to what Allen et al. suggest, “for a tourism-based economy to sustain itself in local communities, the residents must be willing partners in the process. Their willingness to serve as gracious hosts is critical to the success of tourism. Therefore, residents must be involved in the planning and they must be informed and consulted about the scope of development” (1988, p.16).

Study of factors affecting local community’s support for tourism development in past three decades has been one of the areas of interest for researchers (Huh & Vogt, 2008). These factors include environmental impacts of tourism (see 2.6.1); socioeconomic impacts of tourism (see 2.6.2); socio-demographic factors (see 2.7.1); community concern (2.7.2); community attachment (see 2.7.3); utilization of tourism facilities and services by residents (see 2.7.4) and general understanding of economic benefits of tourism (see 2.7.5). Figure 3.2, in chapter three, depicts the proposed model of support for tourism development.

2.9 Modeling local community attitudes toward tourism development

Local community perceptions toward tourism are very important because these perceptions give shape to the behavior of host communities in relation to tourists and can affect their satisfaction. “Perceptions rather than reality are what motivate residents to act or not to act in a certain way” (Andriotis & Vaughan, 2003, p.173). On the other hand, local population participation and cooperation is a vital factor of successful nature-based tourism development (Yu, Chancellor, & Cole, 2011). Since local populations’ perception of tourism impacts is one of the important determinants of successful tourism development, various authors have discussed about it.

For instance, Chen (2001) assessed tourism impacts from urban residents’ perspective in southeastern Virginia and revealed four impact factors: economic benefits, social costs, cultural enrichment, and environmental deterioration and argued that cultural impacts did not have a direct effect on residents’ support for tourism, but economic and social concerns tended to have more influences in perceived total tourism impacts.

Lankford (1994) studied attitudes and perceptions of residents in six counties within the Columbia River Gorge region of Oregon and Washington and stated that the key actors in the community development process differ significantly with regard to their support for tourism development and promotion and tourism play a major economic role in the community by providing jobs.

Lawson, Williams, Young and Cossens (1998) studied residents' attitude toward tourism in 10 New Zealand destinations. They summarized main influencing factor as follow: guest-host ratio, perceived cultural or psychic distance between the host and the guest, economic dependence on tourism, host's control over decision-making, stage of life cycle, degree of seasonality, type of tourism encountered within the community. They argued that in all studied areas there is a general belief that tourism is a good thing for New Zealand, especially in the context of the economy and employment but rather paradoxically, people are less inclined to admit that tourism has been of real benefit to them.

McCool and Martin (1994) studied community attachment and attitudes toward tourism development in Montana. They found a significant relationship between length of residency and attachment and argued that people living in communities with higher levels of tourism development have the strongest sense of community attachment. People highly attached to communities viewed the costs and impacts of tourism as well as the equitable sharing of those costs with tourists with more concern than those relatively unattached (1994, p.33).

Andriotis (2005) conducted a study to measure the perceptions of three Cretan community groups (reliant to tourism employment, non-reliant residents and tourism business people) by using social exchange theory as framework and concluded that the three groups expressed a high degree of positivity toward tourism and tourism development.

McGehee and Andereck (2004) examined the factors predicting rural residents' attitudes toward tourism in Arizona using social exchange theory as foundation. They argued that most of the personal characteristics except age and having lived in the community as child, did not predict attitudes toward tourism but dependence on tourism was a predictor and the existence of personal benefit from tourism was not a significant predictor of support for tourism planning.

Jurowski et al., (1997, p.5) conducted a study in Mt. Rogers National Recreation Area, southwest Virginia, and developed a model of residents' support of tourism. Using path analysis, the primary cause variable were resident perceptions of tourism's impact, and four other variables (economic gain, resource use, community attachment and ecocentric attitude) that the model suggests affect resident perception of the three types of impacts namely economic, social and environmental impacts and directly and indirectly affect support for nature-based tourism.

They found that the more potential for economic gain, the more support for tourism development and more perceived positive tourism impacts. According to their results, the resource user believes that tourism development will bring economic and social benefits to the community and more importantly, will improve the natural environment.

Gursoy, Jurowski and Uysal (2002) proposed a model for host community attitudes toward tourism development according to social exchange theory. Their findings revealed that the host community perceptions are affected by the level of concern, community attachment, the degree to which they are environmentally sensitive and the extent they use the same resource base that tourists use. Their model proposed that support for tourism development is influenced by the perceptions of its costs and benefits and the state of the local economy. This model also argued that the state of the local economy influences the perception of the benefits and costs of tourism development.

Gursoy and Rutherford studied host attitudes toward tourism in Washington and Idaho and improved the model provided by Gursoy et al. (2002). They proposed that the host community supporting for tourism development is affected by nine variables: the level of community concern, ecocentric values, utilization of tourism resource base, community attachment, the state of the local economy, economic benefits, social benefits, social costs, and cultural benefits (2004, p.495). Their findings also confirm the usefulness of social exchange theory as a framework for explaining the host community's attitudes toward tourism. They segregated positive and negative impacts into five cost and benefit factors: economic benefits, social benefits, social costs, cultural benefits, and cultural costs.

Gursoy, Chi and Dyer (2010) studied local residents' attitudes toward mass and alternative tourism in Sunshine Coast, Australia. They recognized level of community concern, community attachment, the degree to which they are environmentally sensitive, use of the tourism resource base, state of the local economy, and the perceived impacts of tourism development as the important factors that affect local community support for tourism development.

They proposed a model according to Gursoy and Rutherford (2004) which stated that the perceptions of economic benefits, social benefits, social costs, socioeconomic costs, cultural benefits, and the state of the local economy are the important factors for local residents' support for tourism development. They also recognized community concern, community attachment, sensitivity to environment and the extent of using tourism resources as the important variables that have influence on local perceptions of tourism

In the tourism research, two frameworks have dominated in community attitudinal research: social exchange theory and social representations theory (Andriotis & Vaughan, 2003). The social exchange theory frequently guides empirical research on tourism impacts, other important theories and conceptual frameworks e.g., the hierarchy of needs and the irritation index (Chen, 2001). This study use social exchange theory as framework.

2.10 Social exchange theory (SET)

SET has emerged in 1920s (Cropanzano & Mitchell, 2005). This theory has roots in sociology (Blau, 1964), social psychology (Homans, 1958; Gouldner, 1960), anthropology (Firth, 1967) and microeconomics. Social exchange "refers to voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others" (Blau, 1964, p.91). These actions involve a series of interactions and transactions among people (Emerson, 1976) that have the potential to generate high quality relationships (Cropanzano & Mitchell, 2005).

Ritzer (2006) supposed that the key assumptions of exchange theory, summarized recently by Molm and Cook (1995, p.210), include the following:

“(1) Behavior is motivated by the desire to increase gain and to avoid loss (or to increase outcomes that are positively valued and to decrease outcomes that are negatively valued).

(2) Exchange relations develop in structures of mutual dependence (both parties have some reason to engage in exchange to obtain resources of value and there would be no need to form an exchange relation).

(3) Actors engage in recurrent, mutually contingent exchanges with specific partners over time (i.e., they are not engaged in simple one-shot transactions).

(4) Valued outcomes obey the economic law of diminishing marginal utility (or the psychological principle of satiation)”.

SET is a general sociological theory concerned with understanding the exchange of resources between individuals and groups in an interaction situation (AP, 1992, p.668). Many forms of social interaction in addition to economic transactions can be a kind of exchange of benefit.

Foa and Foa (1974, 1980) suggested six types of resources in exchange: love, status, information, money, goods and services. People engage in an exchange process, after cost-benefit analysis and assessing opportunity costs for different alternatives. When the people believe the benefits of an exchange exceed the costs and the opportunity cost is low, then the SET predict they will take part in interaction. Skidmore argued that SET suggests individuals will engage in exchanges if (1) the resulting rewards are valued, (2) they believe the exchange is likely to produce valued rewards, and (3) perceived costs do not exceed perceived rewards (cited in Jennings & Nickerson, 2006, p. 195).

Bystrazanowski (1989) referred to ‘play theory’, ‘compensation theory’ and ‘conflict theory’ as number of theories which have been used to explain the nature of local populations’ perceptions of tourism impacts, but concluded that none of them were able to provide a theoretical framework for explain residents’ perceptions toward tourism impacts (Ap, 1992, p.667).

Attribution theory (Pearce, 1989), dependency theory (Preister, 1989) and social representation theory (Pearce, Moscardo & Ross, 1996) also have been suggested to explain residents' perception toward tourism impacts. Ap (1990, 1992), Nash (1989), Perdue et al. (1990), Andriotis and Vaughan (2003) suggested SET is an appropriate framework for examining residents' perceptions toward tourism impacts.

In tourism context, SET assumes that resident' attitudes and perceptions toward tourism and later support or opposition to its development will be influenced by their understanding of impacts in society. It is postulated that residents support tourism for their community in order to fulfill their economic, social, psychological (Ap, 1992) and environmental needs.

Therefore, a person that perceives benefits from an exchange with tourists is likely to evaluate it positively and supports tourism development, one that perceives costs is likely to evaluate it negatively and oppose to its development (Andereck, Valentine, Knopf & Vogt, 2005; McGehee & Andereck, 2004).

As Ap (1992) suggested, the advantages of SET are that it can explain positive and negative perceptions and can examine interactions at the individual or community level. SET specifies that local populations expect to get tourism benefits in exchange for resources they provided to tourism industry.

According to SET "Residents may have more positive perceptions of tourism if they perceive that their tourism exchanges bring them benefits, but will have negative perceptions of tourism if they perceive these benefits to be outweighed by costs" (Ritchie & Inkari, 2006, p.30). In this study social exchange theory was used as the theoretical framework.

CHAPTER 3:

RESEARCH METHODOLOGY

3.0 Introduction

Success and quality of the studies depend on the accuracy of the research plan, set appropriate variables and selection of correct methods and tools for collecting relevant data. This chapter includes the methodological aspects of study including research design, variables, research questions, data collection techniques and analysis and description of study areas.

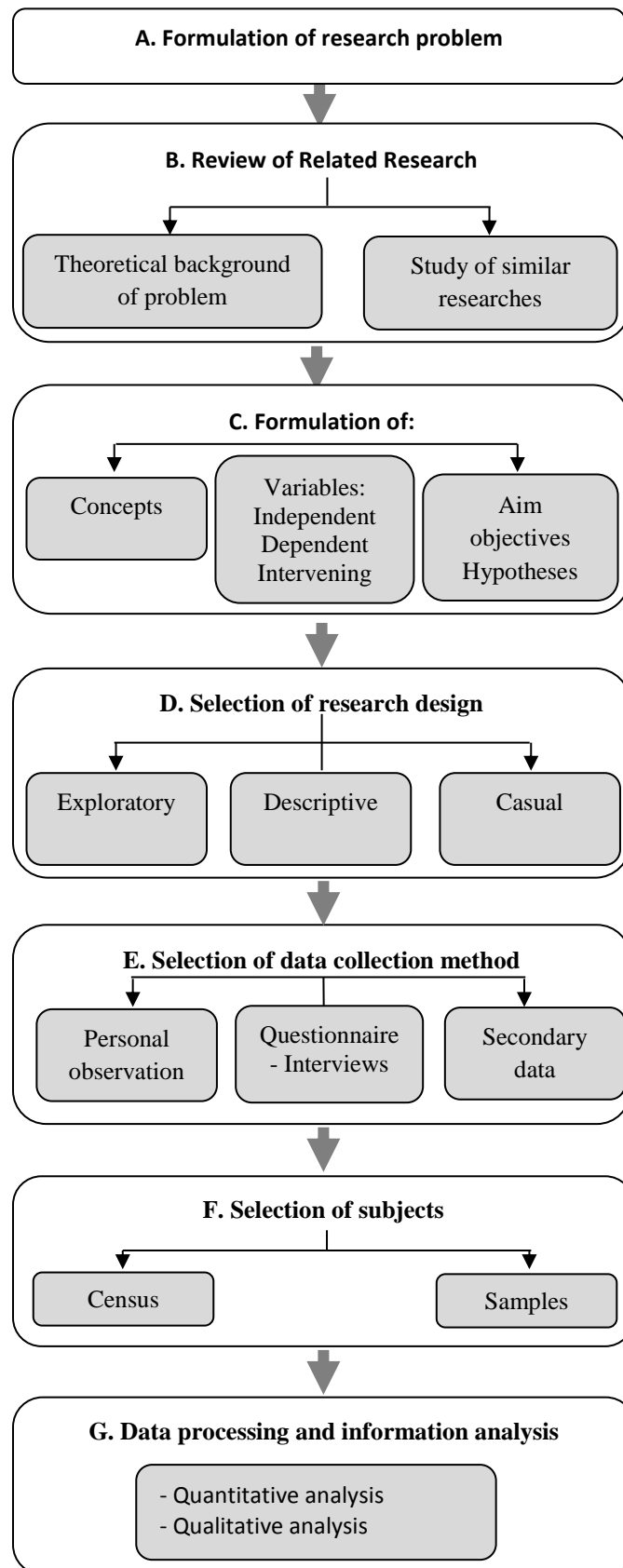
3.1 Research planning

Scientific research is a process that starts from research design. Many investigators proposed different steps for research design (e.g. Pizam, 1994; Oppenheim, 1992; Creswell, 2007; Ryan, 1995; Veal, 1997; Bordens & Abbott, 2002; Punch, 1998). Although, the number of stages is different the sequence of steps is similar. This research used the model proposed by Pizam (1994). Pizam (1994, p.91) divided the tourism research investigation into seven sequential steps:

- A- Formulation of research problem,
- B- Review of related research,
- C- Definition of concepts, variables and hypotheses,
- D- Selection of research design,
- E- Selection of data collection methods,
- F- Selection of subjects,
- G- Planning of data processing and analysis.

According to this model, the steps of research have been formulated in figure 3.1.

Figure 3.1: Research process



Source: Based on Pizam, 1994 after Andriotis, 2002

3.1.1 Formulation of research problem

All scientific examination begins with the formulation of research topic. Pizam (1994) proposed that the general topic of study suggested by practical concern and scientific or intellectual curiosity. Pizam (1994, p. 91-93) proposed three categories for topics that arise from practical concerns as below:

1. Provision of information on the need for some new or enlarged facilities or services. Feasibility studies, physical and land use studies tourism impact assessments are included in this category.

2. Provision of information concerning the probable consequences of various courses of action for deciding among proposed alternatives; for example, it would be important for decision makers to know if nature-based tourism development in a certain destination would be popular and profitable.

3. Prediction of some future course of events in order to plan appropriate actions, for example the impact of economic recession on global tourism trend in coming years.

According to Pizam (1994, p. 93) scientific or intellectual interests present a variety range of topics for research that arise:

1. From a concern with some social problem (demonstration effect or cultural lag).
2. From an interest in some general theme or area of behavior (destination images change or tourist motivation).
3. From some body of theory (economic theory, social theory).

In this study research topic was chose based on practical and scientific concerns along with personal interest. From the scientific standpoint, host communities' perception and attitudes towards tourism impacts and development has been a growing area research. The identification of nature-based tourism impacts in Mazandaran from the host community point of view and the factors that predict local community attitudes towards tourism development were an almost untouched subject in this touristic area. From the practical aspect this study is the first one that investigates both the environmental and

socioeconomic impacts of nature-based tourism in Mazandaran and provides information for decision makers and investors about local community perception of tourism impacts.

3.1.2 Review of related research and conceptual framework

After the research topic was chose the theoretical background of study must be review. Research problem, aim and objectives, hypotheses, variables and questions should be formulated according to theoretical base of study. This will allow one to compare the results of our research with findings of previous studies concerned with the same notion (pizam, 1994).

In this research different resources including: books, scholarly articles, tourism and other journals in social science, theses and dissertations, newspapers, statistical databases, websites and weblogs, reports and maps were used to provide theoretical base of nature-based tourism impacts and their integration in Mazandaran.

The conceptual framework of this research (figure 3.2) was developed based on the models proposed by Jurowski et al. (1997), Gursoy et al. (2002) and Gursoy and Rutherford (2004). All three studies have examined the attitudes of local community in Virginia (USA) which is a developed area.

Jurowski et al. (1997) suggested that support of tourism is a influenced by perceived economic, social and environmental impacts, use of the tourism resources by residents, ecocentric attitudes, potential economic gain and community attachment. According to their results, four variables including use of the tourism resources by residents, ecocentric attitudes, potential economic gain and community attachment affected residents' perception of tourism impacts and therefore directly or indirectly affected support for tourism.

Opportunities for shopping, opportunities for recreation, traffic congestion, crime rate local services, the preservation of the local culture, and relationships between residents and tourists were variables that measured residents' perception of social impacts of tourism. The quality of natural environment was the only item measured environmental impacts.

Gursoy et al. proposed a tourism support model based on the host community attitudes towards tourism development in Virginia (USA). The findings of this study revealed that the host community support is affected by the level of concern, ecocentric values, utilization of resource base and perceived costs and benefits of the tourism development. According to their findings, support for tourism development is influenced by the perceptions of its costs and benefits and the state of the local economy. It proposed that these perceptions are affected by the concern residents have for their community, their emotional attachment to it, the degree to which they are environmentally sensitive, and the extent to which they use the same resource base that tourists use (2002, p.79).

They measured perceived benefits by factors including employment prospects, opportunities for shopping, availability of recreation and tourism revenues for government. Perceived costs were measured by assessing respondents' opinions towards two items: crime rate and traffic congestion.

In another study Gursoy and Rutherford (2004) classified the perceived impact into five groups: economic benefits; social benefits; social costs; cultural benefits; and cultural costs. According to them, the perceptions of these five impact factors and the state of the local economy are the determinants of community support for tourism. These perceptions were influenced by residents' concern for their community, their emotional attachment to it, the degree to which they are environmentally sensitive, and the extent to which they use the same resource base that tourists use.

Figure 3.2 shows the proposed model of this research. According to this model, the local community support for tourism development is a function of their perception of tourism impacts. The perception of local community of these impacts influences their assessment of general tourism's costs and benefits and in turn local community's support for tourism. According to social exchange theory, if they perceived the positive impacts more than negative impacts then the overall result of cost-benefit analysis will be positive and they will support tourism development otherwise they would oppose it.

It also proposes that the local community perceptions of tourism impacts are a function of their attachment to the community, the level of concern they have for it, the extent to which they use the tourism resources or tourism superstructures and the extent to which they believe tourism's economic benefits remain in their community.

Almost all studies on relationship between residents' perception of economic impacts of tourism and their attitudes towards it indicate a positive relationship (Andriotis, 2004; Keogh, 1990; Jurowski et al, 1997) but studies on environmental and socioeconomic impacts show different and sometimes contradictory results. Based on literature the tourism impacts segregate into positive socioeconomic, negative socioeconomic, positive environmental and negative environmental.

The model can be displayed as follows:

$$\mathbf{ST} = \mathbf{F}(\mathbf{PSEI}, \mathbf{NSEI}, \mathbf{PEI}, \mathbf{NEI})$$

And

$$\mathbf{PSEI} = \mathbf{F}(\mathbf{CC}, \mathbf{CA}, \mathbf{UT}, \mathbf{ECRC})$$

$$\mathbf{NSEI} = \mathbf{F}(\mathbf{CC}, \mathbf{CA}, \mathbf{UT}, \mathbf{ECRC})$$

$$\mathbf{PEI} = \mathbf{F}(\mathbf{CC}, \mathbf{CA}, \mathbf{UT}, \mathbf{ECRC})$$

$$\mathbf{NEI} = \mathbf{F}(\mathbf{CC}, \mathbf{CA}, \mathbf{UT}, \mathbf{ECRC})$$

In which:

ST= Support for Tourism Development

PSEI= Positive Socioeconomic Impacts

NSEI= Negative Socioeconomic Impacts

PEI= Positive Environmental Impacts

NEI= Negative Environmental Impacts

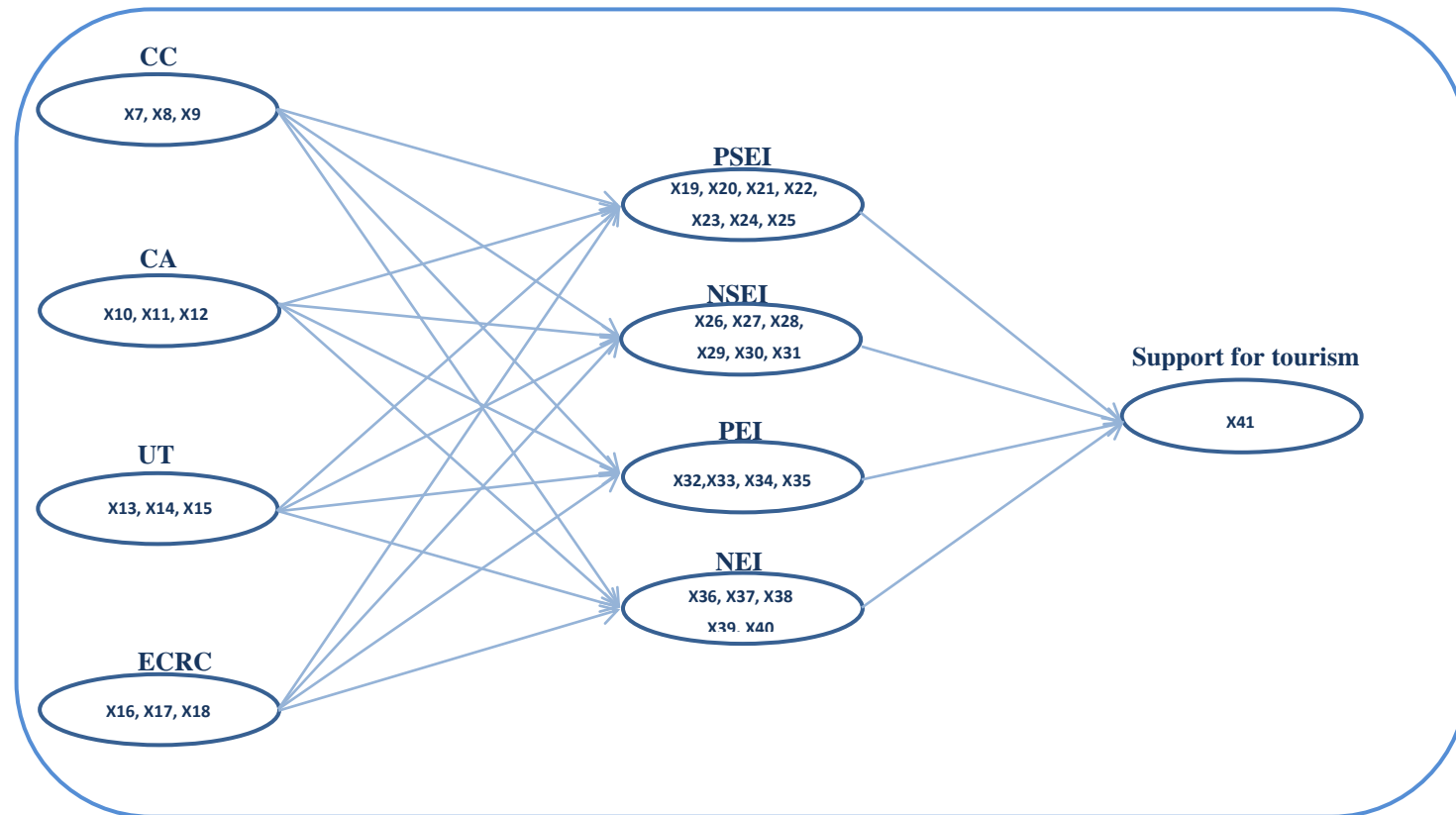
CC= Community Concern

CA= Community Attachment

UT= Utilization of Tourism Resources

ECRC=Economic Benefits Remaining in the Community

Figure 3.2 Model of support for tourism development



Source: own compilation

X7=Concern about natural resources; **X8**=Concern about crime rate; **X9**=Concern about culture and traditions; **X10**=Knowing what goes in the community; **X11**= to be pleased or sorry if you move away; **X12**=to be happy living here; **X13**= Availability of favorite recreational places; **X14**=Being satisfied with using tourism services; **X15**=keep infrastructure at a high standard; **X16**=More businesses for local people; **X17**=jobs are more available for foreigner; **X18**=tourism interest goes to few people; **X19**=increase recreational facilities; **X20**=increase job opportunity; **X21**=Encourage cultural activities; **X22**=increase residents' proud; **X23**=shape a good feeling about area among tourists; **X24**=has a positive impact on area's cultural identity; **X25**=increase local people acquaintance with other culture; **X26**=Increase crime rate; **X27**=Changes way of life; **X28**=overcrowded beaches; **X29**=Increase cost of living; **X30**=changes the traditional dress; **X31**=local people use fewer local dialect; **X32**=increase local awareness and appreciation of the environment; **X33**=improves the appearance of area; **X34**=provides incentive for conservation of natural resources; **X35**=keep attraction with more care; **X36**=increase noise; **X37**=increase traffic; **X38**=increase litter problems; **X39**=increase pollution in beaches; **X40**=deteriorate natural environment; **X41**= To support more tourism development.

3.1.3 Formulation of main variables, aim, objectives and hypothesizes

The main variables of research were categorized into dependent, independent, and intervening variables.

3.1.3.1 Dependent and independent variables

The variables used to measure local community support for tourism development and their perceptions of tourism impacts. These variables were defined in previous studies. The ultimate dependent variable is support or oppose for NBT. Local community's support for nature-based tourism in Mazandaran was assessed by their answers to a five levels Likert-type scale in which, 1=strongly oppose, 2= oppose, 3= neither support nor oppose, 4= support, 5= strongly support.

Seven items measured the local community's perceptions of positive socioeconomic impacts of nature-based tourism in Mazandaran. These were increasing employment opportunities, increasing recreational facilities, Encouraging cultural activities, increasing local community proud, shaping a good feeling about area among tourists, improving area's cultural identity and increasing local people acquaintance with other culture.

Respondents expressed their attitudes towards socioeconomic statements by choosing one option on a 5 level Likert scale with 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree to show their disagreement or agreement with six statements.

Higher scores of statements mean more positively attitudes towards socioeconomic impacts of nature-based tourism in Mazandaran.

For measuring local community perception of negative socioeconomic impacts of tourism, six items were used. These items were increasing crime rate, changing way of life, overcrowding beaches and mountain areas, increasing cost of living, changing the traditional dresses and fewer use of local dialect. Residents were asked to indicate their agreement or disagreement on a 5 level Likert scale with 1= strongly disagree, 2= disagree, 3= neither agree

nor disagree, 4= agree, 5= strongly agree to show their disagreement or agreement with six statements.

Four items were used to measure residents' perception of positive environmental impacts of nature-based tourism. These items were increasing local awareness and appreciation of the environment, improving the appearance and landscape of area, providing incentive for conservation of natural resources and keeping natural attractions with more care. Respondents were asked to rate the positive environmental impacts on a 5 level Likert scale with 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree, 5= strongly agree to indicate their perceptions.

Based on literature five items were used to measure negative environmental impacts of nature-based tourism in Mazandaran. These were increasing noise, increasing traffic problem, increasing litter problems, increasing pollution in beaches, forests, mountains and deteriorating the natural environment. Residents expressed their perceptions towards negative environmental impacts of nature-based tourism with indicating their agreement or disagreement to the five statements on a 5 level Likert scale with 1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree and 5= strongly.

3.1.3.2 Independent and exogenous variables

Based on literature and pretest of questionnaires four variables including community concern, community attachment, utilization of tourism resources and superstructures and the extent to which the economic benefits of tourism remain in community were used as the independent and exogenous variables in this research.

3.1.3.2.1 Community concern

Community concern measured the level of concern that local communities have about issues related to their society. Three items were used to measure local community concern. They have indicated how concern they were about condition and quality of natural resources, crime rate and preserving local culture and traditions. A five level scale ranging from 1= not at all to 5= very much was used.

3.1.3.2.2 Community attachment

This variable examined how do residents feel attached to their society. Three items were used for measuring this variable. These were the extent to which what is happening in the society is important for residents; extent to which the local communities are happy to live in their community, and how pleased or sorry would residents be if they move away from their society. For the first two items answers ranged from 1= not at all to 5= very much and for the last item from 1= very pleased to 5= very sorry.

3.1.3.2.3 Utilization of tourism facilities and services by residents

Three items were used to measure how important are the use of tourism facilities and services for local community. A five level Likert scale where 1= completely disagree on one end and 5= completely agree on the other end was used to measure respondent's attitudes towards statements related to use of tourism facilities and services in their community. The availability of favorite places to go during leisure time, using local tourism services is most satisfying and keeping infrastructure at a high standard were three items for measuring this variable.

3.1.3.2.4 Remaining economic benefits in society

The last independent variable is the residents' perceptions of the amount of economic benefits remain in their community and so does not leak. Three items were used to measure general understanding of residents over the extent to which economic benefits of tourism remain in their community. They were asked if local people own more businesses, jobs are more available for foreigner and tourism interest goes to few people in society. A five level Likert scale where 1 represented completely disagree and 5 represented completely agree were used to measure respondents' views.

3.1.3.3 Intervening variable

Socio-demographic characteristics of respondents were regarded as intervening variable in proposed model. Derived from literature, age, gender, level of education, length of residence in the area, level of income, marital status, place of residence, job status and being employed

in tourism sectors are items being used for measuring the correlation between socio-demographic variable and other dependent and independent variables.

3.1.3.4 Aim, objectives and hypothesizes

Once the literature review is completed, the next step is to formulate and define concepts, aim and objectives, questions and hypotheses of research. The literature review showed the lack of understanding of resident responses to the impacts of tourism on local community in destinations with limited number of international visitors and unplanned and unstructured tourism industry. A large number of past studies conducted in countries like United States, Greece, Turkey, and some other destination, which are among developed and well-known destinations in field of tourism.

The above mentioned deficiencies along with the lack of studies on nature-based tourism impacts in Iran led to choose Mazandaran, as a famous touristic area, in north of Iran and the adoption of this aim:

The aim of this study is to understand local population perceptions of socioeconomic and environmental impacts of nature-based tourism in Mazandaran, Iran and factors influencing their support for tourism in order to enable researchers, planners and public bodies to better understand the attitudes, perceptions, and values of host communities who directly and indirectly involved in the tourism industry and host tourists in the destinations to ensure the sustainability of tourism development in area and improve and eliminate problems which arise from unplanned tourism development.

In order to achieve the above-mentioned aim, the following research objectives were developed:

- To identify the factors affecting local community support for tourism development.
- To identify the factors that predicts local community attitudes towards nature-based tourism impacts in Mazandaran.
- Understand residents' perceptions and attitudes regarding socioeconomic and environmental impacts of nature-based tourism in Mazandaran.
- Examine the relationship between community concern and perception of nature-based tourism impacts.
- Investigate the relationship between community attachment and perception of nature-based tourism impacts.
- Study the relationship between utilization of tourism facilities by residents and their perception of nature-based tourism impacts.
- Examine the relationship between residents' opinion about the amount of economic benefits remain in their society and their perception of nature-based tourism impacts.
- Examine the relationship among residents' socio-demographic characteristics, type and level of involvement in tourism and their relation to perception of nature-based tourism impacts and,
- According to the results of study, propose appropriate strategies and policies to develop more sustainable form of tourism in Mazandaran.

In order to investigate the aim and objectives of research, various variables were identified. Variables according to their relationships with each other can be classified under four categories: independent, dependent, intervening and control (Pizam, 1994).

- Independent variable is the variable that typically being changed and influences the results of study. Independent variables in this thesis can be represented as community concern, community attachment, utilization of tourism facilities by residents and general understanding of the amount of economic benefits of tourism remain in the community (See 3.1.3).

- Dependent variables are assumed to be the effect of independent variables (Pizam, 1994). After review of related research, the following dependent variables were formulated: support for tourism development, positive socioeconomic, negative socioeconomic, positive environmental and negative environmental impacts of nature-based tourism (see 3.3.2). It should be noted that overall impacts of tourism were considered as independent variables for predicting support for tourism development.

3.1.3.5 Research questions

Based on research aim and objectives the 21 questions were developed. The questions are provided in pages five and six (see part 1.2).

3.1.3.6 Research hypothesizes

Based on research aim, objectives and questions the following hypothesizes were proposed. Direction of the relationships between variables suggested based on literature review.

Hypothesis 1a. A direct positive relationship exists between the perceived PSEI and residents' support for NBT development.

Hypothesis 1b. A direct negative relationship exists between the perceived NSEI and residents' support for NBT development.

Hypothesis 1c. A direct positive relationship exists between the perceived PEI and residents' support for NBT development.

Hypothesis 1d. A direct negative relationship exists between the perceived NEI and residents' support for NBT development

Hypothesis 2a. There is a direct positive relationship between the level of community concern and the perceived PSEI.

Hypothesis 2b. There is a direct negative relationship between the level of community concern and the perceived NSEI.

Hypothesis 2c. There is a direct positive relationship between the level of community concern and the perceived PEI.

Hypothesis 2d. There is a direct negative relationship between the level of community concern and the perceived NEI.

Hypothesis 3a. There is a direct positive relationship between attachment to the community and the perceived PSEI.

Hypothesis 3b. There is a direct negative relationship between attachment to the community and the perceived NSEI.

Hypothesis 3c. There is a direct positive relationship between attachment to the community and the perceived PEI.

Hypothesis 3d. There is a direct negative relationship between attachment to the community and the perceived NEI.

Hypothesis 4a. There is a direct positive relationship between the utilization of tourism facilities by residents and the perceived PSEI.

Hypothesis 4b. There is a direct negative relationship between the utilization of tourism facilities by residents and the perceived NSEI.

Hypothesis 4c. There is a direct positive relationship between the utilization of tourism facilities by residents and the perceived PEI.

Hypothesis 4d. There is a direct negative relationship between the utilization of tourism facilities by residents and the perceived NSEI.

Hypothesis 5a. There is a direct positive relationship between the understandings of economic benefits remains in the society and the perceived PSEI.

Hypothesis 5b. There is a direct negative relationship between the understandings of economic benefits remains in the society and the perceived NSEI.

Hypothesis 5c. There is a direct positive relationship between the understandings of economic benefits remains in the society the perceived PEI.

Hypothesis 5d. There is a direct negative relationship between the understandings of economic benefits remains in the society and the perceived NEI.

3.1.4 Research design

The next step after formulating goal, objectives, variables, and hypotheses is research design. Selltiz, Jahoda, Deutsch, & Cook (1965, p.50) define research design as “the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.” Research design is a conceptual framework for conducting the research, in fact it points out the steps of research and their order.

Based on Selltiz, Wrightsman and Cook, research design includes:

- 1- Formulation of research problem,
- 2- Processes and appropriate methods for data collection,
- 3- Define the study population and
- 4- Choose appropriate methods for processing and analyzing data (cited in Pizam, 1994, p. 97).

Research design can be categorized in three groups: exploratory, descriptive or diagnostic and experimental or casual (Pizam, 1994).

3.1.4.1 Exploratory designs

Selltiz et al. argued that exploratory research studies are mainly undertaken for more precise investigation of a problem or developing hypotheses for more study and clarification of concepts or discovery of ideas and insights (cited in Pizam ,1994). Exploratory designs “seek relations” rather than “predict relations” (Pizam, 1994). In exploratory design the problem is too ambiguous to be formulated and tested via statistical tests.

There are a significant number of studies in the field of host community attitudes towards tourism which developed factors and variables related to this topic that clarify concepts and provide appropriate vision over tourism impacts issues (Andriotis, 2000). So since the main problem of this research has been investigated by other researchers, the exploratory design could not been adopted and the other types of research design will be used.

3.1.4.2 Descriptive designs

Descriptive designs are used for one or more of the following purposes (Churchill, 1987, p.53-54 cited in Pizam, 1994):

- 1- “To describe the characteristics of certain groups,
- 2- To estimate the proportion of people in a specific population who behave in a certain way and
- 3- To make specific predictions or discover relations and interactions among variables.”

Descriptive research studies describe the characteristics of particular phenomenon, individual or group. In most descriptive studies, the researcher develops hypotheses, gathers related data, and then according to sample analyses makes some statements about population. Descriptive designs can be classified under two major types: surveys and case studies (Pizam, 1994).

According to Kerlinger and Lee (2000,p.599), survey research studies large and small populations by selecting and studying samples chosen from the population to discover the relative incidence, distribution, and interrelations of variables. Survey research studies are commonly used in tourism studies (Beeton, 2005). As Robson (1993, p.49) proposed, surveys refer to the “collection of standardized information from a specific population, or some sample from one, usually but not necessarily, by means of questionnaire or interview” (cited in Andriotis, 2000). This research by using surveys and design questions could investigate local community attitudes towards tourism impacts and evaluate these impacts and residents’ support for tourism development in Mazandaran.

Case studies are thorough examinations of specific social settings or particular aspects of social settings (Black & Champion, 1976, p.90 cited in Pizam, 1994). In general, a case study is an empirical inquiry which:

“Investigates a contemporary phenomenon within its real-life context: when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used” (Yin, 1984, p. 23 cited in Pizam, 1994).

3.1.4.3 Casual designs

Casual design is a method for investigate the relationship between one or more independent variables and dependent variables. According to Malhotra (1996, p.97) casual designs attempt:

- “To understand which variables are the causes (independent variables) and which variables are the effects (dependent variables) of a phenomenon.
- To determine the nature of the relationship between the causal variables and the effect to be predicted” (cited in Andriotis, 2000).

This study tries to recognize the relationship between independent and dependent variables related to tourism impacts in Mazandaran. Particularly, some relations will be explored such as:

- The relationship between tourism impacts and support for tourism;
- The relationship between socio demographic variables and different type of tourism impacts;
- The relationship between community concern and perceived tourism impacts;
- The relationship between community attachment and perceived tourism impacts and
- The relationship between the understandings of economic benefits remains in the society and perceived tourism impacts.

3.1.5 Data collection methods

Date collection is an important part of research. Improper data collection method could lead to a deviation of research result. Data collection methods could be categorized in three different groups: investigator observation, investigator or his or her agents communicating with the subjects (for instance, interviews or questionnaires) and secondary resources (Pizam, 1994). All methods of data collection were used in this research.

During interviews with local community, the researcher had opportunity to observe the nonverbal behavior and feedbacks from respondents regarding the questions. Thus, the questions that were unintelligible, vague and unclear for respondents were identified and were excluded from final analysis. For example, “conceptual model of support for tourism

development” (figure3.2) that was initially designed had a factor called “Ecocentric attitude” and the concepts like the balance of nature and ecological catastrophe supposed to measure this factor. Many of the respondents pretend that they know the meaning of these concepts, although their reactions, questions, and feedbacks showed that this factor was completely unfamiliar for them. As a result, it was eliminated and a new factor was suggested based on the local conditions of Mazandaran.

3.1.5.1 Questionnaire design

An important part of the research data were collected through interviews. A questionnaire, originally in English and translated to Persian, consisting of three parts was developed.

Part one: The first part that includes questions about local community perception towards tourism impacts has 39 questions. The respondents were asked to indicate their perceptions of the statements on nature-based tourism impacts by using a five level Likert type scale ranging from 1= strongly disagree to 5= strongly agree. The statements were written in form of positive and negative sentences to avoid bias in responses.

Part two: Second part concerned with residents’ participation in tourism planning and development processes in Mazandaran has four questions. The residents were asked whether they have ever participated in tourism planning and development process in their community.

Part three: The third part raises questions about nine different socio-demographic characteristics of respondents (Appendix I).

3.1.5.2 Pilot study

The questionnaire was written in English and then was translated into Persian. A sample of thirty respondents in Babolsar and thirty residents in Kelardasht were chosen to pretest in order to evaluate content validity of questionnaire and respondents' understanding of questions. In September 2011, face to face interviews were conducted with residents. After the pretest some changes were made including wording of questions, eliminating and changing some questions and changing the order and layout of questions in order to make the questionnaire more understandable.

3.1.6 Sample

In order to examine local community perceptions of nature-based tourism impacts in Mazandaran and their support for tourism development, local residents who have lived at least for one consecutive year in Babolsar or Kelardasht were sampled.

For determining final sample size the Cochran (1977) equation was used. According to this equation a sample size of around 660 for Babolsar and 382 for Kelardasht were chose (table 3.1)

Table 3.1 sample size and response rate

City	Total population	Sample size	Response	
			No	Percent
Babolsar	130000	660	397	60.15
Kelardasht	40000	382	190	49.73

3.1.7 Collecting data

In order to achieve a sample that provides characteristics of the population from which the sample was obtained, systematic sampling technique was used. First the households were classified according to neighborhoods and then in selected streets one out of every three homes was integrated in sample. An adult from each home was interviewed. If the property was a residential complex, up to three households were interviewed. If a house was vacant or an adult was not at home to answer, the interviewer went to the nearby house. Up to 30 households were interviewed in each street.

In Babolsar a group of thirty tourism management students from University of Mazandaran were selected to conduct the interviews. A two-day workshop on how to design a questionnaire and conduct interview was designed and conducted by researcher for students in University of Mazandaran. In Kelardasht 18 members of “sustainable development foundation of Kelardasht” which is an active NGO were volunteers to help researcher in conducting interviews. Since all volunteers had a bachelor degree or were master students and were familiar with research methods, during one-day workshop the principles of doing face to face interviews were taught them.

Due to the comparative limitation and constraint on interviewing man with woman and vice versa in community, the interviewers were divided in groups of two consisting of one female and one male. They were asked if the interviewee was a female, the female interviewer conduct the interview, and if the respondent was a man the male interviewer conduct it. Hereby the researcher tried to reduce the effect of gender on responses, specially provide better situation for female respondents to express their opinions.

The interviews were conducted in September and October 2011. Four hundred and nine questionnaires were completed in Babolsar, 12 questionnaires were excluded from analysis due to missing and incomplete answers. Two hundred and fifteen interviews were done in Kelardasht, 25 questionnaires were eliminated, and 190 complete questionnaires were analyzed. A total of 587 questionnaires were completed accurately and achieved for further analysis.

3.2 Data analysis

The next step in research is data processing and analysis. Statistical Package for the Social Science (SPSS) version 20 for windows was used to analyze findings of research and perform different kind of statistical analyses. Excel program was used for drawing charts.

3.2.1 Descriptive statistics

Descriptive statistics were used to describe the basic features of sample. The frequency distribution, which is a common tool for describing a single variable, was used to describing socio demographic characteristics and distribution of different attitudes. The means are the same as averages and were produced in this research.

3.2.2. Correlation

The correlation is a single number that describes how strongly two variables are related. The chi-square test is probably the most popular test for comparing frequencies in cross-tabulations of two nominal variables to examine whether there is any sort of relationship between the two variables involved in table (Veal, 1997).

The null hypothesis (H_0) assumes that observed and expected values are not significantly different or there is no relationship between the two variables. The alternative hypothesis (H_1) assumes there is a relationship between independent and dependent variables or observed and expected variables are significantly different (Veal, 1997).

In this study, if the level of probability was below 0.05 the null hypothesis was rejected. It means that only those correlations where the value of P is below 0.05 are significantly different from zero (Veal, 1997).

Spearman's rank correlation coefficient (ρ) Spearman's rho was used to assess strength of association between two ranked variables. It can take values from +1 to -1. A ρ of +1 indicates a perfect positive correlation of ranks, a ρ of zero indicates no association between ranks and a ρ of -1 indicates a perfect negative association of ranks. The closer the Spearman correlation coefficient (ρ) is to zero, the weaker the association between the ranks (Johnson & Bhattacharyya, 2010).

Mann-Whitney U test was used to compare differences between response based on means calculated for two independent groups and one dependent variable which has non normal distribution. Kruskal-Wallis analysis of variance was applied for comparison of more than two independent groups. If null hypothesis reject then at least one of the samples is different from the other and the Kruskal-Wallis test leads to significant results.

The Friedman test was applied to measure the differences between groups and ranking variables. Correlation was used to measure the strength of association between variables; afterwards multiple regression analysis was used to examine the casual relationship between variables. Regression analysis is a statistical test which is used for examining the casual relationship between a dependent variable and a set of independent variables (Buglear, 2003; Rogerson, 2001; Veal, 1997).

Using regression, path analysis was conducted to determine which casual variables to include in the model and which paths were important and which one were not statistically important to the model.

Principal components analysis (PCA) or factor analysis was used in order to approve and improve the final indicators which in this study were used for predicting the local community perceptions and attitudes towards nature-based tourism impacts. Factor analysis is often used to reduce the number of variables that might be used to examine a factor.

3.2.3 Sampling adequacy

There are a few methods to detect sampling adequacy: (1) Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy for the overall data set; (2) KMO measure for each individual variable; and (3) Bartlett's test of sphericity.

The KMO measure is used as an index of whether there are linear relationships between the variables and thus whether it is appropriate to run a principal component analysis on data set. Its value can range from 0 to 1, with values above 0.6 suggested as a minimum requirement for sampling adequacy, but values above 0.8 considered good and indicative of principal component analysis being useful.

Table 3.2 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.830
Approx. Chi-Square		4519.239
Bartlett's Test of Sphericity	df	741
	Sig.	.000

Table 3.2 shows the KMO measure was .830 which is good or "meritorious" on Kaiser's (1974) classification of measure values.

3.2.4 Bartlett's test of sphericity

Bartlett's test of sphericity says that there are no correlations between any of the variables. This is important because if there are no correlations between variables, then it will not be possible to reduce the variables to a smaller number of components and there will be no point in running a principal component analysis. Table 3.2 shows that Bartlett's test of sphericity is statistically significant ($p = .000$) and null hypothesis is rejected.

3.2.5 Reliability analysis

Cronbach's alpha was used to measure the internal consistency to determine how much the items on the scale were measuring the same underlying dimension. A questionnaire was employed to measure different, underlying constructs. One construct, community concern, consisted of three questions. The scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.722 (table 3.3). Appendix II

Table 3.3 Reliability analysis for variables

Variable	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Community concern	.722	.727	3
Community attachment	.756	.761	2
Utilization of tourism facilities	.745	.748	3
General understandings of economic benefits	.769	.774	4
Positive Socio-cultural Impacts	.795	.798	6
Negative Socio-cultural Impacts	.799	.801	10
Positive Environmental impacts	.768	.771	4
Negative Environmental Impacts	.825	.828	5

Another construct, community attachment, consisted of two questions. The scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.756 (table 3.3). Utilization of tourism facilities and services consisted of three questions had a high level of internal consistency, as determined by a Cronbach's alpha of 0.748 (table 3.3). Another construct, general understandings of economic benefits remains in society, consisted of four questions. The scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.774 (table 3.3).

Positive socioeconomic impacts (PSEI) consisted of six questions had a high level of internal consistency, as determined by a Cronbach's alpha of 0.798 (table 3.3). The next construct was negative socioeconomic impacts (NSEI), consisted of 10 questions had a high level of internal consistency, as determined by a Cronbach's alpha of 0.799 (table 3.3).

One other construct, positive environmental impacts (PEI), consisted of four questions. The scale had a high level of internal consistency, as determined by a Cronbach's alpha of 0.771 (table 3.3). Negative environmental impacts (NEI) consisted of five questions had a high level of internal consistency, as determined by a Cronbach's alpha of 0.828 (table 3.3).

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter describes the findings of Mazandaran local community's surveys on perceptions and attitudes towards nature-based tourism impacts and support for tourism development based on personal interviews with 587 residents from Mazandaran province by using a variety of descriptive, bivariate correlations and multivariate statistics.

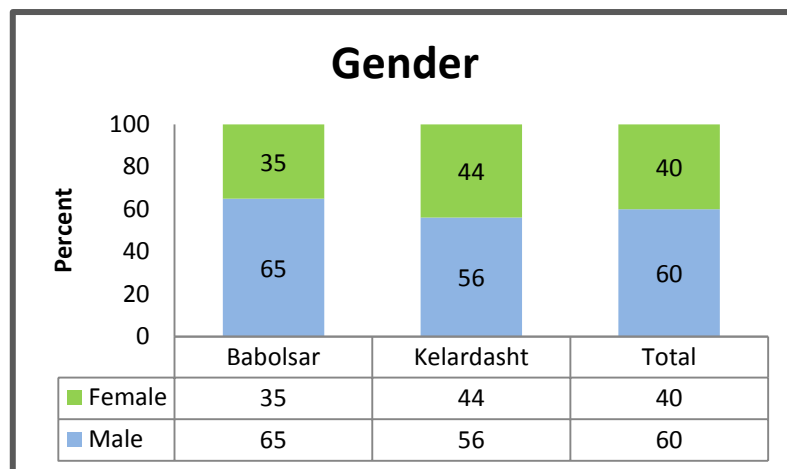
It first presents the characteristics of sample, which may provide some information on similarities and differences in perceptions and attitudes, and better understanding of residents' attitudes toward tourism. It then to identify the relationships between dependent and independent variables used a variety of statistical tests and where significant relationships and differences were recognized, these relationships and differences were discussed.

4.1 Socio-demographic characteristics of sample

Results of the survey on gender, age, level of education, marital status, length of residence, occupational status, occupation in tourism sectors and level of income of respondents will be present in details in this part.

4.1.1 Gender

Results showed that 60% of the sample populations were male and 40% were female (Figure 4.1). This may have been because of the more limitation for Iranian females in compare with males to talk to foreigners and answer their questions especially when the interviewer is a man.

Figure 4.1 Gender of respondents (According to city)

Source: Findings of research

4.1.2 Age

Table 4.1 shows, the majority of respondents (33%) are between 18-25, followed by 25-35 age group with 26 % and the lowest frequency (2%) belongs to age group over 65. The higher proportion of young generation (59%) is consistent with the last census conducted in 2011.

Table 4.1: Age of respondents

Age	Frequency	Percent
From 18 to 25	197	33
From 26 to 35	152	26
From 36 to 45	113	19
From 46 to 65	103	18
Over 65	11	2
Valid total	576	98
Missing system	11	2
Total	587	100

Source: findings of research

4.1.3 Level of Education

A little more than half (54%) of the residents have a university degree and 43% have completed elementary school (5 years), middle (8 years) or high school (12 years) and 3% did not answer to this question (table 4.2). Results are quite consistent with the share of young population (59%) that most of them possess a university degree.

Table 4.2 Level of education of respondents

Level of Education	Frequency	Percent
Up to Diploma	252	43
University degree	317	54
Valid total	569	97
Missing system	18	3
Total	587	100

Source: findings of research

4.1.4 Income

In 2011, the annual base salary was 3.500.000 Toman (one US dollar was 950 Toman). Over 32% of respondents have very low income and 35% have relatively low income. On the other hand, only 5% have an income over 15.000.000 Toman. Due to the lack of data, the comparison with official statistics is not possible. Table 4.3 shows level of respondents' income.

Table 4.3 Level of income of respondents

Level of Income (Toman)	Frequency	Percent
Less than 3.500.000	187	32
From 3.500.000 to 8.500.000	206	35
From 8.500.000 to 15.000.000	60	10
Over 15.000.000	27	5
Valid Total	480	82
Missing system	107	18
Total	587	

Source: findings of research

4.1.5 Marital Status

The majorities (60%) of respondents were married, 36% were single, and 4% did not answer to this question. Table 4.4 displays the marital status of respondents.

Table 4.4 Marital status of respondents

Marital Status	Frequency	Percent
Single	212	36
Married	352	60
Valid total	564	96
Missing system	23	4
Total	587	

Source: findings of research

4.1.6 Length of residence in Mazandaran

According to findings, more than 64% of respondents had inhabited in Mazandaran for more than 15 years and 10% had lived less than 5 years, (table 4.5).

Table 4.5 Length of Residence in Mazandaran

Length of Residence	Frequency	Percent
Less than 5 years	61	10
Between 6 and 15 years	90	15
More than 15 years	375	64
Valid total	526	90
Missing system	61	10
Total	587	

Source: findings of research

High portion of residents with more than 15 years living in Kelardasht can be due to that a large number of local people had been migrated in 1929 by Rezashah to Kelardasht, where they settled.

4.1.7 Employment Status

According to results, 48% are employed, 17% unemployed and 33% are retired, student or homemaker.

Table 4.6 Employment status of respondents

Employment Status	Frequency	Percent
Employed	281	48
Unemployed	97	17
Other (student, retired or homemaker)	196	33
Valid total	574	98
Missing system	13	2
Total	587	

Source: findings of research

Figure 4.6 shows the employment status of residents in Babolsar and Kelardasht.

4.1.8 Employment in tourism sectors

More than 53% of respondents do not involved in tourism businesses and 27% engaged in tourism related jobs (table 4.7). The main tourism related activity are villa or room to rent, villa caretaker, gardening, working as construction worker in building villas.

Table 4.7 Employment in tourism sectors

Employment in Tourism	Frequency	Percent
Employ in tourism sectors	161	27
Do not employ in tourism sectors	311	53
Valid total	472	80
Missing system	115	20
Total	587	

Source: findings of research

4.2 Local community perceptions of nature-based tourism impacts

This section presents the results of local community perceptions towards nature-based tourism impacts in Mazandaran and correlations between dependent and independent variables based on research questions (table 4.8).

Table 4.8 Distribution of residents' responses to statements

N	Nature-based Tourism Impacts	1 %	2 %	3 %	4 %	5 %	Mean	Std. Deviation
1	Tourism has led to an increase in the availability of recreational facilities and spaces	9	12	7	41	31	3.71	1.275
2	Tourism provides job opportunities for local community	7	12	8	38	35	3.82	1.221
3	Tourism encourages a variety of cultural activities by the local population (crafts, arts)	14	19	13	32	22	3.29	1.364
4	Tourism makes local residents feel more proud of their town and community	9	17	17	29	28	3.48	1.309
5	Because of tourism our roads and other public facilities are kept at a high standard	19	25	12	30	14	2.97	1.368
6	Our standard of living increases considerably because of the tourism	7	20	20	37	16	3.35	1.177
7	Tourism improves understanding and image of different communities and cultures	3	9	11	42	35	3.96	1.057
8	Tourists have a positive impact on the area's cultural identity	10	26	17	33	14	3.15	1.236
9	Tourists' keen interest in natural and cultural sites result in these sites are cared for than they otherwise would be	17	19	11	32	21	3.20	1.416
10	Tourism could create a positive feeling about area among tourists	3	6	19	44	28	3.88	0.976
11	Due to the presence of tourists in the area and imitating their fashions, traditional clothing of local community has been changed during past years	7	9	12	35	37	3.86	1.199
12	Local residents have a lower quality of life as a result of living in a tourist area	17	33	17	23	10	2.76	1.252
13	Tourism has increased drug addiction	12	17	18	27	26	3.37	1.355
14	Tourism has led to more vandalism in area	14	21	16	28	21	3.23	1.356
15	Tourists disrupt the peace and tranquility of public parks	11	24	11	32	22	3.30	1.341
16	High spending tourists have an undesirable effect on our way of life	16	24	14	23	23	3.11	1.421
17	Crime rate in the area has increased due to tourism	14	25	18	24	19	3.10	1.349
18	Tourism increased price of land and housing	3	7	7	29	54	4.25	1.039
19	Tourism prevents local language from being use as much as it otherwise would	6	16	11	38	29	3.69	1.211
20	Tourism has resulted in unpleasantly overcrowded beaches, hiking trails, parks and other outdoor places	7	17	6	30	40	3.79	1.320
21	Tourism result in an increase in the cost of living	6	14	7	32	41	3.87	1.266
22	Tourism causes changes in our traditional cultures	7	14	12	34	33	3.72	1.248
23	Local businesses are the ones which benefit most from tourists	4	10	15	42	29	3.80	1.099
24	Tourism gives benefits to a small group of people in the area	25	36	12	20	7	2.47	1.257
25	Tourism creates more jobs for foreigners than local	13	24	23	28	12	3.01	1.228

	community							
26	Tourism helps to increase local awareness and appreciation of the environment	10	19	13	35	23	3.44	1.289
27	Tourism provides an incentive for conservation of natural resources	8	16	17	37	22	3.47	1.228
28	Tourism preserves environment and improves the appearance of area	12	25	11	34	18	3.22	1.316
29	Tourists increase noise in the area	9	23	12	31	25	3.41	1.315
30	The quality of natural environment in area has deteriorated by tourists	8	20	11	40	21	3.46	1.240
31	Tourism development increases the traffic problems	2	6	5	29	58	4.34	0.970
32	The area experiences more litter problems because of the presence of tourists	3	4	6	33	54	4.29	0.979
33	Construction of tourist villages and other tourist facilities has destroyed the natural environment	8	17	12	34	29	3.59	1.287
34	Tourists increasing pollution in beaches and mountains	6	12	7	33	42	3.92	1.232
35	What's happen in the area is important for me	3	2	7	18	70	4.51	0.907
36	I love living in this area and I moved here, I'd be upset and disturbed	7	8	9	17	59	4.14	1.260
37	My favorite recreational facilities and services are exist in this area	27	29	8	23	13	2.65	1.429
38	The state of area's residents are courteous and friendly to tourists	6	11	12	42	29	3.74	1.170
39	I support more tourism development	18	24	20	25	13	2.90	1.316

Source: findings of research

4.3 Normality test

The Shapiro-Wilk and Kolmogorov-Smirnov tests were used to test the normality distribution of data. If the assumption of normality has been violated, the "Sig." value will be less than .05 (i.e., the test is significant at the $p < .05$ level).

This is because the Kolmogorov-Smirnov and the Shapiro-Wilk tests are testing the null hypothesis that the data's distribution is equal to a normal distribution. Rejecting the null hypothesis means that the data's distribution is not equal to a normal distribution. In the table 4.9, all the "Sig." values are less than .05 (they are .000).

Table 4.9 Tests of normality

Variables	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
negative socioeconomic impacts	.066	578	.000	.986	578	.000
positive environmental impacts	.107	578	.000	.969	578	.000
negative environmental impacts	.107	578	.000	.942	578	.000
positive socioeconomic impacts	.066	578	.000	.987	578	.000
community concern	.107	578	.000	.971	578	.000
community attachment	.281	578	.000	.752	578	.000
General understanding of economic benefits	.087	578	.000	.985	578	.000
utilization of tourism facilities by residents	.088	578	.000	.979	578	.000

a. Lilliefors Significance Correction

Therefore scores of all variables were non-normally distributed as assessed by Kolmogorov-Smirnov and Shapiro-Wilk tests ($p < .05$).

4.4 Assessing research questions and hypothesizes

In this part, the results of research questions and hypothesizes examination will be presented. Based on the results of previous studies and confirmatory factor analysis (see appendixIII) independent variables were choose.

4.4.1 Research question 1: perceptions of socioeconomic impacts

Table 4.10 presents the responses to 21 statements on socioeconomic impacts of nature-based tourism in Mazandaran. It should be noted that the impacts associated with providing job opportunity or increasing standards of living, have been considered both as economic or socioeconomic impact in several studies. In this study they have been considered among socioeconomic impacts.

Respondents generally have negative perceptions of socioeconomic impacts of tourism, although some positive impacts have been appreciated. More than 83% of respondents believe or strongly believe that tourism development has increased the price of land and housing. Previous studies in area (Ghadami, 2007; Ghadiri, Heydari & Ramezanzadeh, 2012; Mahdavi, Ghadiri & Sanaei, 2007) also represented similar results.

Approximately 73% of people stated that tourism resulted in an increase in the cost of living. Similar to previous studies (Rahnemaei, Farhoudi, Dittmann & Ghadami, 2008; Aligholizadeh, Badri & Faraji, 2005) this study suggested that tourism has resulted in unpleasantly overcrowded beaches, hiking trails, parks and other outdoor places with more than 70 % of local community strongly agree or agree.

The role of tourism in preventing local language from being use as much as it otherwise would and its impact on changing the traditional cultures were supported by 67% of residents.

Surprisingly, three statements related to the behavior of the tourists in destination that seem to be basis of approval many restrictions against tourists, were not supported strongly by residents. Over 39% were disagree and 18% were neutral that crime rate in the area has increased because of tourism.

More than 33% were disagree and 18% were neutral that tourism has increased drug addiction and drinking alcohol and 35% were disagree and 14% were neutral that tourists' behavior has led to more promiscuity in area.

Respondents also confirmed some positive socioeconomic impacts. More than 77% of people perceived that tourism improves understanding and image of different communities and cultures. Residents appreciated tourism for increasing job opportunities and the availability of recreational facilities and spaces. Over 72% of responses approved the statement that tourism could create a positive feeling about area among tourists.

Table 4.10 Overall perceptions of socioeconomic impacts of tourism by local community

No	Nature-based Tourism Impacts	1 %	2 %	3 %	4 %	5 %	Mean	Std. Deviation
1	Tourism has led to an increase in the availability of recreational facilities and spaces	9	12	7	41	31	3.71	1.275
2	Tourism provides job opportunities for local community	7	12	8	38	35	3.82	1.221
3	Tourism encourages a variety of cultural activities by the local population (crafts, arts)	14	19	13	32	22	3.29	1.364
4	Tourism makes local residents feel more proud of their town and community	9	17	17	29	28	3.48	1.309
5	Because of tourism our roads and other public facilities are kept at a high standard	19	25	12	30	14	2.97	1.368
6	Tourism improves understanding and image of different communities and cultures	3	9	11	42	35	3.96	1.057
7	Our standard of living increases considerably because of the tourism	7	20	20	37	16	3.35	1.177
8	Tourism could create a positive feeling about area among tourists	3	6	19	44	28	3.88	0.976
9	Tourists have a positive impact on the area's cultural identity	10	26	17	33	14	3.15	1.236
10	High spending tourists have an undesirable effect on our way of life	16	24	14	23	23	3.11	1.421
11	Crime rate in the area has increased because of tourism	14	25	18	24	19	3.10	1.349
12	Tourism has resulted in unpleasantly overcrowded beaches, hiking trails, parks and other outdoor places for the local community	7	17	6	30	40	3.79	1.320
13	Tourism result in an increase in the cost of living	6	14	7	32	41	3.87	1.266
14	Tourism causes changes in our traditional cultures	7	14	12	34	33	3.72	1.248
15	Local residents have a lower quality of life as a result of living in a tourist area	17	33	17	23	10	2.76	1.252
16	Tourism has increased drug addiction and drinking alcohol	14	19	18	25	24	3.26	1.355
17	Tourism has led to more promiscuity in area	14	21	16	28	21	3.23	1.356
18	Tourists disrupt the peace and tranquility of public parks	11	24	11	32	22	3.30	1.341
19	Tourism increased price of land and housing	3	7	7	29	54	4.25	1.039
20	Tourism prevents local language from being use as much as it otherwise would	6	16	11	38	29	3.69	1.211
21	Due to the presence of tourists in the area and imitating their fashions, traditional clothing of local community has been changed during past years	7	9	12	35	37	3.86	1.199

Likert scale ranges from 1=strongly disagree to 5=strongly agree

4.4.2 Research question 2: perceptions of environmental impacts

Table 4.11 presents the responses to 10 statements on environmental impacts of nature-based tourism in Mazandaran. Residents generally have negative perceptions of environmental impacts of tourism. Respondents perceived the most negative environmental impacts in form of increasing traffic problems, litter problems, and environmental degradation due to construction of villas and second-homes.

Over 87% of respondents strongly agree or agree that tourism development increases the traffic and litter problems. Aligholizadeh et al. (2005) and Ghadami (2007) have found similar results.

The vast majority of residents (more than 85%) also blamed tourism for environmental degradation via construction of villas and tourist villages, especially in coastal strip and forest areas.

More than 56 % of residents agree that tourists increase noise in the area. Less people agree with this statement might be an indication that conceptual carrying capacity of residents still has not reached the threshold.

Consistent with the results of previous studies (Rahnemaei et al., 2008; Aligholizadeh et al., 2010), the respondents approve coasts, forests, and mountainous areas experiences more litter problems because of the presence of tourists. More than 87 % were agree or strongly agree with related statements.

Respondents have perceived slightly positively (almost 59%) the statements that tourism increases local awareness and appreciation of the environment and provides incentives for conservation of natural resources.

Table 4.11 overall perceptions of environmental impacts of tourism by local community

No	Nature-based Tourism Impacts	1 %	2 %	3 %	4 %	5 %	Mean	Std. Deviation
1	Tourists' keen interest in natural and cultural sites result in these sites are cared for than they otherwise would be	17	20	14	28	21	3.16	1.416
2	Tourism helps to increase local awareness and appreciation of the environment	10	19	13	35	23	3.44	1.289
3	Tourism preserves environment and improves the appearance of area	22	30	11	24	13	2.46	1.011
4	Tourism provides an incentive for conservation of natural resources	8	16	17	37	22	3.47	1.228
5	Tourism development increases the traffic problems	2	6	5	29	58	4.34	0.970
6	Tourists increase noise in the area	9	23	12	31	25	3.41	1.315
7	Construction of villas, tourist villages and other tourist facilities has destroyed the natural environment	3	5	7	41	44	4.18	0.992
8	Tourists increasing pollution in beaches and mountains	6	12	7	33	42	3.92	1.232
9	The quality of natural environment has deteriorated by tourists	8	20	11	40	21	3.46	1.240
10	The area experiences more litter problems because of the presence of tourists	3	4	6	33	54	4.29	0.979

Likert scale ranges from 1=strongly disagree to 5=strongly agree

4.4.3 Research question three and four: relationship between community concern and NBT impacts

According to proposed conceptual model (figure 3.2), it was required to examine whether there is a relationship between community concern and perceived impacts (table 4.12).

For this purpose a Spearman's rank order correlation was run to assess the relationship between local community concern and positive and negative socioeconomic and environmental impacts of tourism in Mazandaran.

There was a statistically significant relationship between all variables, so we can reject the null hypothesis and accept the alternative hypothesis. Therefore, the community concern has strong correlation with all four types of NBT impacts.

According to the results, there was a strong, negative correlation between community concern and positive socioeconomic impacts, which was statistically significant ($r_s (577) = -.186, p < .0005$). Therefore, *hypothesis 2a* was accepted however, since it is a negative correlation coefficient between two variables, the correlation is reverse.

There was a strong, positive correlation between community concern and negative socioeconomic, which was statistically significant ($r_s (577) = .740, p < .0005$). It means that *Hypothesis 2b.* was accepted however the correlation is direct and positive.

There was a strong, negative correlation between community concern and positive environmental impacts, which was statistically significant ($r_s (577) = -.232, p < .0005$). Therefore, *hypothesis 2c* was accepted but due to the negative correlation coefficient, the correlation is reverse.

Also There was a strong, positive correlation between community concern and negative environmental impacts, which was statistically significant ($r_s (576) = .458, p < .0005$). it means that *hypothesis 2d* can be accepted however the correlation is direct and positive.

Table 4.12 correlation between community concern and overall impacts

variables	community concern	
Positive socioeconomic impacts	Correlation Coefficient	-.186**
	Sig.	.000
	N	579
Negative socioeconomic impacts	Correlation Coefficient	.740**
	Sig.	.000
	N	579
Positive environmental impacts	Correlation Coefficient	-.232**
	Sig.	.000
	N	579
Negative environmental impacts	Correlation Coefficient	.458**
	Sig.	.000
	N	578

** . Correlation is significant at the 0.01 level (2-tailed).

It means that local community concernment about their society was strongly associated with their perception of socioeconomic and environmental impacts of tourism.

4.4.4 Research question five and six: relationship between community attachment and NBT impacts

A Spearman's rank order correlation was run to assess the relationship between local community attachment to their society and positive and negative socioeconomic and environmental impacts of tourism in Mazandaran. There was a statistically significant relationship between three pair of variables, so we can reject the null hypothesis and accept the alternative hypothesis in all pairs except negative socioeconomic impacts (table 4.13).

Put another way, there was a strong, positive correlation between attachment to the community and PSE, which was statistically significant ($r_s (577) = .182, p < .0005$). Also There was a strong, positive correlation between community attachment and positive environmental impacts, which was statistically significant ($r_s (577) = .182, p < .0005$).

This means that according to the results *hypothesis 3a* and *hypothesis 3c* were approved and accepted.

Table 4.13 correlation between community attachment and overall impacts

variables	community attachment	
positive socioeconomic impacts	Correlation Coefficient	.182**
	Sig.	.000
	N	579
negative socioeconomic impacts	Correlation Coefficient	.079
	Sig.	.058
	N	579
positive environmental impacts	Correlation Coefficient	.182**
	Sig.	.000
	N	579
negative environmental impacts	Correlation Coefficient	.129**
	Sig.	.002
	N	578

**. Correlation is significant at the 0.01 level (2-tailed).

Also there was a strong, positive correlation between community attachment and NEI, which was statistically significant ($r_s (576) = .129, p < .0005$). Therefore, hypothesis 3d was accepted. There was no significant correlation between community attachment and NSEI of tourism in Mazandaran and *hypothesis 3b* was rejected.

4.4.5 Research question 7 and 8: relationship between use of tourism facilities and NBT impacts

A Spearman's rank order correlation was run to assess the relationship between utilization of tourism facilities by residents and positive and negative socioeconomic and environmental impacts of tourism in Mazandaran. There was a statistically significant relationship between positive impacts, so we can reject the null hypothesis and accept the alternative hypothesis for these two pair of variables (table 4.14).

In other words, there was a strong, positive correlation between utilization of tourism facilities by residents and positive socioeconomic, which was statistically significant ($r_s(577) = .375$, $p < .0005$). In addition, There was a strong, positive correlation between utilization of tourism facilities by residents and positive environmental impacts, which was statistically significant ($r_s(577) = .445$, $p < .0005$).

Table 4.14 correlation between utilization of tourism facilities by residents and overall impacts

variables	community attachment	
positive socioeconomic impacts	Correlation Coefficient	.375**
	Sig.	.000
	N	579
negative socioeconomic impacts	Correlation Coefficient	-.031
	Sig.	.451
	N	579
positive environmental impacts	Correlation Coefficient	.445**
	Sig.	.000
	N	579
negative environmental impacts	Correlation Coefficient	-.066
	Sig.	.113
	N	578

**. Correlation is significant at the 0.01 level (2-tailed).

There were no significant correlation between utilization of tourism facilities by residents and negative socioeconomic impacts of tourism in Mazandaran. It might indicate that those residents who have utilized tourism facilities and services were perceived more positive impacts. Therefore, *Hypothesizes 4a and 4 c* were approved by results.

4.4.6 Research question 9 and 10: relationship between residents' understanding of economic benefits remain in the society and NBT impacts

Based on proposed conceptual model (figure 3.2), the relationship between general understanding of residents from the extent of tourism's economic benefits that remain in the society and overall impacts of tourism was examined (table 4.15).

For this purpose a Spearman's rank order correlation was run to assess the relationship between general understanding of economic benefits and positive and negative socioeconomic and environmental impacts of tourism in Mazandaran. There was a statistically significant relationship between all variables, so we can reject the null hypothesis and accept the alternative hypothesis for all four pairs of variables.

In other words, there was a strong, positive correlation between general understanding of economic benefits and positive socioeconomic, which was statistically significant ($r_s(577) = .226, p < .0005$) so, *hypothesis 5a* was approved.

In addition, There was a strong, positive correlation between general understanding of economic benefits and positive environmental impacts, which was statistically significant ($r_s(577) = .248, p < .0005$) so *hypothesis 5c* was approved.

Table 4.15 correlation between general understanding of economic benefits and overall impacts

variables	General understanding of economic benefits	
positive socioeconomic impacts	Correlation Coefficient	.226**
	Sig.	.000
	N	579
negative socioeconomic impacts	Correlation Coefficient	-.134**
	Sig.	.001
	N	579
positive environmental impacts	Correlation Coefficient	.248**
	Sig.	.000
	N	579
negative environmental impacts	Correlation Coefficient	-.169**
	Sig.	.000
	N	578

** . Correlation is significant at the 0.01 level (2-tailed).

While, There was a strong, negative correlation between general understanding of economic benefits and negative socioeconomic impacts, which was statistically significant ($r_s(577) = -.134, p < .0005$) and there was a strong, negative correlation between general understanding of economic benefits and negative environmental impacts, which was

statistically significant ($r_s(576) = -.169, p < .0005$) so, *hypothesis 5b* and *hypothesis 5d* were approved.

This might indicate those residents who believe that local community gains economic benefit from tourism development are likely perceived more positive and less negative impacts of tourism.

4.4.7 Research question 11 Correlation between overall socioeconomic and environmental impacts

Results display that positive socioeconomic (PSEI) impacts are positive significantly correlated with positive environmental impacts (PEI) and negative significantly correlated with negative socioeconomic (NSEI) and negative environmental impacts (NEI) (table 4.16).

NSEI are positive significantly related with PEI and negative significantly correlated with NEI. Positive environmental impacts are negatively correlated with NEI.

Generally all negative impacts are significantly correlated with each other that cause the high percentage of responses to negative socioeconomic (table 4.10) and negative environmental impacts statements (table 4.11).

It can be interpreted that, those who perceived more NSEI are likely perceived more NEI. The negative correlation between negative and positive impacts could explain the relatively low mean of PSEI and PEI.

Table 4.16 Correlation between overall socioeconomic and environmental impacts

		PSEI	NSEI	PEI	NEI
PSEI	Spearman Correlation	1.000	-.164**	.433**	-.158**
	Sig. (2-tailed)		.000	.000	.000
	N		587	583	581
NSEI	Spearman Correlation		1.000	-.126**	.611**
	Sig. (2-tailed)			.002	.000
	N			583	581
PEI	Spearman Correlation			1.000	-.126**
	Sig. (2-tailed)				.002
	N				581
NEI	Spearman Correlation				1.000
	Sig. (2-tailed)				
	N				

** . Correlation is significant at the 0.01 level (2-tailed).

4.4.8 Research question 12: Impacts of socio-demographic characteristics on perceived impacts

Based on conceptual model of research (figure 3.2) it was assessed if there is any difference between residents with different socio-demographic characteristics in their attitudes towards tourism impacts and the level of community concern and attachment, utilization of tourism facilities and services and general understanding of economic benefits for local community.

4.4.8.1 Relationship between gender and overall impacts

A Mann-Whitney test was run to determine if there were differences in perceived impacts, community concern, community attachment, utilization of tourism facilities and general understanding of economic benefits for local community between males and females residents (table 4.17).

There was statistically significant difference in perceived negative environmental impacts between males ($Mdn = 4.00$) and females ($Mdn = 4.20$), $z = 2.530$, $p = .011$. the results shows the females perceived NEI more than males.

Table 4.17 relationship between gender and main variables

variables	<i>Mdn</i> male	<i>Mdn</i> female	sig. (Mann-Whitney U test)
positive socioeconomic impacts	3.71	3.57	0.170
negative socioeconomic impacts	3.60	3.70	0.219
positive environmental impacts	3.50	3.50	0.322
negative environmental impacts	4.00	4.20	0.011
community concern	3.66	3.66	0.816
community attachment	5.00	4.50	0.012
utilization of tourism facilities by residents	3.00	3.00	0.754
General understanding of economic benefits	3.00	3.00	0.592

Asymptotic significances are displayed. The significance level is .05

In addition, there was statistically significant difference in attachment to the community between males ($Mdn = 5.00$) and females ($Mdn = 4.50$), $z = -2.50$, $p = .012$. The males feel mor attachment to the society than females. There were no statistically significant difference in other variables scores between males and females.

4.4.8.2 Relationship between level of education and overall impacts

A Mann-Whitney test was run to determine if there were differences in perceived impacts, community concern and attachment, utilization of tourism facilities and general understanding of economic benefits for local community between respondents with different level of education (table 4.18).

There was statistically significant difference in perceived PSEI between residents with up to diploma degree ($Mdn = 3.71$) and those with university degree ($Mdn = 3.57$), $z = -2.86$, $p = .004$.

Table 4.18 Relationship between level of education and main variables

variables	up to diploma	university degree	sig. (Mann-Whitney U test)
positive socioeconomic impacts	3.71	3.57	0.004
negative socioeconomic impacts	3.60	3.66	0.771
positive environmental impacts	3.75	3.25	0.000
negative environmental impacts	4.00	4.00	0.958
community concern	3.33	3.66	0.086
community attachment	5.00	4.50	0.000
utilization of tourism facilities by residents	3.16	3.00	0.000
General understanding of economic benefits	3.00	3.00	0.188

Asymptotic significances are displayed. The significance level is .05.

The respondents perception of positive environmental impacts was statistically significant difference between residents with up to diploma degree ($Mdn = 3.75$) and those with university degree ($Mdn = 3.66$), $z = -5.08$, $p = .000$. Respondents whit up to diploma degree perceived PSEI and PEI more than residents with university degree.

In addition, there was statistically significant difference in attachment to the community between residents with up to diploma degree ($Mdn = 5.00$) and those with university degree ($Mdn = 4.50$), $z = -3.91$, $p = .000$. There was also statistically significant difference in utilization of tourism facilities between residents with up to diploma degree ($Mdn = 3.16$) and those with university degree ($Mdn = 3.00$), $z = -3.49$, $p = .000$.

There were no statistically significant differences between level of education and other variables namely NSEI and NEI, community concern and general understanding of economic benefits and the null hypotheses were retained.

4.4.8.3 Relationship between marital status and overall impacts

A Mann-Whitney test was run to determine if there were differences in perceived impacts, community concern and attachment, utilization of tourism facilities and general understanding of economic benefits for local community between respondents with different marital status (table 4.19).

There was statistically significant difference in perception of PEI between single ($Mdn = 3.25$) and married ($Mdn = 3.50$), $z = -.212$, $p = .000$ residents. There was statistically significant difference in attachment to the community between single ($Mdn = 4.50$) and married ($Mdn = 5.00$), $z = -2.76$, $p = .004$ residents.

Table 4.19 Relationship between marital status and main variables

Marital status	single	married	sig. (Mann-Whitney U test)
positive socioeconomic impacts	3.71	3.57	0.832
negative socioeconomic impacts	3.50	3.70	0.233
positive environmental impacts	3.25	3.50	0.041
negative environmental impacts	4.00	4.00	0.882
community concern	3.33	3.66	0.423
community attachment	4.50	5.00	0.000
utilization of tourism facilities by residents	3.00	3.00	0.891
General understanding of economic benefits	3.00	3.00	0.666

Asymptotic significances are displayed. The significance level is .05.

According to the results, married respondents were more attached to the community and perceived PEI more than single respondents

There were no statistically significant differences between marital status and other variables including negative socioeconomic and environmental impacts, community concern and general understanding of economic benefits and the null hypotheses retained.

4.4.8.4 Research question 13: relationship between employment in tourism sectors and overall impacts

A Mann-Whitney test was run to determine if there were differences in perceived impacts, community concern and attachment, utilization of tourism facilities and general understanding of economic benefits for local community between respondents with different marital status (table 4.20).

Table 4.20 Relationship between employment in tourism sectors and main variables

variables	do not working in tourism sector	working in tourism sector	sig. (Mann-Whitney U test)
positive socioeconomic impacts	3.635	3.689	0.530
negative socioeconomic impacts	3.558	3.612	0.378
positive environmental impacts	3.355	3.349	0.975
negative environmental impacts	3.951	3.912	0.385
community concern	3.429	3.464	0.633
community attachment	4.394	4.404	0.732
utilization of tourism facilities by residents	2.997	2.979	0.982
General understanding of economic benefits	3.059	3.028	0.641

Asymptotic significances are displayed. The significance level is .05.

Surprisingly, there were no statistically significant differences between employment in tourism sectors and all main variables and all null hypotheses were retained.

4.4.8.5 Relationship between age and overall impacts

A Kruskal-Wallis test was run to determine if there were differences in perceived impacts, community concern and attachment, utilization of tourism facilities and general understanding of economic benefits for local community between residents in different age groups (table 4.21).

NEI scores were high ($Mdn = 4.00$) in all age groups but the difference were not statistically important. This might indicate the consensus of respondents in perceptions of the negative environmental impacts of tourism.

There was statistically significant difference in attachment to the community between different age groups with 18 to 25 ($Mdn = 4.50$), 25 to 35 ($Mdn = 4.75$), 35 to 45 ($Mdn = 5.00$), 45 to 65 ($Mdn = 5.00$) and over 65 ($Mdn = 5.00$), $\chi^2(4) = 33.42$, $p = .000$. In addition, there was statistically significant difference in utilization of tourism facilities by residents between different age groups with 18 to 25 ($Mdn = 3.00$), 25 to 35 ($Mdn = 3.00$), 35 to 45 ($Mdn = 3.00$), 45 to 65 ($Mdn = 3.00$) and over 65 ($Mdn = 3.33$), $\chi^2(4) = 10.21$, $p = .037$.

There were no statistically significant differences between age groups and other variables including overall impacts, community concern and general understanding of economic benefits and the null hypotheses retained.

Table 4.21 Relationship between age and main variables

variables	18 to 25	25 to 35	35 to 45	45 to 65	over 65	sig. (Kruskal-Wallis Test)
positive socioeconomic impacts	3.71	3.77	3.57	3.42	4.00	0.075
negative socioeconomic impacts	3.60	3.65	3.60	3.70	3.60	0.723
positive environmental impacts	3.50	3.25	3.50	3.50	3.50	0.265
negative environmental impacts	4.00	4.00	4.00	4.00	4.99	0.917
community concern	3.33	3.66	3.33	3.66	2.66	0.537
community attachment	4.50	4.75	5.00	5.00	4.50	0.000
utilization of tourism facilities by residents	3.00	3.00	3.00	3.00	3.33	0.037
General understanding of economic benefits	3.00	3.00	3.00	3.00	3.25	0.642

Asymptotic significances are displayed. The significance level is .05.

Results indicate the resident over 45 were more attached to the community and were more in favor of tourism facilities and services.

4.4.8.6 Relationship between length of residence and overall impacts

A Kruskal-Wallis test was run to determine if there were differences in perceived impacts, community concern and attachment, utilization of tourism facilities and general understanding of economic benefits for local community between local populations with different length of residence (table 4.22).

Table 4.22 Relationship between length of residence and main variables

variables	under 5 years	5 to 15 years	more than 15 years	sig. (Kruskal-Wallis Test)
positive socioeconomic impacts	3.71	3.57	3.71	0.978
negative socioeconomic impacts	3.70	3.70	3.60	0.527
positive environmental impacts	3.50	3.50	3.50	0.957
negative environmental impacts	4.00	4.20	4.00	0.070
community concern	3.66	3.33	3.66	0.183
community attachment	4.00	4.50	5.00	0.000
utilization of tourism facilities by residents	3.00	3.00	3.00	0.569
General understanding of economic benefits	3.25	3.00	3.00	0.143

Asymptotic significances are displayed. The significance level is .05.

Level of attachment to the community scores increased from under five years residence in the area ($Mdn = 4.00$), 5 to 15 years ($Mdn = 4.50$) and more than 15 years ($Mdn = 5.00$) and the difference was statistically significant $\chi^2(2) = 42.39, p = .000$.

According to the results, the longer the length of stay in the area, the greater the attachment to the community.

There were no statistically significant differences between length of residence and other variables including overall impacts, community concern, utilization of tourism facilities and general understanding of economic benefits, therefore the null hypotheses retained.

4.4.8.7 Relationship between level of income and overall impacts

A Kruskal-Wallis test was run to determine if there were differences in perceived impacts, community concern and attachment, utilization of tourism facilities and general understanding of economic benefits for local community between local populations with different level of incomes (table 4.23).

Table 4.23 Relationship between level of income and main variables

variables	less than 3,500,000 Toman	3,500,000 to 8,500,000 Toman	8,500,000 to 15,000,000 Toman	more than 15,000,000 Toman	sig. (Kruskal- Wallis Test)
positive socioeconomic impacts	3.57	3.71	3.71	3.85	0.375
negative socioeconomic impacts	3.70	3.60	3.60	3.50	0.488
positive environmental impacts	3.50	3.50	3.50	3.75	0.422
negative environmental impacts	4.00	4.00	3.80	3.80	0.257
community concern	3.33	3.66	3.33	3.00	0.150
community attachment	5.00	5.00	5.00	5.00	0.309
utilization of tourism facilities by residents	3.00	3.00	3.00	3.33	0.621
General understanding of economic benefits	3.00	3.00	3.25	3.25	0.021

Asymptotic significances are displayed. The significance level is .05.

There was statistically significant difference in general understanding of economic benefits between different income groups with less than 3,500,000 Toman ($Mdn = 3.00$), from 3,500,000 to 8,500,000 Toman ($Mdn = 3.00$), from 8,500,000 to 15,000,000 Toman ($Mdn = 3.25$) and more than 15,000,000 Toman ($Mdn = 3.25$), $\chi^2(3) = 9.74$, $p = .021$.

The results show residents with higher incomes believed that tourism benefits more for local community than for foreigners. This may be due that most of the tourism businesses owners have higher income than other residents may do.

There were no statistically significant differences between income groups and other variables including overall impacts, community concern, community attachment, and utilization of tourism facilities, therefore the null hypotheses retained.

4.4.8.8 Relationship between place of residence and overall impacts

A Mann-Whitney test was run to determine if there were differences in perceived impacts, community concern and attachment, utilization of tourism facilities and general understanding of economic benefits among residents with different place of residence (table 4.24). There was statistically significant difference in all main variables except negative socioeconomic impacts between residences in Kelardasht and Babolsar.

There was statistically significant difference in perceived positive socioeconomic impacts between residences of Kelardasht ($Mdn = 3.42$) and residences of Babolsar ($Mdn = 3.71$), $z = 2.530$, $p = .000$. It means that residents of Babolsar perceived more PSEI than Kelardasht's residents that might be due to the more job opportunities and facilities in Babolsar compared with Kelardasht.

Table 4.24 Relationship between place of residence and main variables

variables	Kelardasht	Babolsar	sig. (Mann-Whitney U test)
positive socioeconomic impacts	3.42	3.71	0.000
negative socioeconomic impacts	3.60	3.60	0.572
positive environmental impacts	3.25	3.50	0.000
negative environmental impacts	4.00	4.00	0.031
community concern	3.66	3.33	0.005
community attachment	5.00	4.50	0.040
utilization of tourism facilities by residents	3.00	3.00	0.001
General understanding of economic benefits	2.75	3.25	0.000

Asymptotic significances are displayed. The significance level is .05.

A statistically significant difference was observed in perceived PEI between residences of Kelardasht ($Mdn = 3.25$) and residences of Babolsar ($Mdn = 3.50$), $z = 4.02$, $p = .000$.

There was statistically significant difference in perceived NEI between residences of Kelardasht ($Mdn = 4.00$) and residences of Babolsar ($Mdn = 4.00$), $z = 2.16$, $p = .031$. The high scores (4.00) of negative environmental impacts might be due to the very high intensity of environmental degradation in both cities.

Level of concern about the community was also statistically significant different by residences of Kelardasht ($Mdn = 3.66$) and residences of Babolsar ($Mdn = 3.33$), $z = -2.18$, $p = .005$. In addition, there was statistically significant difference in community attachment between residences of Kelardasht ($Mdn = 5.00$) and residences of Babolsar ($Mdn = 4.50$), $z = -2.05$, $p = .040$. The higher scores of community concern and community

attachment in Kelardasht compared with Babolsar might be due to the social structure and demographic profiles in Kelardasht that is more consist of ethnic groups with closer social relationships, which in turn will strengthen the community concern and attachment.

There was statistically significant difference in utilization of tourism facilities and services between residences of Kelardasht ($Mdn = 3.00$) and residences of Babolsar ($Mdn = 3.00$), $z = 3.395$, $p = .001$.

The general understanding of the level of economic benefits that remain the society was statistically significant difference between residences of Kelardasht ($Mdn = 2.75$) and residences of Babolsar ($Mdn = 3.25$), $z = 6.79$, $p = .000$. The higher score (3.25) in Babolsar could be because of the diversification of economic activities related to tourism in Babolsar compared with Kelardasht.

4.4.9 Modeling support for nature based tourism development

A standard multiple regression was run to determine the overall fit of the proposed model (figure 4.2) and the relative contribution of each of the predictors variables to the total variance explained. For this purpose the independence of cases, linearity, homoscedasticity and multicollinearity of data were examined (see Appendix IV).

A multiple regression was run to predict PSEI from community concern, community attachment, utilization of tourism facilities by residents and general understanding of economic benefits of tourism. There was independence of residuals, as assessed by a Durbin-Watson statistic of 2.035.

The assumptions of linearity, independence of errors, homoscedasticity, unusual points and normality of residuals were met. These variables statistically significantly predicted PSCI, $F(4, 574) = 39.01, p < .05$, $\text{adj. } R^2 = .21$. All four variables added statistically significantly to the prediction, $p < .05$. Regression coefficients and standard errors can be found in table 4.25.

Table 4.25 multiple regression results of predictors for PSEI

Variable	B	SE	Beta	Sig.
(Constant)	2.063	.206		.000
community concern	-.070	.028	-.095	.012
community attachment	.107	.027	.147	.000
utilization of tourism facilities by residents	.229	.029	.301	.000
General understanding of economic benefits of tourism	.211	.037	.216	.000

a. Dependent Variable: positive socioeconomic impacts

Note: Significant level at $p < .05$, $R^2 = .21$, B=unstandardized regression coefficient, SE= standard error of the coefficient, Beta= standard coefficient

The model explained 21% of the variance in attitudes towards positive socioeconomic impacts of NBT in Mazandaran (figure 4.2).

A multiple regression was run to predict negative socioeconomic impacts from community concern, community attachment, utilization of tourism facilities by residents and general understanding of economic benefits of tourism.

There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.856. The assumptions of linearity, independence of errors, homoscedasticity, unusual points and normality of residuals were met. These variables statistically significantly predicted NSEI, $F(4, 574) = 177.94, p < .05, \text{adj. } R^2 = .55$.

Community concern and community attachment added statistically significantly to the prediction, $p < .05$. Regression coefficients and standard errors can be found in table 4.26.

There were no significant correlation between utilization of tourism facilities by residents, general understanding of economic benefits of tourism and NSEI.

Table 4.26 multiple regression results of predictors for NSEI

Variable	B	SE	Beta	Sig.
(Constant)	1.265	.169		.000
community concern	.590	.023	.737	.000
community attachment	.065	.022	.081	.004
utilization of tourism facilities by residents	.038	.024	.046	.105
General understanding of economic benefits of tourism	-.041	.030	-.038	.178

a. Dependent Variable: negative socioeconomic impacts

Note: Significant level at $p < .05$, $R^2 = .55$, B=unstandardized regression coefficient, SE= standard error of the coefficient, Beta= standard coefficient

The model explained 55% of the variance in attitudes towards negative socioeconomic impacts of NBT in Mazandaran.

A multiple regression was run to predict positive environmental impacts from community concern, community attachment, utilization of tourism facilities by residents and general understanding of economic benefits of tourism. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.909. The assumptions of linearity, independence of errors, homoscedasticity, unusual points and normality of residuals were met.

These variables statistically significantly predicted PEI, $F(4, 574) = 57.56, p < .05$, $\text{adj. } R^2 = .28$. All four variables added statistically significantly to the prediction, $p < .05$. Regression coefficients and standard errors can be found in table 4.27.

Table 4.27 multiple regression results of predictors for PEI

Variable	B	SE	Beta	Sig.
(Constant)	1.398	.280		.000
community concern	-.179	.038	-.170	.000
community attachment	.115	.037	.110	.002
utilization of tourism facilities by residents	.417	.039	.385	.000
General understanding of economic benefits of tourism	.265	.050	.190	.000

a. Dependent Variable: positive environmental impacts

Note: Significant level at $p < .05$, $R^2 = .28$, B=unstandardized regression coefficient, SE= standard error of the coefficient, Beta= standard coefficient

The model explained 28% of the variance in attitudes towards positive environmental impacts of NBT in Mazandaran.

A multiple regression was run to predict negative environmental impacts from community concern, community attachment, utilization of tourism facilities by residents and general understanding of economic benefits of tourism. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.880. The assumptions of linearity, independence of errors, homoscedasticity, unusual points and normality of residuals were met.

These variables statistically significantly predicted NEI, $F(4, 574) = 50.90, p < .05$, $\text{adj. } R^2 = .26$. Community concern, community attachment and general understanding of economic benefits of tourism added statistically significantly to the prediction, $p < .05$.

Table 4.28 multiple regression results of predictors for NEI

Variable	B	SE	Beta	Sig.
(Constant)	2.354	.239		.000
community concern	.413	.032	.468	.000
community attachment	.123	.032	.140	.000
utilization of tourism facilities by residents	-.028	.034	-.031	.403
General understanding of economic benefits of tourism	-.100	.043	-.085	.021

a. Dependent Variable: negative environmental impacts

Note: Significant level at $p < .05$, $R^2 = .26$, B=unstandardized regression coefficient, SE= standard error of the coefficient, Beta= standard coefficient

Regression coefficients and standard errors can be found in table 4.28. There was no significant correlation between utilization of tourism facilities by residents and NEI.

4.4.10 Research questions 14 to 21: path analysis to predict support for tourism development

A multiple regression was run to predict support for tourism development from PSEI, NSEI, PEI, NEI, community concern, community attachment, utilization of tourism facilities by residents and general understanding of economic benefits of tourism. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.920. The assumptions of linearity, independence of errors, homoscedasticity, unusual points and normality of residuals were met.

These variables statistically significantly predicted support for tourism development, $F(4, 574) = 56.79, p < .05, \text{adj. } R^2 = .44$. Table 4.29 shows PSEI, NEI and community concern added statistically significantly to the prediction, $p < .05$.

Table 4.29 multiple regression results of predictors for support for tourism development

Model	B	SE	Beta	Sig.
(Constant)	.182	.287		.527
positive socio-cultural impacts	.713	.051	.515	.000
negative socio-cultural impacts	.037	.067	.029	.582
positive environmental impacts	-.056	.038	-.057	.140
negative environmental impacts	-.113	.047	-.097	.017
community concern	.125	.048	.123	.010
community attachment	-.031	.033	-.031	.343
utilization of tourism facilities by residents	.333	.038	.316	.000
General understanding of economic benefits of tourism	.011	.045	.008	.800

a. Dependent Variable: Support for tourism development

Note: Significant level at $p < .05$, $R^2 = .44$, B=unstandardized regression coefficient, SE= standard error of the coefficient, Beta= standard coefficient

The model explained 44% of the variance in support for nature-based tourism development in Mazandaran. Regression coefficients and standard errors can be found in table 4.29. Figure 4.2 depicts the fit proposed model of support for nature based tourism development.

Examining the *full model* can be noted (Figure 4.2):

- ✓ Community concern influences negatively and significantly the attitudes towards both PSEI ($p=-.95$) and PEI ($p=-.170$) and affects positively and significantly both NSEI ($p=.737$) and NEI ($p=.471$) also support for tourism development ($p=.123$).
- ✓ Attachment to the community has a positive and significance influence on PSEI ($p=.146$), NESI ($p=.085$), PEI ($p=.110$) and NEI ($p=.137$) but no significant direct effect on support for tourism was found.
- ✓ Utilization of tourism facilities has an direct influence on support for tourism development ($p=.316$) as well as PSEI ($p=.301$) and PEI ($p=.385$).
- ✓ General understanding of economic benefits has no direct effect on support for tourism development but influence positively and significantly PSEI ($p=.216$) and PEI ($p=.190$) and negatively and significantly (NEI $=-.090$).
- ✓ The perceived positive socioeconomic impacts influence positively and significantly support for tourism development ($p=.513$).
- ✓ The perceived negative environmental impacts has negatively and significantly relationship with support for tourism development.
- ✓ No significant relationship were found between both PEI and NSEI and support for tourism.

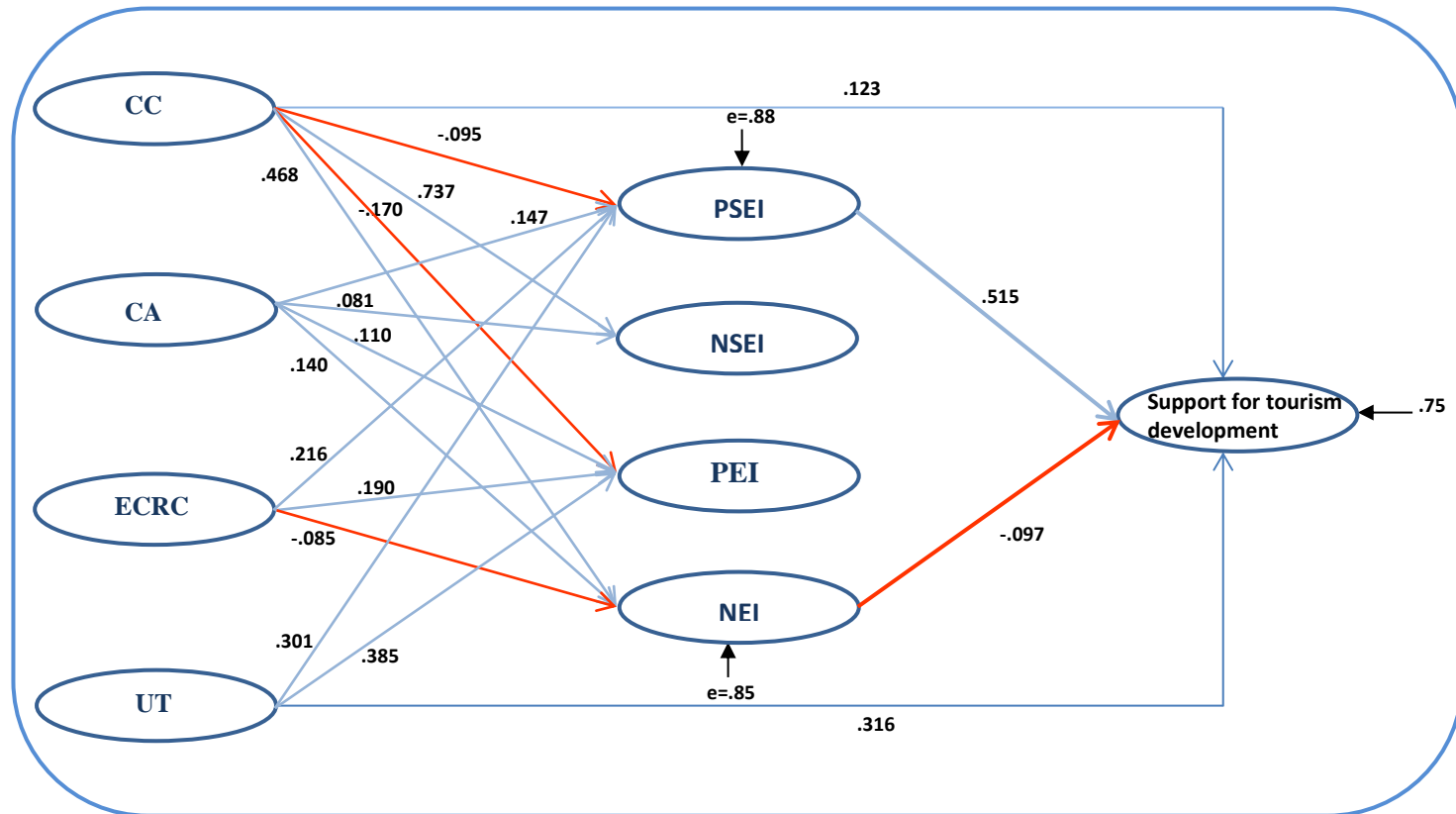


Figure 4.2 Fit model of support for tourism development

4.4.11 Decomposition of the correlation between exogenous variables and tourism development

Table 3 4.30 to 4.34 illustrates the results of decomposition of the correlation between independent variables and support for tourism development.

The total influence of community concern on support for tourism development (.0597) is less than direct influence of this variable on the support for tourism (.123). The negative relationship of this variable with PSEI and the strongly positive influence on NEI which has a negative effect on support for tourism development reduced the total influence of community concern on support for tourism development (.0597).

Table 4.30 Decomposition of the correlation between community concern and support for tourism development

Community concern				
Variable	A Effect of CC on perceived impacts	B Effect on support for tourism development	(A×B) Indirect effect	Percentage of total effect on support for tourism
Community concern		.123*		205.88
PSEI	-.095	.515*	-.0489	-81.89
NSEI	.737*	.029	.0213	35.77
PEI	-.170*	-.057	.0099	16.21
NEI	.468*	-.097*	-.0453	-75.98
Total indirect effects			-.0632	
Total effects		.0597		100

The strength and direction of the influence of community attachment on support for tourism development has been changed due to the indirect effect of this variable on PSEI (table 4.31). While the direct effect of community attachment on support for tourism is -.031 the total effect is .0272.

Table 4.31 Decomposition of the correlation between community attachment and support for tourism development

Community attachment				
Variable	A Effect of CA on perceived impacts	B Effect on support for tourism development	(A×B) Indirect effect	Percentage of total effect on support for tourism
Community attachment		-.031		-113.95
PSEI	.147*	.515*	.0757	278.28
NSEI	.081*	.029	.0023	8.63
PEI	.110*	-.057	-.0062	-23.04
NEI	.140*	-.097*	-.0135	-49.91
Total indirect effects			.0582	
Total effects		.0272		100

The direct relationship between utilization of tourism facilities by residences (.316) and support for tourism development accounts for 70.63% of total effect (.447) of this variable. The indirect effects of this variable on PSEI explain the remaining effect (table 4.32).

Table 4.32 Decomposition of the correlation between utilization of tourism facilities and tourism development

Utilization of tourism facility and services by residents				
Variable	A Effect of UT on perceived impacts	B Effect on support for tourism development	(A×B) Indirect effect	Percentage of total effect on support for tourism
UT		.316*		70.63
PSEI	.301*	.515*	.1550	34.64
NSEI	.046	.029	.0013	0.29
PEI	.385*	-.057	-.0219	-4.90
NEI	-.031	-.097*	-.0030	-0.672
Total indirect effects			.1313	
Total effects		.4473		100

Table 4.33 Decomposition of the correlation between general understanding of economic benefits of tourism and support for tourism development

General understanding of economic benefits of tourism				
Variable	A Effect of ECRC on perceived impacts	B Effect on support for tourism development	(A×B) Indirect effect	Percentage of total effect on support for tourism
ECRC	-	.008	-	6.92
PSEI	.216*	.515*	.1112	96.26
NSEI	-.038	.029	-.0011	-.95
PEI	.190*	-.057	-.0108	-9.37
NEI	-.085*	-.097*	.0082	7.13
Total indirect effects			.1075	
Total effects		0.1155		100

The total effect of general understanding of tourism benefits of tourism on support for tourism (.115) is increased compare to its direct influence (.008) because of the indirect positive relationships with PSEI (table 4.33).

4.4.12 Path analysis to predict support for tourism development in reduced model

A multiple regression was run to predict support for tourism development from positive socioeconomic impacts, negative environmental impacts, community concern, community attachment, utilization of tourism facilities by residents and general understanding of economic benefits of tourism.

Some of the path coefficients for model were derived from multiple regression analyses (part 4.3.9) and multiple regression analyses for reduced model (table 4.34). For the reduced model three layers of multiple regressions were used:

Figure 4.3 shows the reduced model in which all the above-mentioned effects were regarded. For the reduced model three layers of multiple regressions were used:

- 1) With PSEI as criterion and community concern, community attachment, utilization of tourism facilities by residents and general understanding of economic benefits of tourism as predictors.
- 2) With NEI as criterion and community concern, community attachment, utilization of tourism facilities by residents and general understanding of economic benefits of tourism as predictors.

- 3) With support for more tourism development as criterion and CC, CA, UT, EB, PSEI and NEI as predictors.

There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.919. The assumptions of linearity, independence of errors, homoscedasticity, unusual points and normality of residuals were met. All variables statistically significantly predicted support for tourism development, $F(4, 576) = 75.26$, $p < .05$, $\text{adj. } R^2 = .44$. Regression coefficients and standard errors can be found in table 4.34.

Table 4.34 multiple regression results of predictors for support for tourism in reduced model

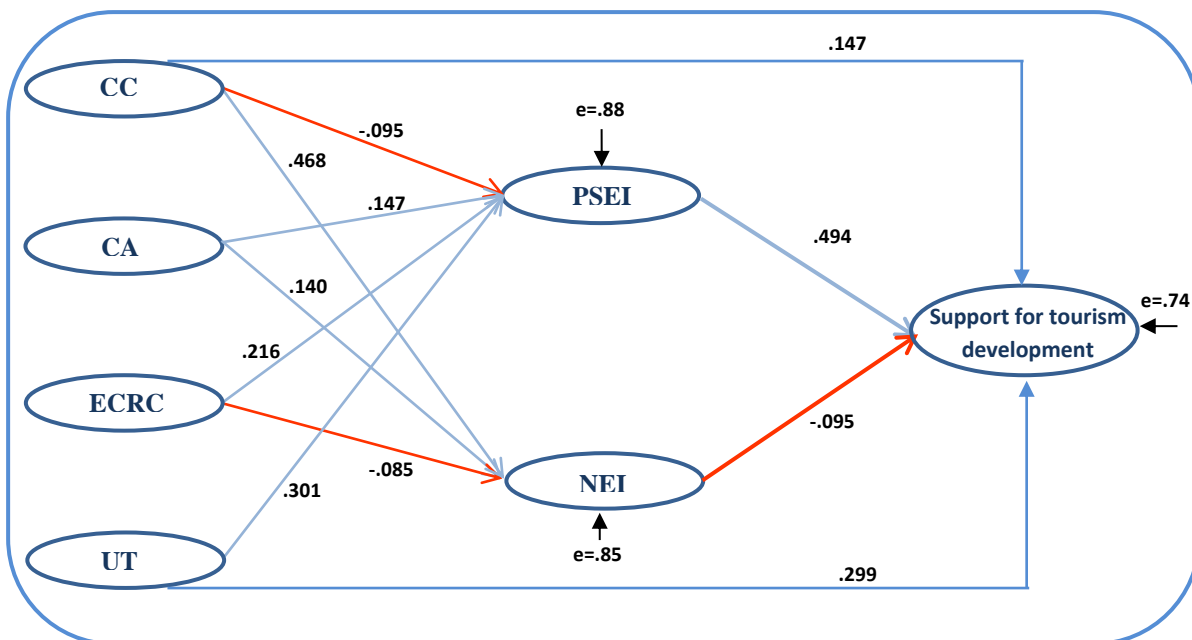
Variable	B	SE	Beta	Sig.
(Constant)	.086	.287		.725
Positive socioeconomic impacts	.684	.051	.494	.000
Negative environmental impacts	-.110	.047	-.095	.008
Community concern (CC)	.151	.048	.147	.000
Utilization of tourism services (UT)	.314	.038	.299	.000

a. Dependent Variable: support for tourism development

Note: Significant level at $p < .05$, $R^2 = .44$, B=unstandardized regression coefficient, SE= standard error of the coefficient, Beta= standard coefficient

Figure 4.3 illustrates an input path diagram representing proposed reduced model.

Figure 4.3 Reduced model of support for tourism development



Testing the reduced model involves comparing how well it fits the data compared to how well the full model fits the data.

$$\text{Fit of the full model} = 1 - 0.89^2 \times 0.85^2 \times 0.75^2 = 0.678$$

$$\text{Fit of the reduced model} = 1 - 0.88^2 \times 0.85^2 \times 0.75^2 = 0.676$$

The summary statistic showing the relative fit of the reduced model to the full model is

$$\frac{1 - \text{Fit of full model}}{1 - \text{Fit of reduced model}} = \frac{1 - 0.678}{1 - 0.676} = 0.9907$$

The reduced model like full model fit the data.

Chapter 5: Tourism development in Mazandaran

5.1 Iran at a Glance

Iran has been in Persian literature the title of the country since Sassanian era (224-651 BC) and became the officially international title for the country in 1935. In Western countries, Iran had been traditionally known as Persia. Iran located in southwest Asia in the Middle East region. Around 75 million people live in an area of 1,648,195 square kilometer (SCI, 2011). Google Maps (2013) represents the location of Iran in relation to neighboring countries (Map 5.1).

Map 5.1 Iran



Source: Google Maps, 2013

Iran faces to Persian Gulf and Gulf of Oman on the south, Caspian Sea, Turkmenistan, Azerbaijan and Armenia on the north, Afghanistan and Pakistan on the East and Turkey and Iraq on the west. Table 5.1 shows length of borderlines of Iran.

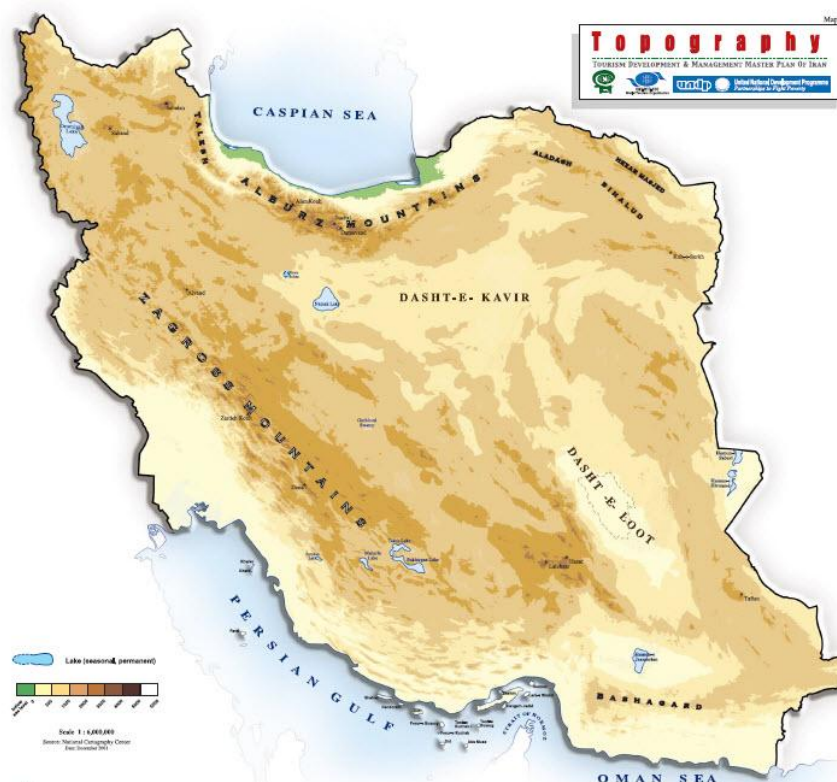
Table 5.1 Length of Iran's borderlines (Kilometer)

Total	Iran-Iraq	Iran-Turkey	Iran-Torkemanestan	Iran-azarbaijan	Iran-armenia	Northern coastline	Iran-Afghanistan	Iran-pakistan	Southern coastline
8865	1609	511	1205	759	48	765	945	978	2045

Source: SCI (2011)

The landscape of Iran is dominated by Alborz and Zagros mountain ranges, two vast deserts namely Dasht-e Kavir and Dasht-e Lut, two coastal areas of Persian Gulf, to the south with around 2045 km length, and Caspian Sea, to the north around 765 km length, and several rivers which drain into the Persian Gulf, Caspian Sea or the desert areas of the Central Plateau (Map 5.2).

Map 5.2 Topography of Iran



Source: Iran Travel and Tourism Organization (ITTO), 2002

The Alborz Range stretches parallel to the Caspian Sea in the north and the highest peak is Damavand at 5,671 meters. The Zagros Range runs parallel to the Persian Gulf to the southeast and the highest peak is Dena at 4,409 meters. Iran's forest area is estimated at about 14,202,559 ha (equal to 9 percent of the country's land area) and are divided into two areas including the Caspian forests (the Hyrcanian forests) in the north which known as the oldest forests in the world and dry and semi-dry forests (Forest, Range & Watershed Organization (FRWO), 2013a). The two deserts of the Central Iranian Plateau cover around 20% of Iran's total land area (FRWO, 2013b).

5.1.1 Iran's Climate

The climate of Iran is influenced by its location and above-mentioned geographical characteristics. Iran has various climates; the range between the maximum and minimum daily temperatures is up to 40 degree centigrade and while there is 2000mm of precipitation in the Caspian Sea coasts, central part receives less than 50 mm (FRWO, 2005). In general, climate in Iran ranging from arid and semiarid in central part to subtropical along the Caspian Sea lowland in north and cold in mountainous areas of Alborz and Zagros. The climate of Persian Gulf littoral is mild in winter, hot, and humid in summer. Diversification of geographical and climatic conditions of country makes it possible to travel to Iran throughout the year and in all seasons.

5.1.2 Flora and Fauna of Iran

Iran hosts 8200 plant species of which 1720 is native ones. The field studies reveal the existence of over 500 bird species, 1600 mammal species (equal to all mammal species in Europe), 180 reptile species (26 native ones), 270 fish species and 13 amphibian species in Iran (FRWO, 2005, p.5).

5.1.3 Iran's Economy

Iran's economy is based on oil, gas and Petrochemical industry, agriculture, mining and industry. Iran is estimated to have around 9% of the world's oil reserves (CBI, 2013). The majority of country land surface is not arable and only one-third is suited for agriculture. Cereal crops such as wheat, barley, rice, fruits, sugar beet, tobacco, saffron, tea, and pistachio nuts are the Iran's major agricultural products.

5.1.4 The History of Iran

Iran has a long history. Hegel (1837/1902, p.147) considered the ancient Persians to be the first historic people:

“In Persia first arises that light which shines itself and illuminates what is around...The principle of development begins with the history of Persia; this constitutes therefore the beginning of history” (cited in Baum & O’Gorman, 2010).

It is believed that the oldest Persian urban civilization was Elamite who arose in Khuzestan around the city of Shush on 2700 BC (Shahmiri, 2013). In around 2000 BC, it is thought that the Aryans entered North and North East of Iran (Mobin, 2013). “With the mixing of the Aryan and Elamite races, three main tribes gradually came to dominate the area covered by modern day Iran. The Medes inhabited the west around Hamadan, the Parthians who inhabited the east of Iran around the Caspian Sea, and the Persians who inhabited the southern areas of Iran. The coalescence of these three tribes over time led to the rise of the Persian Empire and its great impact on the rest of the world through science, architecture, technology, art, and literature” (ITTO, 2002).

Cyrus the Great established the Achaemenid Empire in 550 BC; it was the largest Empire that the ancient world had seen, extending from Anatolia and Egypt across western Asia to northern India and Central Asia (Department of Ancient Near Eastern Art (DANE), 2004).

The Archaemenian Dynasty lasted until 330 BC when Alexander conquered Achaemenid Empire. Parthians in 190 BC defeated Macedonian Seleucid, the founder of Seleucid dynasty. Early Persian architecture emerged during the reign of the Parthian Kings (ITTO, 2002). Ardeshir I was the founder of Sassanid Empire in 224 AD. During the reign of Shapur I Zoroastrianism was made the state religion (DANE, 2003), many of the finest fire temples that can still be seen today were constructed during this time (ITTO, 2002). A series of wars had weakened the Sassanid Empire, this weakened Iran, and Arab forces, united under Islam, defeated the Sassanid armies in 642 (DANE, 2003).

Shah Ismaeil founded the Safavid dynasty in 1502, the greatest dynasty to emerge from Iran in the Islamic period (Yalman, 2002). It was in this period, which Shia became the

official religion in Iran and Esfahan was rebuilt to become one of the prime centers throughout the known world, including Europeans (ITTO, 2002).

Then Nader Shah established Afsharieh dynasty which was defeated by Karim Khan Zand, a Lor, who moved the capital to Shiraz which he built into a great city (ITTO, 2002). The weakened successors to Karim Khan Zand handed over the power to the Ghajars who established their capital in Tehran in 1795 (ITTO, 2002).

In 1925 Reza shah came to power and founded Pahlavi dynasty, which was overthrown by Islamic revolution in November 1978 and the Pahlavi dynasty was then replaced by the Islamic Republic of Iran that despite the most severe difficulties including an 8-year war with Iraq continues to the present time (ITTO, 2002).

5.1.5 Tourism Resources in Iran

Due to the unique strategic location, Iran has always been considered as a major regional power from the earliest times. This location has placed it as a bridge between Asia, Middle East, and Europe. Different ethnic groups have lived in Iran since ancient times. This has established it as a major hub for science, art, literature, and great architecture. The combination of these factors has led to formation of Iran's rich and unique tangible and intangible cultural heritage dating from ancient times (ITTO, 2002).

The symbols of this rich cultural and historical heritage are scattered throughout the vast territory of Iran in a variety of landscapes and climates. The varied landscapes of Iran are set within National parks, protected areas, wildlife refuges, national natural monuments, biosphere reserves, wetlands, and forest parks that prepare the main resources for nature-based tourism in the country.

5.1.5.1 Cultural Resources of Iran

Iran is incredibly rich in cultural and heritage resources (Baum & O'Gorman, 2010) with 16 inscribed world heritage sites (table 5.2 and Map 5.3), 54 properties on the UNESCO tentative list (UNESCO, 2013a), 10 elements on the list intangible cultural heritage (UNESCO, 2013b). Eight out of 15 inscribed sites are ancient historical sites: Pasargade, Persepolis, Bisotun, Tchogha Zanbil, Takht-e Soleyman, the Persian gardens, Shushtar Hydraulic System, and Bam complex (Map 5.3). The other listed sites are two tombs, Soltanyeh and Gonbad-e Qābus, one historical large square, Naghshe Jahann, one

historical mosque namely Masjed-e Jāmé of Isfahan, Golestan Palace and St. Thaddeus Monastery.

Table 5.2 Iran's Properties inscribed on the World Heritage List

Name	Description	Place	Historical Period	Inscription
Persepolis	Capital of the Achaemenid Empire	Shiraz	513 BC	1979
Tchogha Zanbil	Holy city of the Kingdom of Elam	Susa	1250 BC	1979
Meidan Emam (Naghsh-e Jahan)	Royal square	Esfahan	beginning of the 17th century	1979
Takht-e Soleyman	Archaeological site	Takab	6 th and 7 th and 13 th century	2003
Pasargade	First capital of the Achaemenid Empire	Shiraz	6 th century BC	2004
Bam and its cultural landscape	fortified settlement and citadel	Bam	6 th to 4 th centuries BC	2005
Soltanyeh	Mausoleum	Zanjan	1302	2005
Bisotun	Archaeological site	Kermanshah	521 BC	2006
Armenian Monastic Ensembles	Three monastic ensembles	Jolfa	7th century	2008
Shushtar Historical Hydraulic System	Historical site	Shushtar	5 th century BC	2009
Tabriz Historic Bazaar Complex	Historical site	Tabriz	18 th century	2010
Sheikh Safi al-din Khānegāh Ensemble	Historical complex	Ardabil	16 th to 18 th century	2010
The Persian Garden	collection of nine gardens	Shiraz, Esfahan, Kashan, Behshahr, Mahan, Yazd, Birjand	6 th century BC to 19 th century	2011
Masjed-e Jāmé of Isfahan	Historical mosque	Esfahan	841	2012
Gonbad-e Qābus	Tomb	Gonbad-e Qābus	1006	2012
Golestan Palace	Palace	Tehran	18 th century	2013

Source: UNESCO, 2013a

This list indicates some aspects of Iran's cultural and historical capabilities that can provide motivation for international tourists to visit Iran.

Map 5.3 Iran's properties inscribed on the World Heritage List (2013)

Iran's properties inscribed on the World Heritage List (2013)



Source: UNESCO, 2013a, Draft R.Mirzaei, 2013

5.1.5.2 Natural Resources of Iran

Iran is a large country that its topography varies considerably from major depressions below sea level to mountains in excess of 5,600 meters. The geomorphology of the country is varied and interesting. It includes mountain features, desert features such as dunes and salty lakes, coastal beaches, and karst features such as extensive caves (tourist consult, 1974).

There has been considerable environmental degradation and over-exploitation of natural resources in Iran in the past few decades (Mirzaei, 2007). Several factors such as population growth, unsustainable and low performance utilization of basic resources and destructive human activities especially in rural settlements is threatening the biodiversity of the country (Department of Environment (DOE), 2010, p.10).

The scale and scope of natural degradation led to the founding of the Iranian Wildlife Association in 1956. The IWA was an independent body with a mandate to oversee the protection and preservation of the country's wildlife as well as compliance with pertinent laws.

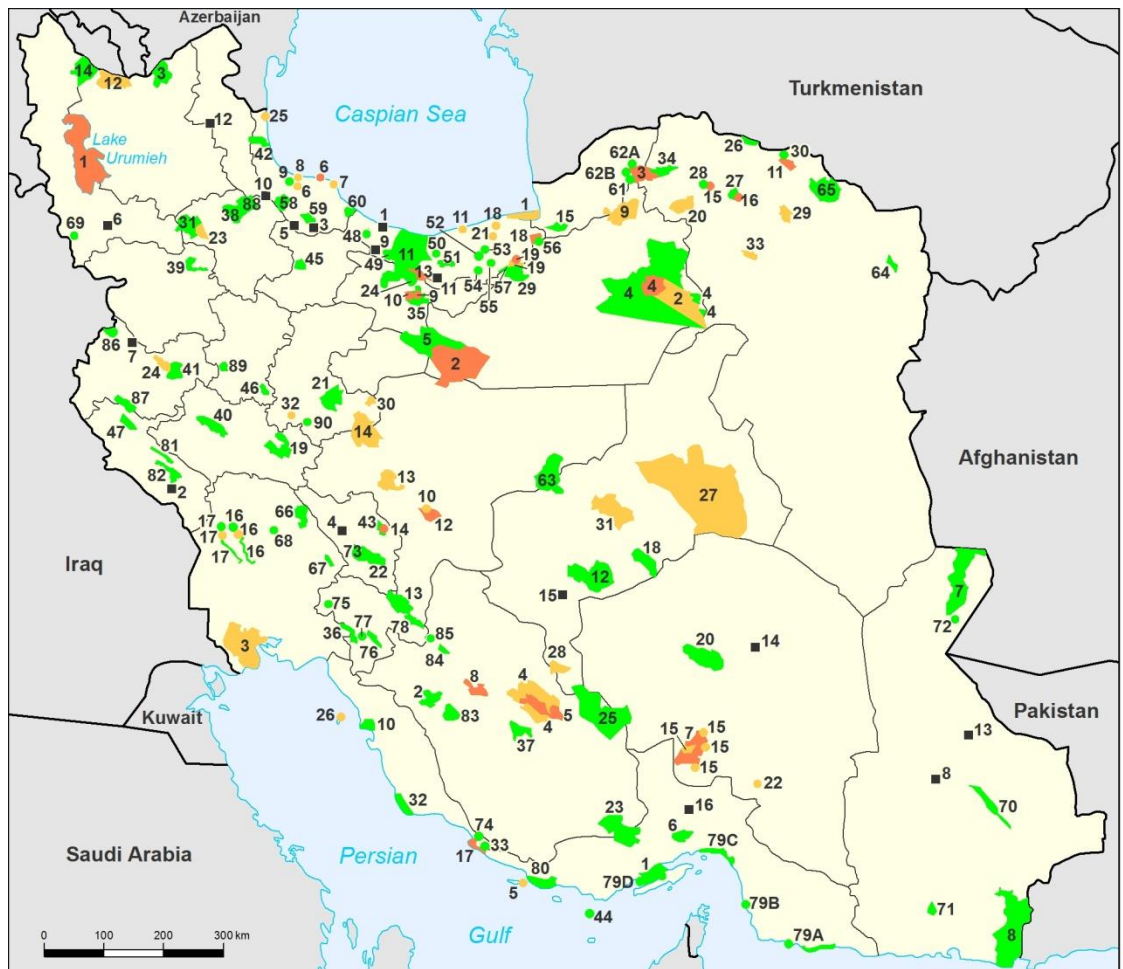
Following the approval of the Hunting and Fishing Bill in 1967, the Hunting and Fishing Organization replaced the IWA. In 1971, the HFO was transformed into the Department of Environment (DOE). The High Council of Hunting and Fishing was renamed as the High Council for Environment Protection. The reorganization added environmental activities including preventing actions detrimental to environmental balance to its mandate.

In 1989, the post of prime minister in an amendment of the Constitution of the Islamic Republic of Iran was removed. Pursuant to the 1992 amendment to the Environment Protection and Enhancement Act of 1972 and change in the composition of members of the High Council for Environment Protection, the DOE became an affiliate of the Office of the President. The President chairs the Council and a Vice-President heads the DOE.

To preserve the existing biodiversity over the wide geographic expanse of Iran, four types of areas have been designated for conservation and protection, namely national parks, wildlife refuge, protected areas, and natural national monuments. By the year 2013, the size of the DOE supervised areas reached over 17.087 million hectares, about 10.4 % of the total land area in 272 under protected areas (DOE, 2013).

Iran's most prominent natural resources are located in these areas (Map 5.4).

Map 5.4 Iran's protected areas

**Protected Areas**

- 1 Hara
- 2 Arjan&Parishan
- 3 Arasbaran
- 4 Touran
- 5 Kavir
- 6 Geno
- 7 Hamoun
- 8 Gando
- 9 Siahkeshim
- 10 Heleh
- 11 Alborz-e markazy
- 12 Kalmamd
- 13 Dena
- 14 Marakan
- 15 Jahannama
- 16 Dez
- 17 Karkheh
- 18 Kuh-e Bafgh
- 19 Oshotorankuh
- 20 Bidoyeh
- 21 Haftad Gholeh
- 22 Sabzkuh
- 23 Hormod
- 24 Varjin
- 25 Bahram-e goor
- 26 Sarany
- 27 Sarigol
- 28 Salouk
- 29 Parvar
- 30 Tandoureh
- 31 Angoran
- 32 Mond
- 33 Nayband
- 34 Ghorkhod
- 35 Jajrud
- 36 Kuh Khaeez&Sorkh
- 37 Mian Jangal Fasa

- 38 Sorkhabad
- 39 Bijar
- 40 Sefidkuh
- 41 Bisotun
- 42 Lisar
- 43 Tang-e Sayad
- 44 Faror Islands
- 45 Bashgol
- 46 Lashkardar
- 47 Manesht&Ghalarahg
- 48 Beles Kuh
- 49 Chahar Bagh
- 50 Vaz
- 51 Haraz
- 52 Abshar-e Shirgah
- 53 Khipos
- 54 Shesh Rudbar
- 55 Asas
- 56 Hezar Jerib
- 57 Boola
- 58 Ghasht rudkhan
- 59 Siah rud-e rudbar
- 60 Sarvelat&Javaherdasht
- 61 Loveh
- 62a Zav
- 62b Zav
- 63 Siah Kuh
- 64 Bagh-e Keshmir
- 65 Ors-e Sistan
- 66 Shimbar
- 67 Shalo&Mongasht
- 68 Haft Shahidan
- 69 Mir Abad
- 70 Kuh-e Birk
- 71 Kuh-e Pozak
- 72 Shila
- 73 Helen
- 74 Hara-e Nayband
- 75 Solak
- 76 Khamin

- 77 Kuh-e Dil
- 78 Denay-e Sharghy
- 79A Hara-e Gabrik
- 79B Hara-e Rudegaz
- 79C Hara-e Tiab&Minab
- 79D Hara-e Khoran
- 80 Seraj
- 81 Kabir kuh
- 82 Dinar Kuh
- 83 Maleh Galeh
- 84 Tang-e Bostanak
- 85 Abshar-e Margon
- 86 Bozin&Marakhil
- 87 Ghalajeh
- 88 Agh Dagh
- 89 Khan Ghormaz
- 90 Alvand

National Parks

- 1 Urumieh
- 2 Kavir
- 3 Golestan
- 4 Touran
- 5 Bakhtegan
- 6 Bojagh
- 7 Khabr
- 8 Bamou
- 9 Khojir
- 10 Sorkh-e Hesar
- 11 Tandooreh
- 12 Kolahghazi
- 13 Lar
- 14 Tang-e Sayad
- 15 Salouk
- 16 Sarigol
- 17 Nayband
- 18 Paband
- 19 Kiasar

Wildlife Refuges

- 1 Miankaleh
- 2 Touran
- 3 Shadegan
- 4 Bakhtegan
- 5 Shidvar
- 6 Selkeh
- 7 Amirkalayeh
- 8 Sorkhandol
- 9 Khoshyeylagh
- 10 Kolaghazy
- 11 Fereidonkenar
- 12 Kiamaky
- 13 Ghamishloo
- 14 Mooteh
- 15 Rochon
- 16 Dez
- 17 Karkheh
- 18 Dasht-e naz
- 19 Dodangeh
- 20 Miandasht
- 21 Semeskandeh
- 22 Mehroyeh
- 23 Angoran
- 24 Bisotun
- 25 Lavandvil
- 26 Kharko
- 27 Naybandan
- 28 Boroueeeyeh
- 29 Heidary
- 30 Jasb
- 31 Dareh Anjir
- 32 Rasband
- 33 Shirahmad

National Nature Monuments

- 1 Khoshk-e Daran
- 2 Dehloran
- 3 Sosan-e Sefid
- 4 Laleh-e Vajgoon
- 5 Sarv-e Harzevil
- 6 Ghar-e Saholan
- 7 Ghar-e Ghoryghalae
- 8 Cheshmeh-e Gelfeshan-e pirlg
- 9 Alamkuh
- 10 Ghare Yakhkan
- 11 Golehe Damavand
- 12 Goleh-e Sabalan
- 13 Taftan
- 14 Sarv-e Sirch
- 15 Sarv-e Abarku
- 16 Khersin

Source: DOE (2013) Draft Dittmann (2013)

5.1.5.2.1 National Parks

A national park is a designated part of Iran's environment, including forests, rangelands, woodlands, prairies, water, or mountains. As such, it is brought under protection to help permanently preserve its natural ecology and create a suitable environment for the flourishing of wildlife and flora under natural conditions. The national parks system currently covers almost 1.986 million hectares in 28 national parks (DOE, 2013).

5.1.5.2.2 National Natural Monuments

This applies to exemplary and rare instances of flora, fauna or remarkable land formations or landscapes or even ancient trees, which are brought under protection through suitable perimeters. Presently 35 national natural monuments cover 37576 hectares (DOE, 2013).

5.1.5.2.3 Protected Areas

A protected area in Iran exemplifies natural resources such as forests, rangelands, prairies, water or mountains that are significantly important due to their impact on wildlife breeding, preservation of plant species or their natural state. Over 166 protected areas cover about 9.48 million hectares (DOE, 2013).

5.1.5.2.4 Wildlife Refuges

Wildlife refuge in Iran means natural resources incorporating forests, rangelands, prairies, water, and mountains that have natural habitats and special climatic conditions. These habitats have been brought under protection to help effectively protect and revive wild animals. Total area of 43 wild life refuges is 5.586 million hectares (DOE, 2013).

Details of the four categories of protected areas managed by the Department of Environment are given in table 5.3.

Table 5.3 Iran's under protected areas

Number and area of the Iran's protected areas (2013)					
Category	Number		Area		% of entire land area
	Number	percentage	Hectares	Percentage	
National Park	28	10.3	1986087	11.6	1.2
National Monument	35	12.9	37576	0.2	0.02
Wildlife Refuge	43	15.8	5585840	32.7	3.39
Protected area	166	61	9477175	55.5	5.75
Total	272	100.0	17086678	100.0	10.36

Source: DOE, 2013

5.1.5.2.5 Wetlands in Iran

The Ramsar Convention (adopted at Ramsar on Mazandaran in 1971) defined 42 types of wetlands which all exist in Iran except one. This demonstrates the diversity of wetland in Iran (DOE, 2010). Iran has designated 33 wetlands in 22 Ramsar sites cover land area of 1,483,824 hectares. These wetlands play an important role in nature-based tourism activities in Iran. Miankaleh and Fereydoun-Kenar wetlands are among the most important natural attractions of Mazandaran.

5.1.6 Tourism Facilities and Services in Iran

Developing the first tourism infrastructures in contemporary Iran, dates back to 1930s where the first tourism facilities including some guesthouses, hotels, and airports were built. Hotel investment was supported by management contracts with major international chains such as Hilton, Hyatt, Intercontinental and Sheraton and the national airline, Iran Air, was established which by the late 1970s was the fastest growing airline in the world and one of the most profitable (Baum & O'Gorman, 2010, p.4). Government sectors and in some cases private sectors, established the following tourism facilities and services.

5.1.6.1 Transportation network

Presently, Iran has 9 international airports located at Tehran, Shiraz, Esfahan, Tabriz, Mashhad, Kish Island, Zahedan and Bandarabas. The Imam Khomeini airport in Tehran has the highest traffic volume in country. Tourism statistics show that the share of air transport is gradually decreasing in past years while the share of road transport is increasing in Iran (table 5.4).

Table 5.4 Inbound tourism by mode of transport % (2007-2009)

year	Air	Road%	Water	Rail
2007	40.8	58.6	0.5	0.1
2008	34.6	64.6	0.6	0.1
2009	27.9	71.2	0.7	0.1

Source: ICHTO, 2010

A number of 41 domestic airports in Iran form a hub and spoke system with the hub centered on Tehran. In tourism development master plan of Iran the air transport system is described as follows:

“Overall, capacity is limited, services unreliable, safety questionable, reservation and booking systems manual, ticket prices high and required in cash, and considerable demand turned away” (ITTO, 2002, p.81).

Over the past years and especially after political and economic sanctions against Iran, the Iran Air has been unable to deliver the fleet size required to meet demand. Aging and outdated fleet, not to provide fuel to Iranian aircrafts on international flights and increase in foreign exchange rate are among the main reasons for poor operation of Iran Air.

After the Islamic revolution, Western country markets have fallen dramatically and neighboring Islamic countries have been the main inbound tourism market. Concurrent with these changes in market the mode of transport shifted from air transport to land transport (table 3.6). Road transportation is presently the main mode of transport to and within Iran (ITTO, 2002).

The main international land gateways to Iran are from Iraq via Mehran and Shalamcheh, from Turkey via Jolfa and Bazargan, From Azarbaijan via Astara, and from Afghanistan via Taybad.

Fixed share of rail transport could be due to the limited capacity of the sector. In general, rail transportation in Iran is not so developed. The quality and comfort of the rolling stock varies considerably, capacities are generally limited, in-journey services are poor, and speeds generally low thus taking a considerable time to complete a journey (ITTO, 2002).

The central station located in Tehran from which six main lines radiate as follows:

- I- The North-East line to Khorassan. This line is the most important one for religious tourism as Imam Reza shrine in Mashhad is the most prominent pilgrimage site in Iran.
- II- The North line to Golestan in Caspian Sea. This route goes through Firouzkooch, Sari and Gorgan and can be used by Eco-tourists.
- III- The North-West line goes to Tabriz and from there to Turkey, Azerbaijan and Armenia.
- IV- The South line goes to Khozestan.
- V- The Central line which passes through Esfahan and Shiraz. This line is very important to visit historical monuments.
- VI- The South-East line goes to Yazd, Persian Gulf coasts in Bandarabas and Zahedan.

5.1.6.2 Accommodation Establishments in Iran

Iran Cultural Heritage and Tourism Organization (ICHTO) categorized accommodation establishments into hotels, guesthouses, and hotel apartments. The hotels are graded from one to five stars. There are some other forms of accommodation establishments like Ecolodges, chalets, villas, motels and camping sites which their statistics and data are not available, although the data exist in police departments.

There were 2332 accommodation units in Iran in 2012 of which 843 were hotels, 1397 were guest houses and 77 were hotel apartments (ICHTO, 2012). Table 5.5 shows the classification and capacity for accommodation units in Iran.

Table 5.5 Accommodation establishments in Iran

Hotel Category	No of units	No of Rooms	No of Beds
5 Star Hotels	17	3786	7775
4 Star Hotels	68	6587	13360
3 Star Hotels	172	10122	22050
2 star hotels	313	9975	22964
1 star hotels	273	6785	14486
Guest houses	1397	25892	68194
Hotel apartments	77	682	2869
Unclassified	15	950	1117
Total	2332	64779	152815

Source: ICHTO, 2012

The accommodation establishments do not have access to Global Distribution Systems (GDS) that are the most important and effective channel for communicating with potentials customers.

5.2 Tourism development in Iran

The remains of Achaemenid Empire (550 BC) extensive and well developed road networks, known as the king road, which connected Susa to Persepolis shows that travel has long been flourished in Iran. Herodotus said stations and guesthouses were located about every 4 Farsang¹ (18 km) along this road system (cited in Briant, 1998).

Travel has been highly regarded in other Iranian dynasty. During the Safavid era (1501-1722 AD) was one of the brightest periods of travel and tourism in Iran. It was during the reign of Shah Abbas that he decided to rebuild and revive the Silk Road and for this purpose, restoration of caravansaries was one of the most important requirement measures. These caravansaries were known as Shah Abbasi Caravansaries.

Contemporary history of tourism development in Iran dates back to 1930s where the first tourism facilities including some guesthouses and hotels were built. Based on tourism activities in different historical periods and compare it to Butler's tourism area life cycle (Butler, 1980), contemporary tourism development in Iran can be categorized in four stages:

¹ A Persian scale equal to 4.5 km

- Stage I (1930-1962): exploration and involvement
- Stage II: (1962-1978): development and consolidation;
- Stage III: (1979-1988): depression and decline
- Stage IV: (1988-2013): unsteady rejuvenation

5.2.1 Stage I (1930-1962): Exploration and involvement

At the time of Reza Shah, infrastructures development and security in the country have facilitated the travel requirements. The first official organizations associated with tourism in the country were established. Significant number of tourism facilities including guesthouses (called Jalbe-Saiahan), hotels, and airports were built and major attractions were developed.

According to Butler (1980), small numbers of tourists characterizes the exploration stage and there would be no specific facilities provided for tourists. As the number of visitors increase, residents will provide some facilities and services for visitors and will enter the involvement stage (Butler 1980). In Iran, the government provided the first tourism facilities and services.

Unfortunately, no official tourism statistics for this period are available to compare the number of visitors however according to the first official figures in 1969 more than 241,198 international tourists visited Iran. This figure suggests that in previous years the number of tourists should have been increasing.

5.2.2 Stage II (1962-1978): Development

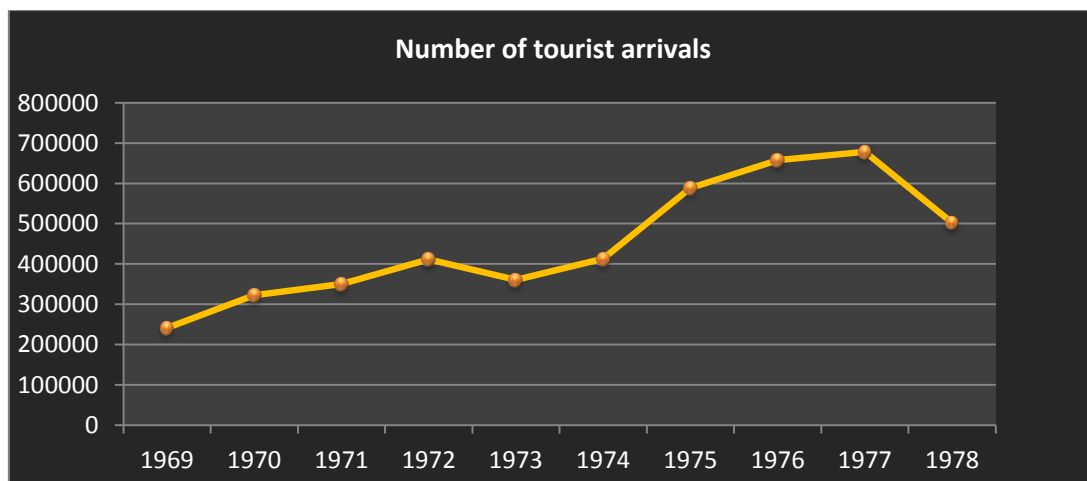
In 1941, Mohammadreza Pahlavi took power. During his reign extensive relationships with the West, especially America was established and in turn, tourism was considered as an important strategy to introduce Iranian history and culture. At the pick 2500 year celebration of Persian Empire¹ was held in Shiraz. Following these activities, Western Europe and America were Iran's most important tourism market.

¹ The **2,500 year celebration of the Persian Empire** ([Persian](#) جشن‌های ۲۵۰۰ ساله شاهنشاهی ایران) consisted of an elaborate set of festivities that took place on 12-16 October 1971 on the occasion of the 2,500th anniversary of the founding of the Iranian monarchy ([Persian Empire](#)) by [Cyrus the Great](#). The intent of the

The government continued to develop tourism facilities and services. Ministry of information and tourism established heavy marketing and promotion programs. The first tourism master plan was developed. The numbers of tourist arrivals were increased steadily. The main tourism markets in this period were European countries and America (Ehlers, 1974). Figure 5.1 shows the number of tourist arrivals from 1969 to 1978.

According to Butler (1980) development stage marked by a well-defined tourist market, and natural and cultural attractions will be developed. Changes in the physical appearance of the area will be noticeable. This stage of Butler's model was seen in Iran, especially in Caspian Sea lowland where the changes in land uses of coastal areas, mainly due to tourism activities, was initiated.

Figure 5.1 Number of tourist arrivals in Iran (1969-1978)



Source: Bureau of statistics and marketing (1978)

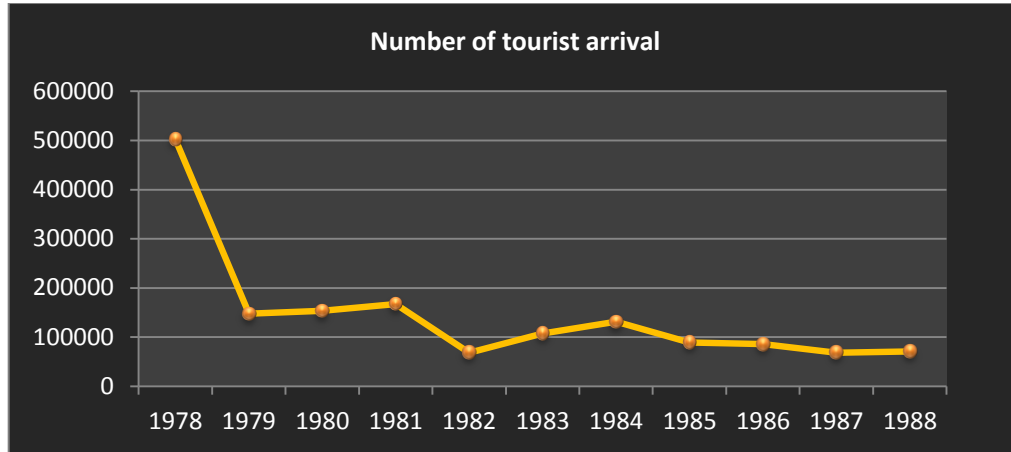
5.2.3 Stage III (1978-1988): Depression and Decline

In 1978, the main tourism market of Iran were United States of America %12.7, England %9.5, west Germany %8.2, Turkey %7.2 and Saudi Arabia %5.6 (Bureau of statistics and marketing, 1978). After the Islamic revolution, many sectors including tourism experienced a dramatic stagnation. Tense political relations with the western countries and particularly America, which were the main tourism markets for Iran and the Iran-Iraq war, interrupted the growing trend of tourism in Iran and the number of tourists

celebration was to demonstrate Iran's long [history](#) and to showcase its contemporary advancements under [Mohammad Reza Pahlavi](#), the Shah of Iran ("2,500 year celebration of the Persian Empire", 2013, Para.1).

started to decrease considerably. Figure 5.2 shows number of tourist arrivals from 1978 to 1988.

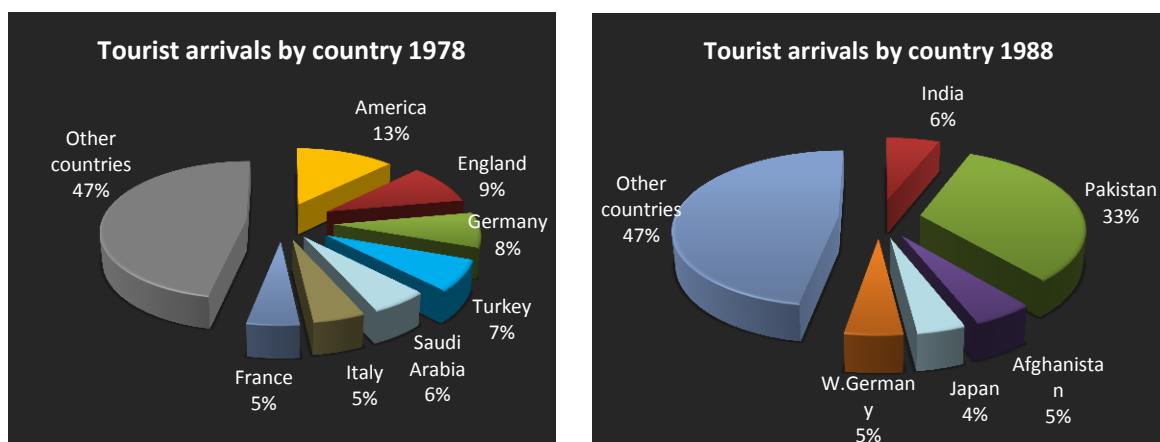
Figure 5.2 Number of tourist arrivals in Iran (1978-1988)



Source: Bureau of statistics and information, 1997

Following the above-mentioned changes which was intensified by occupation of the American Embassy in Tehran and the Iran hostage crises (from November 4, 1979 to January 20, 1981), tourism market experienced major changes and shifted to neighboring countries including Pakistan, Afghanistan and India. While America and Western Europe had a market share more than 40 % in 1978, after 10 years and in 1988, Pakistan, Afghanistan and India with more than 44% market share were the main tourism market in Iran. Figure 5.3 illustrates tourist arrivals by country in 1978 and 1988.

Figure 5.3 Tourist arrivals by country (1978, 1988)



Source: Bureau of statistics and information (1997)

5.2.4 Stage IV (1988-2011) Unsteady Rejuvenation

After the Iran-Iraq war and in the first and second Five-Year development plans (1989-1998), the government policy on tourism was not clear. These plans were relatively high centralized and although an important and basic policy was to support nongovernmental sectors, it had not been implemented. In addition, in terms of privatization policies of governmental dependent companies, during carrying out these two plans some companies and institutions were set up, which were somehow governmental dependent and were considered as the main competitors of private and nongovernmental sectors (Dittmann & Mirzaei, 2013).

For this reason, governmental support in cooperative and private sectors' active investment and participation as well as nongovernmental investments had experienced a gentle upward trend. As a general summation, it can be mentioned that tourism in this stage have had a relatively centralized structure and governmental sectors were dominant player.

Therefore, government played a major role in tourism activities. Some major problems of tourism were shortage of accommodation catering establishments; weak transportation facilities and services; unfamiliarity of organizations, institutions and people with the proper way to communicate with tourists; some executive and legal problems in administrative, banking, trading and customs systems (The Plan & Budget Organization of Iran (PBO), 1998).

In third Five-Year plan which began in 2001, tourism development was considered and a new approach to tourism was adopted. Anticipated executive strategy of the plan was codifying the tourism master plan in the first year of program, 2001. In this framework, a new tourism master plan was prepared in 2002. Despite having an appropriate structure, due to some operational weaknesses and also problems in using fundamental planning concepts and techniques, like zoning, remained as much a draft report and did not find any applicability.

Map 5.5 Tourism regions



Source: ITTO, 2002

Map 5.5 Shows the tourism's regions in this plan, where Iran is divided into seven regions. Although the primary purpose of zoning is to integrate and combine uses that seem to be compatible and have similar characteristics, this map shows that for instance Mazandaran and Qom provinces, which have completely different geographical features, socioeconomic characteristics, climatic conditions, and tourism potentials are in a common region named Alborz

In inbound tourism sector, the plan aimed to attract 4 million tourists at the end of 1384. The comparison between the number of tourist arrivals in 1384 (1.89 million), according to official statistics, and the plan's goal (4 million) indicates that just 47% of the goal was accomplished (ITTO, 2009).

However, it should be clear that the experts believe statistics show the number of travelers, not tourists. Due to the lack of statistical framework and definitions used in preparing statistics, numerous contradictions are in the tourism statistics.

Figure 5.4 Number of tourist arrivals in Iran (1988-2011)

Source: ICHTO, 2011

For instance, while figure 5.4 depicts a steady growth in number of international arrivals from 1988 to 2011, an unpublished report of Iran Cultural, Heritage and Tourism Organization (2011) shows out of 3,294,126 travelers in 2011, who have been account as tourists in official statistics, only 346,423 hold a tourist visa. According to the report, only around 10 % of travelers who have travelled to Iran were tourists (table 5.6).

Table 5.6 number of tourist arrivals based on type of visa

Type of Vis	Number of tourist arrivals
Business	718
Student	2045
Tourist	346423
Pilgrimage	635396
Visa cancellation	961058
Entrance	546740
Diplomats, transit passengers and commuters	801746
Tourists and travelers	3,294,126
Iranians living abroad	123367
Total (Tourists and residents)	3417493

Source: ICHTO, 2012

Reviewing the results of the third plan policies in the tourism sector, points out that in some cases the qualitative goals have been achieved. For example, the actions related to the Article 164 of the third development plan represent that the executive regulations have been approved and notified to be executed by the Cabinet of Iran. The main meaning and purpose of this Article is to improve the banking system services for tourists.

According to the content of this Article the anticipated policy in the third plan regulation involves tourism foreign exchange permission in the ports of entry by internal banks based on the negotiated rates. The carried out actions related to the implementation of this policy include approving and applying the executive regulation of Article 164 of third plan by the cabinet.

The assessments suggest that despite the implementation of this Article, banking system services did not improve so much because making the International Credit Card System is the urgent need of the visitors that has not been anticipated in the mentioned regulation (Soleymanpour, 2009).

Table 5.7 shows the executive strategy performance of the third five-year development plan of Iran in tourism sector.

Table 5.7 Executive Strategy performance of the Third Development Plan in tourism sector

Purpose	The executive guidelines anticipated in the plan	The applied executive guidelines and the related taken actions
To assign accommodation and catering establishments	<ul style="list-style-type: none"> Assigning accommodation units of Tourism and Touring Organization to nongovernmental sector Assigning accommodation units of governmental organizations to nongovernmental sector 	<ul style="list-style-type: none"> Assigning the significant portion of the accommodation facilities of Cultural Heritage and Tourism Organization to <i>the governmental organization</i> such as Civil Servants Pension and Social Security Developing a Bill on accommodation units of governmental organizations though did not progress well.
To reform the tourism industry development law	<ul style="list-style-type: none"> Making necessary arrangements for reforming the law within one year after approval of the third plan (2002) by the Cultural Heritage and Tourism Organization 	<ul style="list-style-type: none"> The authorities have approved the Bill of reforming the law of tourism industry development.
To develop coordination among related executive organizations in order to provide essential facilities	<ul style="list-style-type: none"> Reforming entry and exit rules for foreign citizens to facilitate the entry of incoming-tourists Issuance of common visa for the nationals whose countries are the affiliated members of the Islamic Conference and the Silk Road Conference Creating welfare facilities for the transit passengers 	<ul style="list-style-type: none"> Coordinating with the Ministry of Foreign Affairs and the Ministry of Intelligence service about issuance of electronic visa and abolition of visa for some Islamic countries
To improve and develop supervision and evaluation of tourism infrastructures and facilities	<ul style="list-style-type: none"> Reforming the regulation about supervision on the tourism establishments in accordance with International standards 	<ul style="list-style-type: none"> The regulation about supervision on the tourism travel agencies has been approved by the Cabinet
To promote tourism culture	<ul style="list-style-type: none"> Preparing projects, procedures, training methods and etc. to promote tourism culture and the way the community possess the historical and cultural monuments and introducing tourism attractions 	<ul style="list-style-type: none"> Doing feasibility studies to identify, introduce and develop various tourism attractions in some provinces Training about 10000 people in different levels to offer tourism services

Source: Soleymanpoor, 2009

In fourth five-year development plan the coastal areas were considered. In article 36 mentioned:

“The government has a duty to provide the comprehensive plan of organizing coastal areas up to the end of the first year of fourth development plan (year 2005) with priority given to the Caspian Sea, in order to organize coasts and to prevent pollution and degradation of coastal areas” (PBO, 2004: article 36).

Determination of coastal boundary and release the occupied beaches were the main executive strategies of this important article. According to note of this article by the end of fourth development plan (year 2008) sixty meters retreat of coastal boundary must be fully accomplished. The main frameworks for tourism activities and the management of tourism impacts concerning the nongovernmental sector were mentioned in the Article 114 (PBO, 2004).

In addition, the Article 145 stipulated that establishing or managing all kinds of inns, guesthouses, residential complexes, polyclinics, sport and recreation centers and so on by governments and public organizations is prohibited. All organizations are required to transfer the ownership or the right of exploitation of these kinds of facilities and services to the nongovernmental sectors up to the end of the third year (year 2007) of the fourth development plan.

According to official statistics, the numbers of tourist arrivals from 1988 to 2011 have been increasing.

Generally, in this stage government tried to develop tourism but the results were not satisfied due to the lack of planning and experts and unplanned investments.

5.3 Tourism in Mazandaran

At the time of Reza Shah, infrastructures development and security in the country have facilitated the travel requirements. The first official organizations associated with tourism were established. Mazandaran was among the first destinations, which was developed in this period. According to Amirsharifi, in Kelardasht, coincide with the construction of summer palace of Reza Shah some villas were also built (cited in Ghadami, 2007). The number of tourists was limited and most of the upper classes and senior officers of the Army or the courtiers.

Since 1960s which coincides with an increase in relative income of middle classes in Iran, the number of tourists in Mazandaran gradually increased. The coastline strip of Caspian Sea was the most important destination for domestic tourism in the country and swimming was the main activity for tourists. A significant number of coastal resorts and accommodation establishments were developed in Babolsar, Ramsar, Chalous, Mahmoudabad and Farahabad.

After the Islamic revolution, many sectors including tourism experienced a dramatic stagnation that interrupted the growing trend of tourism in Iran. Domestic travel patterns were changed considerably.

5.3.1 General Characteristics

Mazandaran is located in south of the Caspian Sea and north of the Alborz Mountains. Three territories are detectable in Mazandaran: coastal strip, slopes and Alborz Mountains. In province of Mazandaran around 3,074,000 people live in 23,842 square kilometres (SCI, 2011). The population density in Mazandaran is 129 people per square kilometres. According to 2011 census, Unemployment rate in Mazandaran was at 4 percent compare with 4.5 percent in urban areas and 3.3 percent in rural areas.

Table 5.8 indicates the proportion of employment in agriculture declined steadily throughout the last 25 years, while the proportion of industry and the service sectors, increased.

Table 5.8 Employment by sector in Mazandaran (census 1986 to 2011)

Sector	1986	1996	2006	2011	5 years growth
Agriculture	40.7	31.3	20.98	19.2	-8.48
Industry	17.8	23.9	29.68	31.9	7.48
Services	41.5	44.8	47.86	49	2.38

Source: agriculture organization of Mazandaran, 2013

5.3.2 Demographic Structure in Mazandaran

The population in Mazandaran has been increasing steadily from 835,109 in 1956 to 3,073,943 in 2011 (table 5.9). Another important change in the population of Mazandaran is decreasing the proportion of rural to urban population.

Table 5.9 Population and average annual growth rate in Mazandaran

Year	Population	Average annual growth (%)
1956	835,109	-
1966	1,250,090	4.12
1976	1,5965,65	2.48
1986	2,274,763	3.6
1996	2,602,008	1.35
2006	2,922,432	1.16
2011	3,073,943	1.02

Source: SCI, 2013

The gradual decline of percentage of rural population from 76% in 1956 to 68% in 1976 to 45.3% in 2011 indicates that the trend of urban population growth and rural population decline in Mazandaran have intensified in recent years (Table 5.10). Tourism has been an important factor in the gradual transformation of rural to urban livelihood in Mazandaran.

Table 5.10 urban and rural population in Mazandaran

		1956	1966	1976	1986	1996	2006	2011
Urban	Number	200707	300709	511787	893473	1202469	1554143	1682152
	Percent	24	24	32	39.2	46.2	53.1	54.7
Rural	Number	634402	949381	1084778	1381290	1399539	1368289	1391791
	Percent	76	76	68	60.8	53.8	46.9	45.3

Source: SCI, 2013

5.3.3 Location and Natural Environment

Mazandaran located in the north of Iran, faces the Caspian Sea on the north, and surrounded by Alborz Mountain on the south. It has border with provinces of Tehran, Gilan, Golestan, Semnan, Qazvin and Alborz (Map 5.6).

Map 5.6 Mazandaran

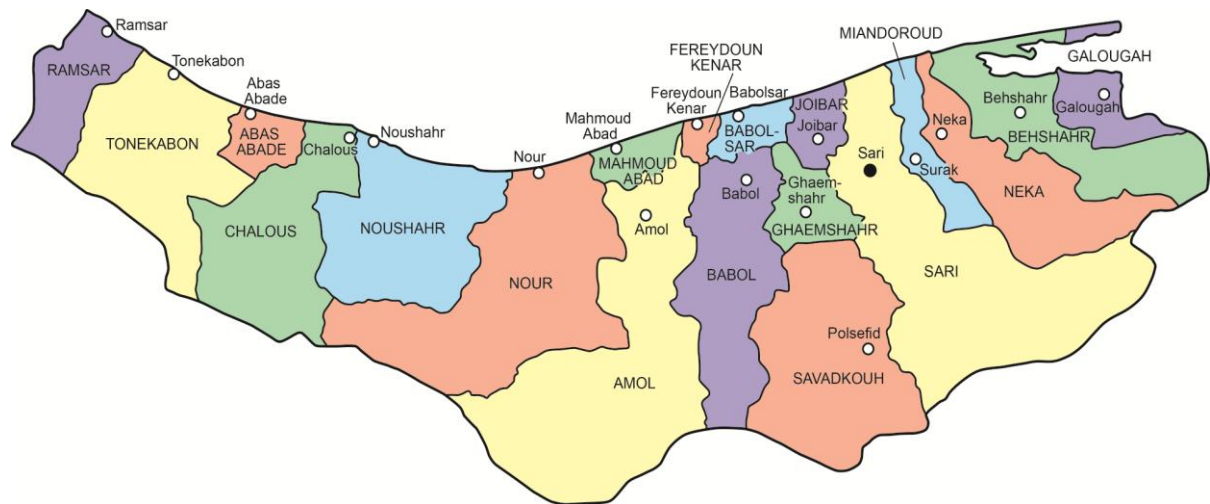
Source: own draft

Mazandaran is known mainly as a famous tourism destination as well as the main center of rice production in Iran. Due to the geographical characteristics of the area local community are strongly dependent on natural resources and this in turn result in more environmental degradation. Mazandaran is one of Iran's fishing areas and has the largest forests area in country (Agriculture organization of Mazandaran, 2013).

The Persian coast of Caspian Sea extends for more than 700 kilometres and around 330 kilometres of shore located in Mazandaran (SCI, 2013). The nature of this area influenced by Alborz mountain range, Caspian Sea and high level of precipitation result in diverse vegetation cover, forest, marsh, wetlands, numerous rivers and shrubberies which unfortunately, has been severely damaged during the past years (Ehlers, 1980).

Based on the latest divisions in 2011 the province is consisted of 19 townships, 53 cities and 122 rural districts (SCI, 2013). Map 5.7 shows the boundaries of the townships.

Map 5.7 boundaries of the townships of Mazandaran



Source: SCI, 2012, Draft R.Mirzaei, 2013

The townships are as follows:

- 1- Ramsar includes the cities of Ramsar, Katalem and Sadat-shahr
- 2- Tonekabon includes the cities of Tonekabon, Khorramabad, Nashtaroud, ,
- 3- Abasabad includes the cities of Abasabad, Kellarabad, Motel-Gho and Langaroud.
- 4- Chalous includes the cities of Chalous, Marzanabad and Kelardasht.
- 5- Noushahr includes the city of Noushahr
- 6- Nour includes the cities of Nour, Chamestan, Baladeh, Izad-shahr, Royan
- 7- Amol includes the cities of Amol, Reyneh, Gazanak, Dabodasht
- 8- Mahmoudabd includes the cities of Mahmoudabad and Sorkh-roud
- 9- Babol invludes the cities of Babol, Amirkolah, Gotab, Galogah, Khoshroud-pey, Marzikolah and Zargarmahaleh
- 10- Freydounkenar includes the cities of
- 11- Babolsar includes the cities of Babolsar, Bahnemir and Kolebast
- 12- Joibar includes the cities of Joibar and Kohikheil
- 13- Ghaemshahr includes the cities of Ghaemshahr and Kiakolah
- 14- Savadkouh includes the cities of Savadkouh, Polsefid, Shirgah, Alasht and Zirab
- 15- Sari
- 16- Miandoroud

17- Nekah

18- Behshahr

19- Galougah

5.3.4 Climate of Mazandaran

The Alborz Mountain range stretches like a wall in the south of Mazandaran and prevents Caspian Sea's moisture to enter the central plateau of Iran. The moisture causes significant precipitation in the northern slopes of the Alborz Mountains that due to the wind direction, topography, distance and proximity to the sea and latitude three types of climate can be distinguished in Mazandaran:

- *Temperate and humid climate* in the western and central Caspian Sea plains which are restricted to the foothills of North Alborz. Due to the proximity to the sea and the forest, the area has a high rainfall and moderate temperature. The average precipitation is 870 mm and reduced from West to East. The precipitation is least in spring (12%) and high in autumn (43%). Because of persistent cloud cover and relative high humidity the temperature is moderate and its range is limited. In general the area has mild winter and warm humid summer and frost rarely occurs.

- Mountain climate that can be divided into two groups:

- a) *Moderate mountain climate*: certain changes in climate are observed with the gradual increase of the height of the Caspian plain towards the North highlands of Alborz. At altitudes of 1500 to 3000 meters, the cold mountain climate becomes apparent which has cold winter with long frost period and short and mild summers.

- b) *Cold mountain climate*: In areas above 3000 meters altitude, the temperature drops sharply and long frost led to formation of long freezing winters and short cool summers. Precipitation in this area is often in the form of snow that during the cold winter accumulates and lasts until the mid of the summer.

5.3.5 Topography of Mazandaran

The main terrains of the areas are plain area in the north and mountainous area in the south. Alborz mountain range is divided into three regions of western, central and eastern by the rivers that flow along the north-south.

- *The western area* stretches from Sefidroud valley in west to Chalous and Karaj valley. Takhte-Soleyman is the famous mountain range in this area.

- *The central area* is the widest part of Alborz Mountain that stretches from Chalous valley to Babol and Darband in east. The most famous and important tourism destinations are located in this area.

- *The eastern area* starts from Darband and Babol and stretches to east.

Part of plain areas and almost all part of mountainous areas are covered with forests known as Hyrcanian forests or Caspian forests. The Caspian forests are known as the oldest forest in the world that extend from Astara to Giledareh in the east of Golestan province and are around 800 kilometers in length and 20 to 70 kilometers in width (FRWO, 2013a). Forests in Mazandaran cover more than 46.5 % of its area equal to 1,107,256 hectares (Agriculture organization of Mazandaran (AMO), 2013).

The beautiful rural scenery, rice paddies, vegetable fields, tea plantations with its main areas around Lahijan (Ehlers, 1970), and orchards next to long straight beaches, wetlands, wonderful forests, diversity of flora and fauna; has long made the region a unique destination for tourists.

5.3.6 Tourism facilities and services

The first tourism establishments was built in Mazandaran in 1930s. In this section, different types and capacities of facilities are presented.

5.3.6.1 Accommodation Establishments in Mazandaran

According to the statistical Year book of Mazandaran (SCI, 2013) there were 281 hotel in Mazandaran in 2011 of which one were classified as 5 stars, six as 4 stars, eighteen as 3 stars, 25 as 2 stars and 37 as 1 star. Table 5.11 summarizes the capacity of hotels in Mazandaran.

Table 5.11 Accommodation establishments based on grade

Year	1 star	2 stars	3 stars	4 stars	5 stars	total
1996	15	26	4	2	1	48
2001	15	24	8	3	1	159
2007	19	24	14	3	1	229
2008	54	35	16	7	1	293
2009	34	35	18	6	1	265
2010	34	25	18	6	1	266
2011	37	25	18	6	1	281

Source: SCI, 2013

Table 5.12 shows the number of hotel rooms based on grade in Mazandaran.

Table 5.12 Number of hotel rooms based on grade

Year	1 star	2 stars	3 stars	4 stars	5 stars	total
1996	352	788	323	153	174	1790
2001	236	711	342	210	174	1882
2007	291	681	743	213	157	4472
2008	376	652	407	392	157	4624
2009	519	700	708	430	174	4957
2010	525	700	798	430	174	5148
2011	640	816	890	436	174	5652

Source: SCI, 2013

According to the current classification system operated by ICTTO the accommodation establishments in Iran have been classified into hotels, apartment hotels, pensions, inns, youth hostels, tourist camps, seacoast establishments, mineral water establishments (spas), and tourism areas (ITTO, 2002).

Table 5.13 presents tourism establishments' capacities in Mazandaran and table 5.14 shows number of rooms in different tourism establishments.

Table 5.13 Tourism establishments' capacities

Year	Hotel apartment	Beach resort	Inn	Camping site	Tourism areas
2001	9	99	-	-	-
2007	28	115	25	-	-
2008	41	115	21	3	-
2009	35	120	20	2	4
2010	39	120	17	2	4
2011	52	120	16	2	4

Source: SCI, 2013

Table 5.14 Number of rooms in tourism establishment

Year	Hotel apartment	Beach resort	Inn	Camping site	Tourism areas	total
2001	209	-	-	-	-	209
2007	551	1372	464	-	-	2387
2008	841	1372	340	87	-	2640
2009	653	1372	302	67	32	2426
2010	766	1372	284	67	32	2521
2011	934	1372	291	67	32	2696

Source: SCI, 2013

Data on the other establishments exists in the Police Department, this is not available for tourism planning and development purposes. In addition, other accommodation establishments are sometimes used for tourism purposes such as school dormitories, rented accommodation, campsites, corporate and government guesthouses.

Tourism high seasons in Mazandaran are from 20th of March to 5th of April which are coincident with Iranian new year celebration namely Nouroz, and from 21st of June to 22nd of September which are summer holidays in Iran. During Nouroz holiday in 2005 around 1,470,000 and in 2006 around 935,000 tourists visited Mazandaran (Tourism Organization of Mazandaran, 2005, 2006).

Comparing the number of visitors and accommodation establishments' capacity, indicate that a significant part of demand is not met, therefore visitors have to accommodate on the streets sidelines, parks, or schools. (Figure 5.5)

Figure 5.5 tourists accommodate on the street sideline



Photo by R.Mirzaei

5.3.6.2 Coastal Establishments in Mazandaran

There are around 30 special swimming areas (Salemsazi Darya) in the approximate length of 20 km coastal areas of Mazandaran. Cheap beach accommodation units called “Pelazh” are designed in these areas. Accommodation capacities of these units are very limited and the quality is very low. These centers operate under the supervision of municipalities and police; do not meet the minimum safety and faced with the problem of shortage of lifeguards. Due to the budget cut in last two years, the lifeguard members have declined to less than half.

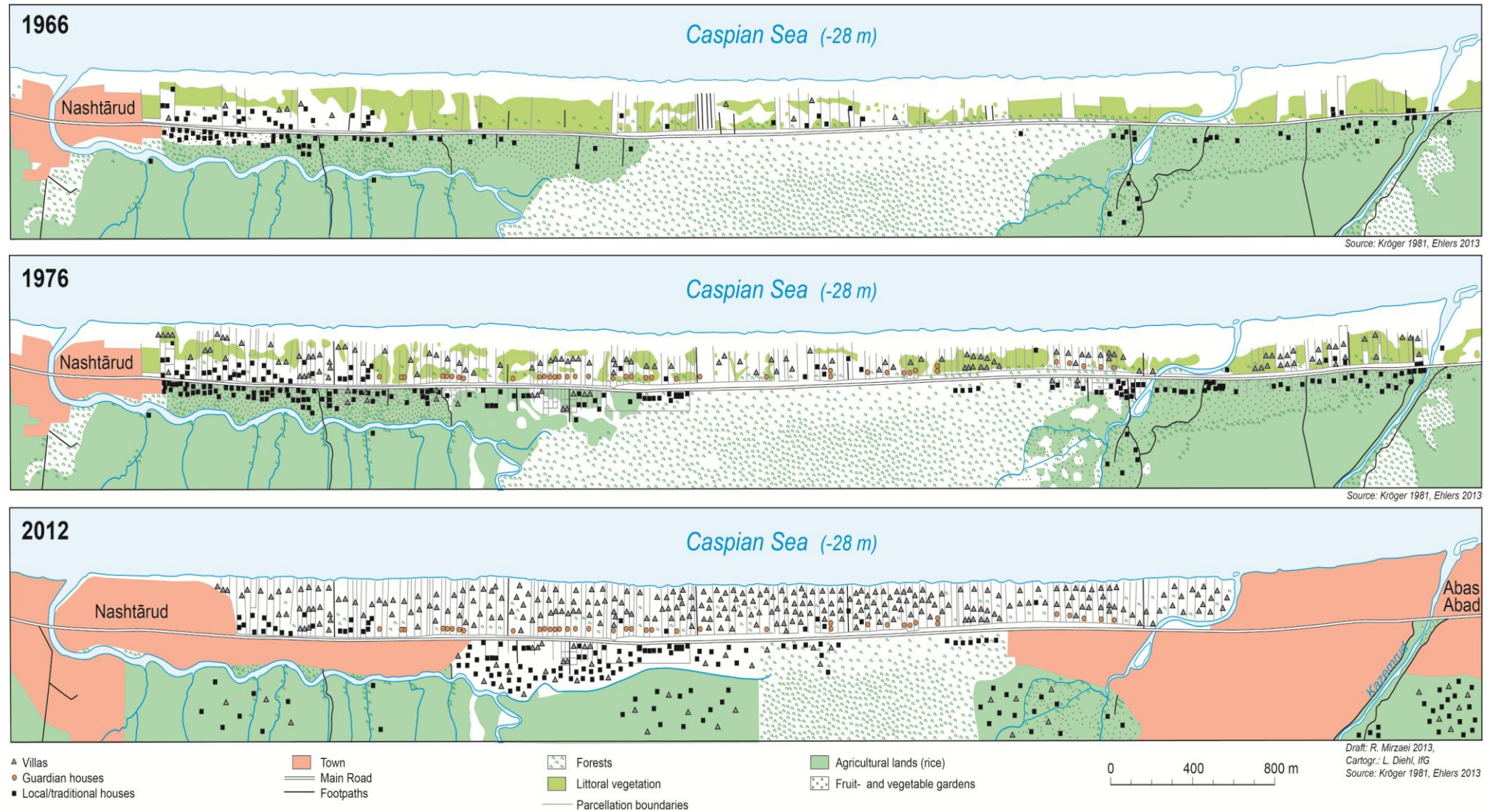
Sea level rising in coastal areas and its consequences is another problem in coastal strip of Mazandaran. During the past years, a significant part of low elevation coastal zone submerged. Impeded drainage seriously affects tourists, residents, and agricultural productions. Submerged houses and wastewater wells are very dangerous for swimmers.

5.3.7 Transformation of Coastal Strip and Caspian Plain

The high densification of residential and commercial buildings in coastal strip have transformed many agricultural lands, villages and orchards into urban or tourist areas. Plain villages have lost their traditional characteristics and rural and natural landscapes were damaged. Furthermore, agricultural lands functions convert from a productive economic activity into tourist villages.

Map 5.8 shows transformation in 7 km coastal strips from 1966 to 2012. Kroeger (1981) produced a map that depicts the beginning of tourism development in coastal strip of Mazandaran from Nashtarud to Abas Abad in 1960s. Almost the entire coastal strip was free and tourists had easy access to the beaches. A large part of the beach was covered by littoral vegetation and natural landscape dominated. The southern part of the coastal road, outside the urban areas, was completely covered by forest except near the city boundaries that scattered traditional houses were built. There were no residential areas or business districts in rice fields.

Map 5.8 Coastal Densification with Touristic Infrastructure: 1966 - 2012



After 10 years in 1976, some changes took place in coastal area. Ehlers (2013) called it the “take-off” period of Caspian tourism. However, large parts of coastal lands were still open and tourist villas, second homes, and tourism businesses occupied few parts of the coasts. While almost the entire coastal strip bounded with land plots ready for construction, coastal boundary were still free. Coastal vegetation was still there and there were scattered tourist villas. Tourist complexes are emerging in parts of the coast. In the southern part of the coastal road, the numbers of traditional houses were increased and a very limited number of tourist villas were built. Rice fields and forests were still almost untouched.

In 2012, there has been tremendous conversion in coastal strip. *All part* of coastal strip is occupied and there is no access to the beach. Tourist villas and second homes cover beaches and coastal boundary is completely occupied. Indeed, sea has become the “exclusive courtyard” for tourist villas. There is no littoral vegetation and residential areas expanded. The traditional houses’ territory is expanding which probably is a preload to further expansion of residential areas. In the southern part of the coastal road, very extensive destruction of forests occurred and converted to agricultural lands, tourist villas or traditional houses. The urban area grows dramatically and tourism businesses have developed along the coastal road (figure 5.6).

Figure 5.6 Caspian Sea littoral near Chalous



Photo by R.Mousavi

5.3.8 Form of Nature-Based Tourism in Mazandaran

There are three different form of nature-based tourism in Mazandaran: *rural tourism*, *beach tourism*, and *second-home tourism*.

5.3.8.1 Rural tourism in Mazandaran

Around 1,391,791 people or 45 percent of all Mazandaran's population are working on 600,707 hectares farmlands in 3671 villages (AOM, 2013). During the past decades rural areas and farmlands have become one of the main destinations for tourists from different part of country. The beautiful rural sceneries, rice paddies, vegetable fields, tea plantations, and beautiful orchards next to the traditions and hospitality of local community are the core product of rural tourism in Mazandaran.

The Iran Cultural Heritage and Tourism Organization defined 17 villages as target villages in order to develop sustainable tourism in Mazandaran (ICHTO, 2007). Generally, same day visitors and second-homes in form of tourist villages are concentrated in plain villages and scattered second-homes are located in forest areas (Aligholizadeh, Ghadami, & Ramezanzadeh, 2010). Most of villages are located between Caspian plains and forested mountains. However, there are few villages in forest and mountainous areas.

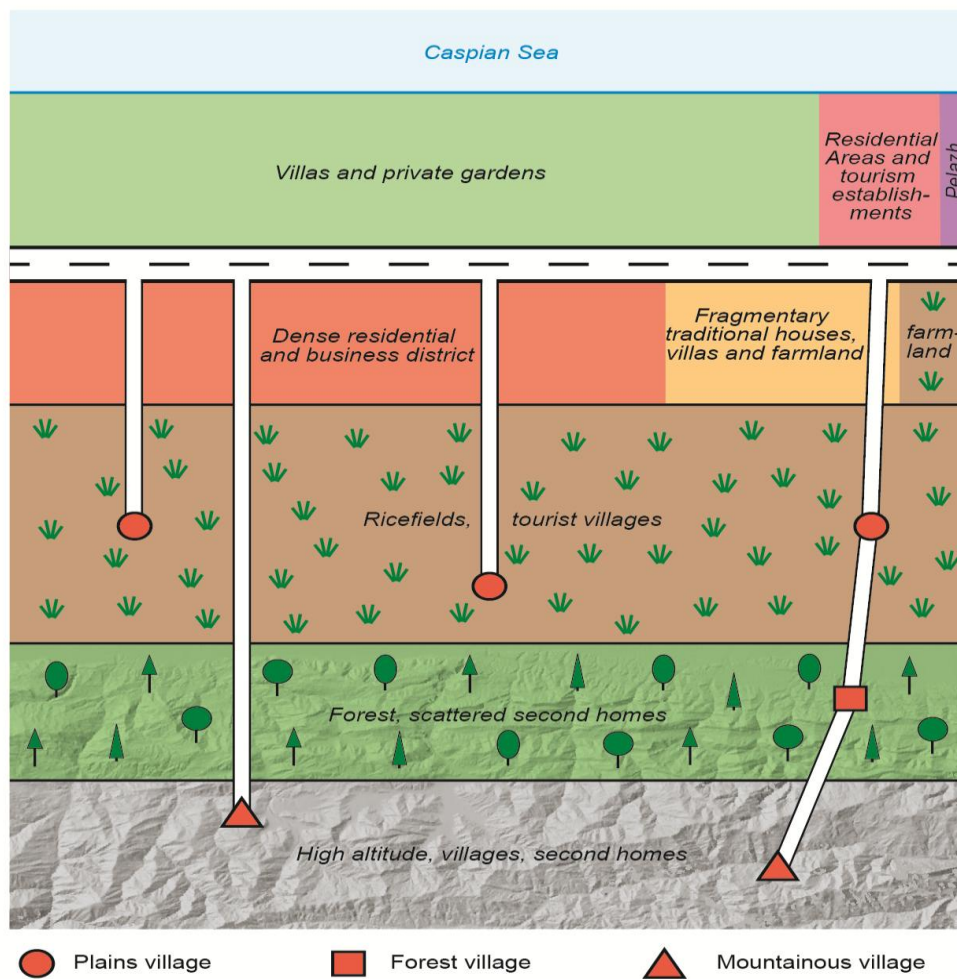
Depend on tourism facilities and services the villages are influenced differently by tourists. Plain villages are more and deeper influenced by tourists although in the last few years mass tourism flows affected forest villages.

Through field research and travel to different part of Mazandaran's coastal strip the main zones of Caspian Sea lowland were identified as illustrated in figure 5.7. In Mazandaran, sea and forest are the main axis of development. The seacoast is covered by garden houses, villas and buildings and partly by very simple tourist resorts namely Pelazh. A high traffic coastal autobahn separates coastlines from Caspian plain. Residential areas, shops, restaurants, and farmland are scattered along the southern part of highway.

Beyond the road are rice fields, plain villages, and tourist villages. The roads connecting villages to highway are very narrow, without sidewalk, parking place and traffic sings making it very dangerous for locals and visitors. There is no main road between villages. While most residents of villages earn from renting rooms to visitors, the ratio of private villas and second home in this area is very high. A study conducted in

Noushahr county by Ghadami et al. (2010) showed that there are more than 15 public and 134 private tourist villages, consist of 3576 units, and more than 3033 scattered villas. In other words, more than 48% of all residential units are second homes.

Figure 5.7 Morphological zoning of Caspian Sea lowland, North of Iran



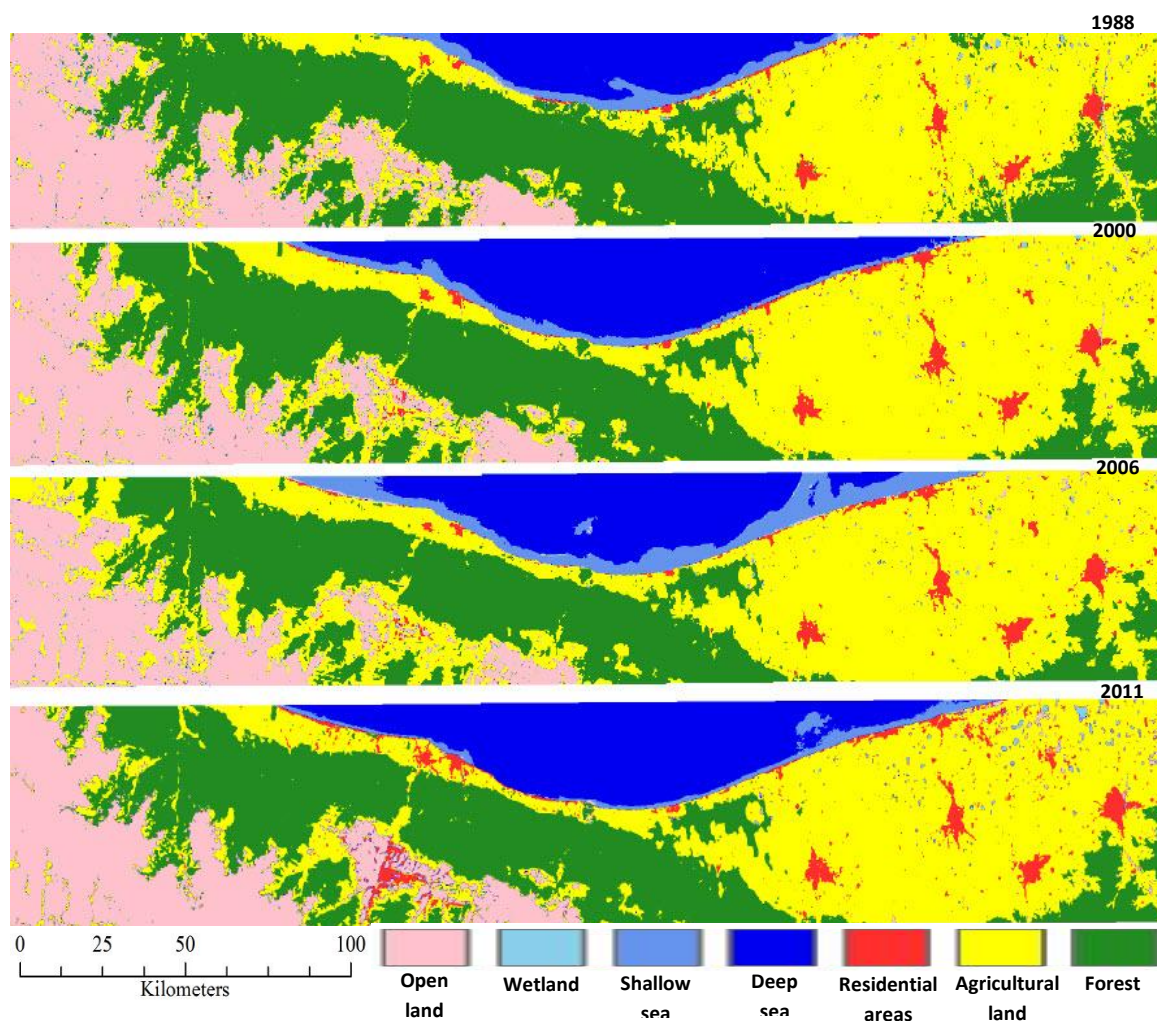
Draft: R. Mirzaei 2013, Drawing: L. Diehl, IfG

Behind the farmlands is the forest zone. Although, forest cover this region there are limited small villages and scattered second homes. The main economic activity is livestock and forestry although tourists also visit villages. Massive destruction of forests to farmland and second home conversion has severely damaged the environment.

The last region is altitudes above 3000m. Since there is less supervision on this area, there is a mass speculation in forms of mountainous villages, country houses, and villas. In recent years many villas are built in this zone without any planning (refer to map 5.8). This trend has been intensifying by other factors that will be discussed in chapter six.

Golamifard, Jourabiam, Hosseini & Mirzaei (2013) examined land use conversion in Mazandaran from 1988 to 2011. Results of study show that more than 33,487 hectares of forests areas were reduced and converted to 21,367 hectares of agricultural lands and 13,155 hectares of residential areas, mainly second-homes. Modeling results for the year 2016 showed that the area of forestland and open land compare to the year 2011 will decrease and agricultural and residential land uses will increase (Map 5.9).

Map 5.9 Land cover change in Mazandaran (1988, 2000, 2006, 2011)



Source: Golamifard et al. 2013

An important point can be seen in land cover change between 2006 and 2011 is open spaces and second home expansion in altitudes above 3000m concurrent with the loss of forest and agricultural lands. Development of tourist villas and second homes in the mountainous and forest areas are probably the main cause of deforestation and agricultural land use conversion.

5.3.8.2 Beach Tourism in Mazandaran

Mazandaran has 338 kilometers coastline. A 25 meters road is divided coastline strip into two parts, northern and southern. The width of northern part (the beach) varies from 50 to 3000 meters. In recent years, the development of tourism facilities and services on the coastline of Mazandaran has been very limited and most of the spaces are allocated to building private villas and residential complexes for government organizations. Due to the uncontrolled construction, there have been major changes in coastal areas.

Second-homes, residential areas, and tourism establishments are covered beaches and coastal areas transferred to inaccessible private lands for villas, hotels or company-owned holiday facilities (Ehlers, 2013).

Table 5.15 General land use in Caspian Sea coastal strip 2012 (in meter)

Area	Villas	Residential & business areas ¹	Fenced land	Pelazh	Open beach ²	Protected area	Other ³
Ramsar to Tonekabom	10260	21437	1358	2170	0		45
Tonekabon to Nashtaroud	6054	370	1686	400	0		100
Nashtaroud to Noushahr	25436	13375	1200	6450	0		580
Noushahr to Mahmoudabad	53380	9460	3207	3080	0		1617
Mahmoudabad to Miankaleh	19657	18500	3020	1734	44500	54000	16500
Total	114787	63142	9271	15034	44500		18842
%	36.56	20.12	2.96	4.78	29.58		6
% In tourist areas	56.1	30.86	4.53	7.34	0	0	1.1

1: Include residential and business areas and tourism establishments

2: There is no building in these areas however land use and ownership is not clear

3: Park, airport or industry zone

Table 5.15 shows general land use of northern part of coastline in Mazandaran. Public and private villas and second homes cover more than 36% of entire coastal strip in Mazandaran. In high dense tourist areas from Ramsar to Babbolsar the figure is more than 56 %. Residential, business areas and tourism establishments cover more than 20% of entire coasts and 30% in tourist areas. In other words, public and private villas, shops, restaurants, airport, and hotels cover around 95% of coastal areas that are not accessible to tourists.

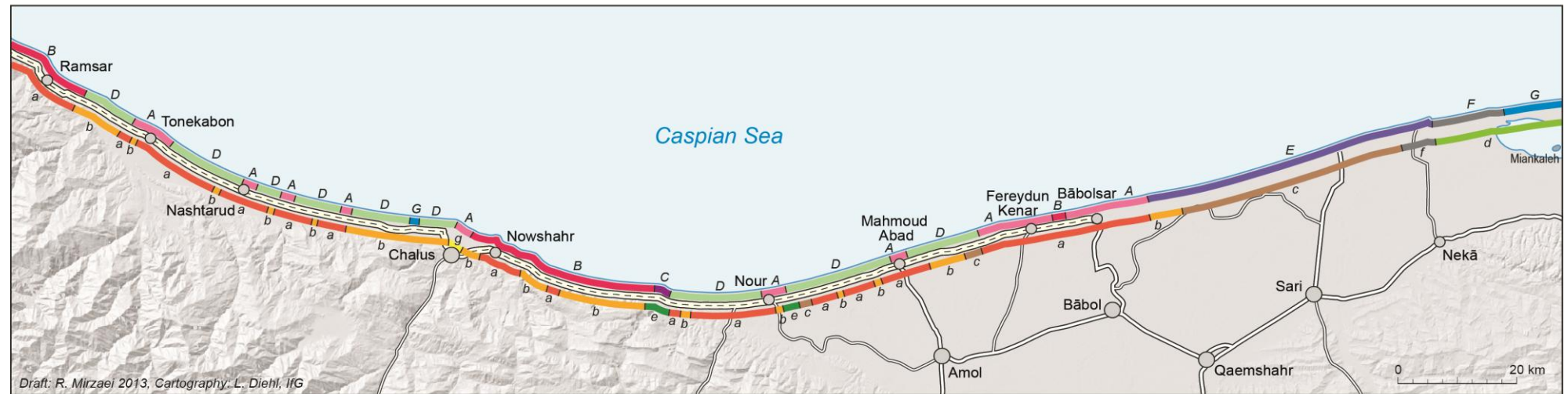
Map 5.10 depicts density of coastline strip in northern and southern part of the coastal road in 2012. Along the coastal road in touristic region from Ramsar to Babolsar which road is close to the sea, the beach is completely occupied and residential, business areas and tourist villages cover the southern part. After the Babolsar, the distance between the road and the sea is greater and consequently no buildings and facilities are on the coast.

According to Kroeger (1981) in 1976 except near Ramsar, Chalus and Noushahr with limited holiday resorts, mainly company owned, the southern part were almost entirely open. During last four decade, tourism as the main driving factor has transformed dramatically Caspian Sea lowland. Coasts as the main and central attraction are not accessible to visitors and the area has lost much of its tourist potentials.

Furthermore, under the old landowning system, the custom was for the holding to remain within the same peasant family without being divided (Bromberger, 2012). Ehlers (1970, p. 299) argued this custom favored a degree of stability in the size of farms and of the agricultural population (cited in Bromberg 2012). However, today the fragmented farms are converted into second-homes and tourist villages in turn the area of agricultural land is diminishing day by day.

Map 5.10 coastal densification in Mazandaran 2012

Land use in Caspian littoral



land use in coastal strip

- A dense residential areas
- B dense residential area and tourism establishments
- C tourism establishments (Pelazh)
- D villas and private gardens

- E open/fenced coasts with limited villas
- F industrial zone
- G open coasts

land use in Southern part of the coastal highway

- a dense residential and business district
- b fragmentary traditional houses, villas and farmland
- c farmland
- d meadow and dune
- e forest
- f industrial zone
- g open

5.3.8.3 Second-Home Tourism in Mazandaran

Since the early 1970s, coinciding with rising oil prices and the growth of nation income, minority of people who have benefited from the revenues began to buy villas and apartments as second-homes in some European countries (Gharib, 2003).

Another group of people began to build second-homes around the big cities such as Tehran. As the Tehran grew, the demand for second-home increased and the new second-home district expanded to Caspian Sea coastal areas. Increasing demand for land and villa on coasts of the Caspian Sea, that previously was left pristine and untouched (Map 5.7), caused an influx of brokers and real state agencies in the area. Their presence has led to mass unplanned construction in the coastal areas and conversion of forests, gardens, and agricultural lands to residential and single villas.

During the Iran-Iraq war this trend has recede somewhat and property sales were stagnant. After the war, the unplanned expansion of coastal construction, forest degradation and the conversion of farmlands and paddies to residential areas continued with greater intensity than before. Villas, residential complexes, or fenced lands occupy today almost the entire coastal strip and public access to beach is very limited.

CHAPTER 6

DISCUSSIONS AND RECOMMENDATIONS

6.0 Introduction

The main purposes of this research were threefold. Firstly, it was to understand the local communities' perception of the socioeconomic and environmental impacts of nature-based tourism in Mazandaran. Secondly, it was to recognize the factors influencing local communities' perception of nature-based tourism impacts. Thirdly, it sought to understand how residents' perceptions of tourism impacts and the factors influencing their perceptions were related to support for nature-based tourism development in Mazandaran.

In order to achieve the research objectives a literature review in chapter two examined the tourism impacts on community and tourism development paradigms. In chapter three, the research plan and related analysis, methods and techniques used for analyzing data were discussed in detail. Data were collected through interviewing residents in Babolsar and Kelardasht in order to understand the local communities' perceptions of nature-based tourism development in Mazandaran, to predict residents support for tourism development, and to develop recommendations towards removing barriers for tourism development in Mazandaran. Chapter four presented the results and findings of research.

The tourism development stages in Iran and its characteristics, and the main types of tourism and resources in Mazandaran are presented in chapter five. This chapter will examine how residents' perceptions of tourism development and impacts are consistent with reality of tourism in Mazandaran. Finally, the implications for tourism planning and development, as well as for future research are presented.

6.1 Summary of the results from residents' perceptions of tourism impacts and support for NBT development

Recent studies have focused on host communities' perception and attitudes towards tourism impacts or tourism development, although little research has been conducted concerning residents' attitudes towards tourism impacts and their relationship with support for tourism development. Since tourism relies heavily upon the goodwill of the local residents;

consideration of their support, and perceptions and attitudes toward tourism impacts are essential for its development, successful operation, and sustainability (Ap, 1992; Gursoy, Jurowski & Uysal, 2002). Given the importance of understanding local community attitudes, this thesis tried to model local population's perceptions of the socioeconomic and environmental impacts of nature-based tourism and their relationship with support for tourism development in Mazandaran

Undoubtedly, tourism has been a main economic activity in Mazandaran with many benefits for the local community. Residents appreciated tourism for increasing job opportunities, development of recreational facilities and spaces, creating a positive feeling about area among tourists, and enhancing social relationships between tourists and residents.

Despite above-mentioned perceived benefits; unbridled, unplanned, and unmanaged development of tourism in Mazandaran in past years has led to widespread environmental degradation and the destruction of tourism resources. Tourism is a service activity based on attracting tourists to visit tourism attractions. Thus, the tourism industry depends on not only the quantity but also the quality of these attractions (Andriotis, 2002). Both community and environment have certain limits, crossing these limits can cause irreversible changes that may result in an opposition towards tourism development and tourists. This can have a major influence on socioeconomic and environmental aspects of the society and the future success of a destination (Andriotis, 2002; Swarbrooke, 1993). Tourism development will only be successful if the planners understand that local communities are heterogeneous not homogenous (Mason, 2008); thus, it is necessary to consider their needs, wants and their different attitudes towards tourism.

The findings of study (See 4.3) show respondents generally have negative perceptions of environmental impacts, which are perceived more than costs and benefits of socioeconomic impacts of tourism, although some positive impacts have been appreciated. Irrespective of socio-demographic characteristics, place of residence, attitude toward community or tourism benefits, the local community in Mazandaran indicate a high negative perception of environmental impacts of tourism.

Results indicate that socioeconomic benefits ranked second followed by socioeconomic costs. In fact, positive environmental impacts were the least perceived impacts, which could be due to the lack of environmental conservation strategies in tourism development plans. Moreover, negative consequences of villas and second-homes expansions in coastal and forest areas are so widespread that any potential positive impacts are overshadowed.

Similar to the previous studies (Ghadami, 2007; Ghadiri, Heydari & Ramezanzadeh, 2012; Mahdavi, Ghadiri & Sanaei, 2007) the results indicate that tourism development has increased the price of land and housing. Farming and gardening compared to tourism economic activities, particularly second-home development, have lower economic capacity and are therefore less attractive to residents (Ghadami et al., 2010). Thus, poor agricultural infrastructures and lack of integrated management approach, and on the other hand ever increasing demand for private villas and second homes resulted in a dramatic increase in land prices. Ghadami et al. (2010) revealed 1215 percent increase of land prices in Noushahr from 2000 to 2006.

A sharp increase in the number of visitors during high seasons, e.g. Nouroz and summer holidays, has increased the cost of living of local people. Approximately 73% of people stated that tourism resulted in an increase in the cost of living. Similar to previous studies (Rahnemaei, Farhoudi, Dittmann & Ghadami, 2008; Aligholizadeh, Badri & Faraji, 2005), this study suggested that tourism has resulted in unpleasantly overcrowded beaches, hiking trails, parks and other outdoor places. Residents believed that tourism development has resulted in preventing the local language from being used as much as it otherwise would. Furthermore, they believe in the role of tourism in changing the traditional cultures.

Community concern and community attachment are the variables that influence the respondents' perception of NSEI. Particularly, those who have a high degree of concern about the society perceived more negative socioeconomic consequences of NBT in Mazandaran.

Surprisingly, three statements related to the behavior of tourists in destinations that seem to be used by the government as grounds for imposing many restrictions against tourists, were not supported strongly by residents. According to the results (See 4.3.1) the majority of

respondents disagreed that tourism has increased drug addiction and drinking alcohol and that tourists' behavior has led to more promiscuity in area.

Respondents also confirmed some positive socioeconomic impacts. They appreciated tourism for increasing job opportunities and the availability of recreational facilities and spaces. The proportion of employment in agriculture declined steadily throughout the last 25 years, while the proportion of industry and the service sectors increased. Due to the second-home tourism development in area, most of the activities were associated with construction jobs, concrete block producing, welding, carpentry, villa caretaking, and gardening (FRWTO, 2013a).

Over 72% of responses confirmed that tourism could create a positive feeling about the area among tourists, and more than 77% of people perceived that tourism improves the understanding and image of different communities and cultures. It shows that decision makers should consider tourism as a powerful tool for bringing together different ethnic groups and strengthening cultural relationships between them, an issue that is very important and crucial in multi-ethnic societies like Iran.

Residents generally have negative perceptions of the environmental impacts of tourism. Respondents perceived the most negative environmental impacts in the form of increasing traffic problems, litter problems, and environmental degradation due to construction of villas and second-homes. In recent years, the development of tourism facilities and services on the coastline of Mazandaran has been very limited and most of the spaces are allocated to building private villas and residential complexes for government organizations or a limited member of high-income people. Many people who spend their one or two weeks holiday in Caspian Sea, due to the lack of accommodation establishments have to buy private villas.

Because of the uncontrolled construction, there have been major changes in coastal areas. In other words, public and private villas, shops, restaurants, airport, and hotels cover around 95% of coastal areas in touristic regions that are not accessible to tourists (See 5.3.8.2).

In general, during last four decades, tourism as the main driving factor has transformed the Caspian Sea lowland dramatically. The lack of a comprehensive plan for the development and

protection of coastal areas, unplanned and inappropriate land use accordance with the requirement of the area, improper use of regulations and rules of detailed plans of urban areas for the constructions in coastal areas, as well as the destruction and fragmentation of coastal lands and their allocation to villas or second-homes; have led to severe degradation and damages of the coastal strip since 1970s.

Coasts as the main and central attraction are not accessible to visitors and the area has lost much of its tourist potential. Villas, second-homes, residential complexes, fenced lands, and tourism establishments occupy today almost the entire coastal strip and public access to beach is very limited or in some areas impossible. In fact, seashore has become the “exclusive courtyard” for tourist villas (Figure 6.1).

Figure 6.1 Seashore as “exclusive courtyard” in Sisangan



Photo: Cortesy from Google earth

Along the coastal road the in touristic region from Ramsar to Babolsar which is close to the sea, the beach is completely occupied and residential, business areas and tourist villages cover the southern part of the coastal highway. After Babolsar, the distance between the road and the sea is greater and consequently no buildings and facilities are on the coast.

The high densification of residential and commercial buildings in coastal strip have transformed many agricultural lands, villages and orchards into urban or tourist areas. Plain villages have lost their traditional characteristics and rural and natural landscapes are

damaged. Furthermore, functional agricultural lands are converted from areas of productive economic activity into tourist villages.

Some other factors intensifying environmental problems in coastal areas include:

- Accommodation capacities are very limited, low quality and rather expensive. Therefore, a significant part of demand is not met and visitors have to find accommodation on the streets sidelines, parks, or beaches. As a result, the whole area has becoming a giant rubbish dump. Heaps of mineral water bottles, plastic bags, leftovers foods, and fruits are seen along the beaches, at the margin of roads, or in forests.

- Lack of recreational facilities and services for tourists and very high density of visitors in limited areas where they have access to the beach.

- Severe restrictions imposed by security forces and police on swimming and walking on the beach will force people to go to more remote areas. The entry of tourists to the more remote beaches that do not have any facility and services, but where there are fewer restrictions may contribute to the death of a significant number of visitors who swim in these areas. According to officials, more than 98% of 566 drowned people in Mazandaran coasts, from 2010 to 2012, have been swimming in these areas (“The Caspian Sea drowning”, 2013). Furthermore, these areas are affected by environmental damages (Figure 6.2).

Figure 6.2 Restrictions on swimming an walking on the beach



Photo by ISNA



Photo by R.Mirzaei

Right picture: Walking on the beaches is crime, violators will be prosecuted

- Sea level rising in coastal areas and its consequences like the submerging of villas on coastal zone and their impeded drainage. Submerged houses and wastewater wells are very dangerous for swimmers and have an important role in sea pollution.

The combination of these factors has led to the “*counter-beach*” phenomenon in Mazandaran. The change in the flow of coastal tourists affects the neighboring regions particularly the Caspian plain, forests and mountainous areas. The uncontrolled expansion of second-homes has resulted in major environmental and social degradations. Figure 6.3 depicts the spatial relationships between a coastal zone with villas or second-homes and adjacent environment as the second-home areas expand, in the area that the distance between coastal areas and forests is close.

In the first phase, few villas are found on the coastline, the coastal boundary is free and there is no villa or second home in plain areas or forests. As the number of villas on the coastline increases, the second- home region expands to the plain area. The coastal boundary is still open and there is very limited number of villas in low altitude slopes. Particularly, public companies are developing tourist villages (Phase II).

In the third phase, the second-home region expands more, so the coastal boundary is occupied in some areas. Tourist villages are developed in plain areas and villas expand to the tree line. The growth rate of second-home region in coastal strip has been declining however, in plain and forest areas it is increasing.

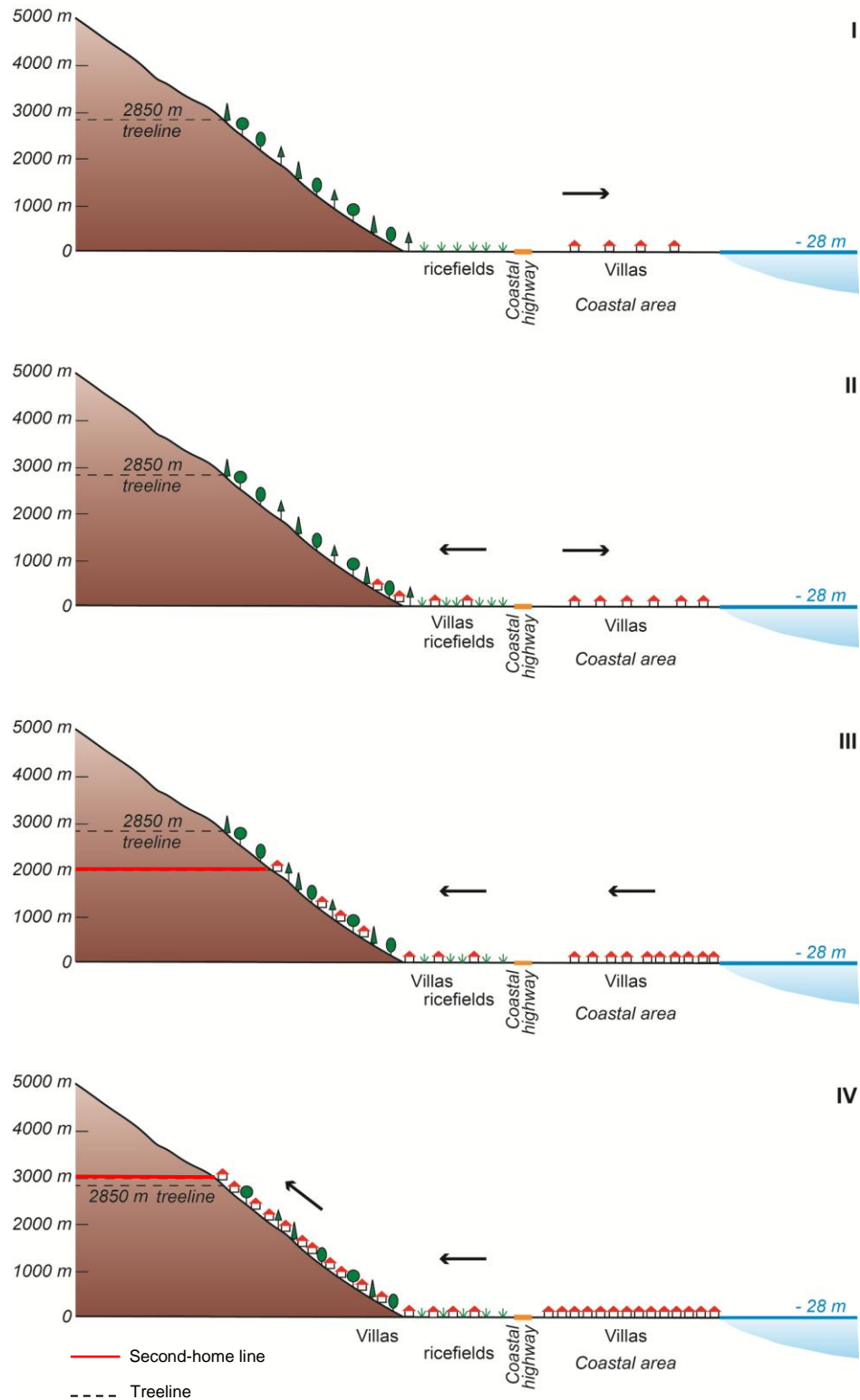
In the fourth and final stage, the original second-homes area becomes engulfed by residential areas. Roughly the entire coastal strip is covered by second-homes and villas, there is rarely open beach and the coastal boundary is completely occupied. Beaches lose their tourism functions and become less appealing to most tourists. Second-home regions are dramatically expanded in plain and forest areas. Tourist villages are developing in high altitudes. Environmental degradation and deforestation is increasing. Additionally, new constructions are developed near forest and mountain villages mainly for use as second-homes by rural emigrants. Many of the former farm dwellings in plain and forest areas became the second-homes of high-income people and the former property owners are today’s servants.

This expansion of second-homes and its consequences in the Caspian Sea littoral are not just a function of tourism development, but also of the activities of speculators and real estate developers, population increase, increase in car ownership, greater leisure time, political privileges, abuse of legal vacuums, as well remote areas as being more affordable, which all contribute to intensifying this trend.

Lack of recreational facilities in Tehran, lack of agricultural economic feasibility, and in turn sale of agricultural lands and interest among the villagers to buy a car, are other factors promoting the formation of the process whereby after buying the land and building villa by new owner the former farmer will become the new caretaker.

An extensive array of research conducted by Ehlers (1970, 1971 a, b, c, d, 1974, 1980) demonstrate the great potentials of tourism in Caspian Sea littoral in the past. However, the above-mentioned trend has resulted in a deterioration of the Mazandaran coastline image to the extent that today it attracts mainly the low-spending segments of the domestic markets that are highly concentrated in special areas, and during specific times, during summer and Nouroz holiday, without any planning, or organizing. Obviously, the mentioned trend in near future will lead to the loss of leisure and tourism functions of the Caspian Sea lowland as the most important destination for domestic tourism in Iran.

Figure 6.2 Model of villas and second-home expansion in Caspian Sea lowland, North of Iran



To prevent the continuation of this trend and to achieve residents' support for tourism development model 4.2 was developed based on the previous studies. The decomposition of the variables describes residents' opinions on tourism and the circumstances under which they are willing to support tourism development.

The community concern has a direct and positive effect on local community support for tourism development ($\rho_{16}=0.123$). Furthermore, those residents who are concerned about their society evaluate the negative environmental and socioeconomic impacts of tourism as strongly negative ($\rho_{56}=0.471$, $\rho_{36}=0.737$) and have negative perception of positive socioeconomic and environmental impacts ($\rho_{26}=-0.095$, $\rho_{46}=-0.170$). The total effect of this variable shows that the result of cost and benefits analysis for residents with high level of concern about their society is small and positive (0.05) for nature-based tourism development. It may indicate that although this group of residents still slightly support tourism however, if the authorities do not control and manage negative environmental and socioeconomic impacts of tourism, in near future they will be against tourism development.

The decomposition of community attachment shows although the direct effect of this variable on support for tourism is a little negative (-.031) but the total effect is somewhat positive (0.02). Attached residents assess all types of impacts positively, so it is difficult to explain the relationship between attachment to the community and attitudes towards tourism impacts or support for tourism, this difficulty is shared with a previous studies by McCool and Martin (1994) and Um and Crompton (1987).

General understanding of tourism's economic benefits remaining in the society has an indirect effect on support for tourism (0.11). The direct effect of this variable is not significant but once the variable passes through tourism impacts the total effect is positive. The decomposition analysis shows the significant effect of this variable on PSEI which is strongly positive ($\rho_{28}=0.316$).

The direct effect of community use of tourism facilities and services by residents has direct strong positive relation with support for tourism development ($\rho_{19}=0.316$). It means those residents who use the tourism facilities strongly support tourism development. These residents perceived very positively the socioeconomic and environmental benefits of tourism ($\rho_{29}=$

0.311, $\rho_{49} = 0.385$) although at the same time they believe that tourism will degrade the environment ($\rho_{59} = -0.031$); this may be due to the widespread and clear environmental degradation in Mazandaran. Jourowski et al. (1997) suggested that the resource users perceived the economic, social, and environmental impacts positively. The total effect of this variable is also strongly direct and positive (0.44). The results suggest that resource users strongly support tourism development.

The model provides a theoretical framework for assessing local community support for tourism development in a developing society. Previous studies suggested a linear relationship between tourism impacts and support for tourism development (King et al., 1992; Perdue et al., 1990). However, this model revealed that the local community support for tourism development is a result of cost and benefit analysis of tourism impacts by residents in which their perceptions of tourism impacts are influenced by some attitudinal and socio-demographic factors.

6.2 Implications

There is an increasing concern on potential negative effects of tourism on host communities and a growing need to develop tourism in a planned and sustainable way to maximize the benefits and control the costs. An important element in planning is considering local communities in the planning process. This is based on the concept that planning is for the residents of a destination (Inskeep, 1991) and their support is necessary for successful tourism development (Swarbrook, 1993). Therefore, identifying and understanding the factors that influence local community support for tourism development is very important for planners and for the success of any project (Gursoy et al., 2002, p. 98).

The proposed model can help planners and decision makers to assess levels of support for tourism development before investment in tourism projects. The planners should assess levels of community concern. The more concern residents have for their society, the more they will support tourism development. The findings of this research suggested that local communities in Mazandaran are concerned about their community. This implies that investors and planners should consider the aspects that residents have concern about, particularly environmental degradations.

Limited studies have simultaneously assessed the relationship between perceived tourism impacts and the support of tourism development and factors which predict these interrelationships through an appropriate data analysis technique, such as path analysis.

A new factor introduced by this research is general understanding of residents of the level of economic benefits remaining in the society. Residents believing that much of tourism's economic benefits will remain in the society and go to the local community will support tourism development. The results show that the local community in Mazandaran will support tourism if they receive economic gain from tourism. This indicates that planners, investors, and decision makers should involve residents directly in tourism activities. Another important strategy is to inform local communities on the direct and indirect economic benefits of tourism development for their society, since residents may not have enough information about the socioeconomic benefits of tourism.

The greater use of tourism facilities and services by residents will result in their support for tourism development. The local community of Mazandaran will support tourism and exchange their resources with tourists if they are able to access more recreational facilities. This suggests that planners should provide more recreational opportunities through organizing coastal and forest areas and remove restrictions to the use of existing recreational facilities.

Similar to the previous studies conducted by Jourowski et al. (1997) and Gursoy et al. (2002) the findings of this research confirm the effectiveness of social exchange theory as the theoretical framework for predicting residents' attitudes toward tourism impacts and development. Another theoretical contribution is to consider general understanding of economic benefits of tourism remaining in the society which was the second important factor, after utilization of tourism facilities by residents, in predicting support for tourism development in urban setting.

6.3 Recommendations

Based on the results, the following recommendations are suggested:

6.3.1 Organizing coastal areas

The most important performance measure for organizing coastal areas is to stop the construction of villas and second-homes in vulnerable forest and coastal areas and remove barriers that impede tourists' access to beaches. Rules and regulations that must be taken into account in constructions in coastal areas include the Coastal Lands Act passed in 1976. According to this law, the width of coastal boundary must be 60 meters from the high water mark of 1963. Of course, due to the sea level rising in the past years a new baseline for indicating high water mark should be identified.

Integrated management of beaches in all three coastal provinces, Mazandaran, Gilan and Golestan, and continuous monitoring of land use changes should be considered. A comprehensive plan for tourism development in the 40 km of almost unspoiled beaches (see map 5.15) should be developed before speculators attack and repeat the bitter experience of similar areas. These measures may help to relieve some of the troubles that manifested for residents such as litter and traffic problems.

6.3.2 Develop strategies to help spread the benefits of tourism to the wider community

Planners need to contribute local communities to provide their traditional products in a way that appeals to tourists. Generally, local communities' products are traditional ones that are not appreciated by tourists, e.g. local dairy products are less popular and suffering loss of prestige day by day, both from the point of view of the risk to human health and in respect of the short shelf-life of the end product (Fao, 2013). Therefore, in most cases a business relationship cannot be established between residents and tourists, except in limited cases such as renting rooms to tourists and caretaking.

Furthermore, tourism planners and decision makers in Mazandaran need to develop strategies to help distribution of tourism benefits among various social groups in order to gain their support for tourism development. Development of small scale tourism and providing

low-interest loans to local communities to invest in tourism projects particularly in developing low-cost accommodation establishments such as ecolodges is also recommended. Public organizations may transfer the ownership or the right of exploitation of their resorts and tourist villages to the local residents. This would not only help spread the benefits of tourism to residents, but also can bring communities together and the wider social benefits (Ritchie & Inkari, 2006).

6.3.3 Development recreational facilities throughout the coastal strip

The finding of this research revealed that those residents who use tourism resource-based facilities and services are strongly supportive of tourism development. In fact, it was the most important factor for gaining residents' support for tourism development. On the other hand, lack of recreational facilities and services is one of the main factors in environmental degradation. The high density of tourism establishments in limited part of coastal areas, mainly around Ramsar, Tonekabon, Noushahr, Nour, and Babolsar, have intensified pressures on the environment and local communities and increase the scope of environmental and socioeconomic costs.

Establishing new recreational facilities and improvement of existing facilities with a commitment to sustainable development principles and respect for local patterns will not only promote residents' support for tourism, but also will help to conserve environment and enhance tourists' satisfaction.

6.3.4 Involving local community in development process

Planners need to understand that host communities consist of different social groups with different interests. Many community members may not enjoy the benefits of tourism. Women are among groups that their critical role in tourism planning in Mazandaran has been neglected. The results of this research show that female residents are more eager to support tourism development. Therefore, planners, decision makers, and investors should involve them in tourism development process.

There are several types of community partnership in tourism development. According to Timothy (1998), the most important form of partnership includes cooperation between public

organizations, different levels of government, and the private. The establishment of community based tourism NGOs can help to promote residents' role in tourism development. However, it is critical in host communities to consider the extent to which community may cooperate with government and public organizations (Boya& Singh, 2003). Lankford and Howard suggested, "Local governments and tourism promoters should lay particular emphasis on the finding that if people feel they have access to the planning/public review process and that their concerns are being considered, they will support tourism" (1994, p. 135).

6.3.5 Developing education programs

The findings of this study suggest that those residents who have a positive understanding of economic benefits of tourism remaining in the society are more likely to support tourism development. Education is needed to explain direct, indirect, and induced benefits of tourism for society. If people are uninformed of tourism's benefits, they may over time change their mind, become opposed to tourism development, and reject tourism. To help local community to better understand tourism and its impacts, educational programs can be developed through tourism exhibitions, public meetings, workshops, and television and radio programs.

6.3.6 Commitment to practical use of impact assessment techniques

The results indicate that there has been considerable environmental degradation and over-exploitation of natural resources due to the unplanned expansion of coastal construction and the conversion of farmlands and paddies to residential areas. "Impact analysis is conducted to predict the likely economic, social, and environmental effects of alternative tourism plans. Impact assessment suggest who and what may be positively and adversely impacted by the proposed developments and help the community decide which, if any, of alternative plans should be adopted"(Dwyer & Edwards, 2010, p.34). Thus, commitment to use impact assessment techniques in development projects contributes to control negative environmental and socioeconomic impacts when the environment is affected by development.

6.4 Future research

This thesis did not assess the attitudes of business owners who play an important role in providing services to tourists. Further studies are needed to examine their perceptions of factors predicting their support for tourism development. Results show the perceived NSEI and PEI did not have direct relationship with support for tourism. Further studies are needed to examine relationship between these factors. Since attitudes towards tourism may change over time, longitudinal research is suggested to assess changes in local communities' attitudes towards tourism impacts and development.

Since the type and level of tourism development in other part of Caspian Sea littoral are different, it would be meaningful to examine residents' perception of tourism in these areas, particularly in western coast of Gilan. This research examined perceptions of residents of nature-based tourism; further study could provide additional insight into the applicability of the proposed model for other types of tourism such as cultural tourism.

The relationship between general understanding of economic benefits remaining in society and attitudes towards tourism was assessed for the first time in this study. More study is required to examine the exact impact of this variable on support for tourism development.

Although many restrictions against tourist are based on the hypothesis that tourists' behavior have negative impacts on society, the findings of this study reject this hypothesis. Further study is needed in other areas with different levels of development to examine relationship between tourists' behavior and social problems in tourist destinations.

Due to the dramatic fluctuation in residents' income in last two years, it would be meaningful to examine the relationship between the economic status of communities and their perceptions of tourism impacts.

As the type of tourists varies in different part of Caspian Sea littoral, they have different environmental behaviors. Identification of the factors influencing environmental behaviors of tourists would have both theoretical and management implications.

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Appendix I : Questionnaires in English and Persian

Dear resident,

This survey is meant to investigate local community perceptions towards nature-based tourism (NBT) impacts in Mazandaran.. Nature-based tourism is the tourism activities, which based on natural, ecological landscapes in Mazandaran. For examples, beaches, forest recreational areas, botanical gardens, lakes, waterfalls, natural trails, hot springs, cold springs, leisure farming, and bird watching etc. Your valuable response is extremely helpful to this study. Responses to this questionnaire will be completely anonymous. Your identity will remain anonymous. We greatly appreciate you taking time to complete this questionnaire.

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Part1. Nature Based Tourism Impacts

In this part, we would like to know your opinion about **nature-based tourism (NBT)**

Socio-cultural and environmental impacts in Mazandaran.

Please indicate how strongly you agree or disagree with the following statements.

- 1- Tourism has led to an increase in the availability of recreational facilities and spaces

Strongly agree

1	2	3	4	5
---	---	---	---	---

 Strongly disagree

- 2- High spending tourists have an undesirable effect on our way of life

1	2	3	4	5
---	---	---	---	---

- 3- Tourism causes changes in our traditional cultures

1	2	3	4	5
---	---	---	---	---

- 4- Local residents have a lower quality of life as a result of living in a tourist area

1	2	3	4	5
---	---	---	---	---

- 5- The crime rate in the area has increased because of tourism.

1	2	3	4	5
---	---	---	---	---

- 6- Because of tourism our roads and other public facilities are kept at a high standard

1	2	3	4	5
---	---	---	---	---

- 7- I think tourism has led to more vandalism in Namak Abrod

1	2	3	4	5
---	---	---	---	---

- 8- Tourism has resulted in unpleasantly overcrowded beaches, hiking trails, parks and other outdoor places for the local community

1	2	3	4	5
---	---	---	---	---

- 9- Tourists disrupt the peace and tranquility of public parks

1	2	3	4	5
---	---	---	---	---

- 10- Tourism has increased drug addiction

1	2	3	4	5
---	---	---	---	---

- 11- Our standard of living increases considerably because of the tourism

1	2	3	4	5
---	---	---	---	---

- 12- Tourism result in an increase in the cost of living

1	2	3	4	5
---	---	---	---	---

13- Tourism provides job opportunities for local community

1	2	3	4	5
---	---	---	---	---

14- Tourism increased price of land and housing

1	2	3	4	5
---	---	---	---	---

15- Tourists' keen interest in natural and cultural sites result in these sites are cared for than they otherwise would be

1	2	3	4	5
---	---	---	---	---

16- Tourism has resulted in unpleasantly overcrowded beaches, footpaths, parks and outdoor places

1	2	3	4	5
---	---	---	---	---

17- Tourism improves understanding and image of different communities and cultures

1	2	3	4	5
---	---	---	---	---

18- Tourism increased cost of living in Namak Abroud

1	2	3	4	5
---	---	---	---	---

19- Tourism encourages a variety of cultural activities by the local population (crafts, arts)

1	2	3	4	5
---	---	---	---	---

20- Tourism prevents local language from being use as much as it otherwise would

1	2	3	4	5
---	---	---	---	---

21- Tourism could create a positive feeling about area among tourists

1	2	3	4	5
---	---	---	---	---

22- Local businesses are the ones which benefit most from tourists

1	2	3	4	5
---	---	---	---	---

23- Tourists have a positive impact on the area's cultural identity

1	2	3	4	5
---	---	---	---	---

24- The state of area's residents are courteous and friendly to tourists

1	2	3	4	5
---	---	---	---	---

25- Tourism creates more jobs for foreigners than local community

1	2	3	4	5
---	---	---	---	---

26- Tourism gives benefits to a small group of people in the area

1	2	3	4	5
---	---	---	---	---

27- Tourism makes local residents feel more proud of their town and makes them feel good about themselves and their community

1	2	3	4	5
---	---	---	---	---

28- I believe that tourists increase noise in the area

1	2	3	4	5
---	---	---	---	---

29- I believe that tourism helps to increase local awareness and appreciation of the environment

1	2	3	4	5
---	---	---	---	---

30- I believe that tourism cause evolution of agriculture and fishing

1	2	3	4	5
---	---	---	---	---

31- I believe that the quality of natural environment in Namak Abrod has deteriorated by tourists.

1	2	3	4	5
---	---	---	---	---

32- Tourism development increases the traffic problems in Namak Abrod

1	2	3	4	5
---	---	---	---	---

33- Tourism preserves environment and improves the appearance of Namak Abrod

1	2	3	4	5
---	---	---	---	---

34- The area experiences more litter problems because of the presence of tourists

1	2	3	4	5
---	---	---	---	---

35- Local community in Namak Abroud feel proud to belong to it

1	2	3	4	5
---	---	---	---	---

36- Tourism provides an incentive for conservation of natural resources

1	2	3	4	5
---	---	---	---	---

37- Construction of tourist villages and other tourist facilities has destroyed the natural environment

1	2	3	4	5
---	---	---	---	---

38- Tourists increasing pollution in beaches

1	2	3	4	5
---	---	---	---	---

Part two. Involvement

The following questions ask about how **involved** you are in tourism planning in **Mazandaran**

- a. Mazandaran government invites you to participate in tourism planning
- b. Mazandaran government knows your concerns and issues regarding NBT
- c. Mazandaran government accepts your opinions
- d. Do you have desire to be involved in decision making process?
- e. You influence province tourism planning
- f. what happens to Mazandaran is important to me
- g. I am proud of being a Mazandaran resident

Please indicate times and money you spend in the following.

- h. How many times have you participated in local government's tourism activities, as a tourist, over the last 12 months?

Never participated 1 ~ 6 times 6 ~ 10times More than 10 times

- i. How many times have you participated in local government's tourism planning, as a decision maker in the past 12 months?

No Time 1 ~ 5 times 6 ~ 10 times More than 10 times

Part three. Socio-demographic characteristics

- a. What is your gender? Male Female
 - b. How old are you? 18-25 25-35 35-45 45-65 more than 65
 - c. What is your family status? Single married divorced
 - d. What is your highest level of education? (Please select only one category)
- | | | | |
|------------|-----------------|--------------------------------|-------------|
| Elementary | Jr. high school | High school/ vocational school | Jr. college |
| BA degree | Graduate degree | Other professional degree | |
- e. Since when have you lived in this area?
 - f. What is the name of your place of resident?
 - g. What is your employment status? Employed unemployed others
 - h. How many member of your family are employed in tourism businesses?
 - i. How much is your annual personal income?
- | | | | |
|---------------------------|------------------------|-------------------------|----------------------|
| Less than 3.500.000 Toman | 3.500.000 to 8.500.000 | 8.500.000 to 15.000.000 | more than 15.000.000 |
|---------------------------|------------------------|-------------------------|----------------------|
- j. Any other comments, which you think important impacts of Mazandaran NBT?

Thank you for your cooperation!

ساکن محترم منطقه

این پرسشنامه ابزاری است جهت شناسایی ادراکات مردم محلی از اثرات اجتماعی فرهنگی و زیست محیطی گردشگری مبتنی بر طبیعت در استان مازندران. پاسخ های ارزشمند شما برای انجام این تحقیق بسیار سودمند خواهد بود. هویت شما و پاسخ های ارایه شده توسط شما کاملاً ناشناس خواهد بود و از اینکه برای تکمیل این پرسشنامه وقت ارزشمند خود را اختصاص می دهید بینهایت سپاسگزاریم.

روزبه میرزائی - پژوهشگر دوره دکتری جغرافیا و برنامه ریزی گردشگری

آندریاس دیتمن - استاد راهنما

دانشکده جغرافیا و گردشگری دانشگاه یوستوس لیپینگ گیسن- آلمان

بخش 1. اثرات گردشگری مبتنی بر طبیعت

در این بخش ما مایلیم نظرات شما را در خصوص اثرات اجتماعی فرهنگی و زیست محیطی گردشگری مبتنی بر طبیعت در مازندران بدانیم.

لطفاً با انتخاب گزینه مربوطه میزان موافقت و یا مخالفت خود را با عبارت عنوان شده مشخص نمایید (نظر شما می تواند در طیفی از " 1= کاملاً موافقم" تا " 2= موافقم" " 3= نظری ندارم" " 4= مخالفم" و " 5= کاملاً مخالفم" قرار گیرد).

1- توسعه گردشگری در منطقه منجر به افزایش خدمات و فضاهای تفریحی موجود شده است.

کاملاً موافقم

1	2	3	4	5
---	---	---	---	---

 کاملاً مخالفم

2- گردشگری موجب افزایش فرصت های شغلی برای مردم محلی شده است

کاملاً موافقم

1	2	3	4	5
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 کاملاً مخالفم

3- گردشگری مردم محلی را به انجام دادن فعالیت های فرهنگی گوناگون از جمله ساخت صنایع دستی تشویق کرده است

کاملاً موافقم

1	2	3	4	5
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 کاملاً مخالفم

4- گردشگری باعث شده است مردم محلی از اینکه به این منطقه تعلق دارند و در اینجا زندگی می کنند احساس غرور کنند

کاملاً موافقم

1	2	3	4	5
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 کاملاً مخالفم

5- گردشگرانی که پول زیادی در منطقه خرج می کنند تاثیر نامطلوبی بر شیوه زندگی مردم محلی دارند.

کاملاً مخالفم

1	2	3	4	5
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 کاملاً موافقم

6- توسعه گردشگری منجر به افزایش نرخ جرم و جنایت در منطقه شده است.

کاملاً موافقم

1	2	3	4	5
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 کاملاً مخالفم

7- توسعه گردشگری باعث شلوغ شدن بیش از حد و آزاردهنده جنگل ها، کوهها، کنار رودخانه ها، مسیرهای

پیاپیاده روی، پارک ها و سایر مکانهای تفریحی برای مردم محلی شده است

کاملاً موافقم

1	2	3	4	5
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 کاملاً مخالفم

- 8- گردشگری موجب افزایش هزینه های زندگی ما شده است
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 9- گردشگری موجب تغییر در فرهنگ های سنتی مردم منطقه شده است.
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 10- در نتیجه سکونت در اینجا که یک منطقه گردشگری است، زندگی مردم محلی از کیفیت پایین تری برخوردار می باشد.
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 11- توسعه گردشگری موجب افزایش اعتیاد به مواد مخدر و مصرف نوشیدنی های الکلی در منطقه شده است.
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 12- به اعتقاد من گردشگری موجب گسترش بی بندوباری در منطقه شده است.
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 13- حضور گردشگران باعث بر هم خوردن آرامش پارک ها و فضاهای باز شده است.
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 14- جاده ها و سایر تسهیلات و خدمات عمومی به واسطه توسعه گردشگری با کیفیت مناسبی نگهداری می شوند
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 15- سطح کلی استانداردهای زندگی ما به واسطه گردشگری، افزایش یافته است
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 16- گردشگری موجب افزایش قیمت زمین و ساختمان در منطقه شده است.
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 17- علاقه شدید گردشگران به جاذبه های طبیعی و فرهنگی منطقه موجب شده است که مسئولین امر مراقبت بیشتری از این مکانها به عمل آورند.
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 18- توسعه گردشگری موجب درک و آشنایی بیشتر مردم محلی با سایر فرهنگ ها و قومیت های کشور شده است.
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 19- گردشگری موجب شده است مردم محلی کمتر از آنچه که باید از گویش های بومی خود استفاده کنند
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 20- گردشگری می تواند موجب شکل گیری احساس مثبت و خوبی در رابطه با منطقه در گردشگران شود
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|
- 21- کسب و کارهای محلی بیش از سایرین از گردشگری منفعت کسب می کنند.
- | | | | | | | |
|---------------|---|---|---|---|---|---------------|
| کاملاً مخالفم | 5 | 4 | 3 | 2 | 1 | کاملاً موافقم |
|---------------|---|---|---|---|---|---------------|

22- گردشگران تاثیر مثبتی بر هویت فرهنگی منطقه دارند

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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23- ساکنین منطقه برخورد مودبانه و دوستانه ای با گردشگران دارند

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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24- مشاغل ایجاد شده توسط گردشگری بیشتر در اختیار افراد غیر بومی قرار دارند

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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25- منافع گردشگری به گروه اندکی از مردم می رسد

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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26- به نظر من گردشگران سر و صدا می کنند و باعث شلوغ شدن منطقه می شوند

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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27- گردشگری، سطح آگاهی مردم محلی در رابطه با محیط زیست را ارتقا می دهد و موجب شده است تا مردم بومی احترام بیشتری برای محیط زیست منطقه قایل شوند.

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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28- گردشگری موجب ارتقای وضعیت کشاورزی و ماهیگیری منطقه شده است

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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29- به نظر من کیفیت محیط زیست منطقه به دلیل حضور گردشگران کاهش یافته است.

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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30- توسعه گردشگری موجب گسترش مشکلات ترافیکی منطقه شده است.

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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31- گردشگری موجب حفاظت از محیط زیست می شود و به بهبود چشم اندازهای طبیعی و شکل ظاهری منطقه کمک می کند.

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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32- به نظر من حضور گردشگران در منطقه موجب تولید ذباله بیشتر می شود

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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33- توسعه گردشگری و منافع ناشی از آن موجب ایجاد انگیزه در مردم محلی برای حفاظت بهتر از محیط زیست شده است

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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34- ساخت شهرک ها و سایر تسهیلات گردشگری موجب آسیب رساندن به محیط زیست شده است.

کاملاً مخالفم کاملاً موافقم

1	2	3	4	5
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35- گردشگران موجب آلودگی کوهستان شده اند.

کاملاً مخالفم

1	2	3	4	5
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 کاملاً موافقم

36- پوشش سنتی مردم بومی منطقه به واسطه حضور گردشگران و الگو برداری از نوع پوشش آنها توسط محلی ها

در طی سالیان گذشته تغییر یافته است.

کاملاً مخالفم

1	2	3	4	5
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 کاملاً موافقم

37- آنچه در منطقه اتفاق می افتد برای من مهم و واجد اهمیت است.

کاملاً مخالفم

1	2	3	4	5
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 کاملاً موافقم

38- من زندگی در این منطقه را دوست دارم و چنانچه از اینجا نقل مکان کنم، متأسف و ناراحت خواهم شد.

کاملاً مخالفم

1	2	3	4	5
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 کاملاً موافقم

39- مکان های تفریحی مورد نیاز من در حال حاضر در این منطقه وجود دارند

کاملاً مخالفم

1	2	3	4	5
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 کاملاً موافقم

بخش دوم. مشارکت

پرسش های زیر در زمینه میزان مشارکت شما در توسعه و برنامه ریزی گردشگری در مازندران مطرح شده است.

الف- مقامات محلی نگرانی ها و نقطه نظرات شما در رابطه با توسعه گردشگری را می دانند؟

الف-1- در طول 12 ماه گذشته چند مرتبه به عنوان یک فرد تصمیم گیرنده در جلسات مربوط به برنامه ریزی و توسعه گردشگری در منطقه مشارکت داشته اید؟

ب- آیا در یکسال گذشته برنامه گردشگری خاصی (مانند تور مسافرتی، جشنواره و برنامه هایی برای گذران اوقات فراغت) از طرف دولت برای استفاده شما طراحی شده است؟

ب-1- در طول 12 ماه گذشته چند مرتبه به عنوان یک گردشگر در برنامه های ارایه شده توسط دولت شرکت داشته اید؟

بخش سوم. ویژگی های جمعیت شناسی

الف- جنسیت : مذکر ☐ مونث ☐

ب- چند ساله هستید؟

18-25 ☐ 25-35 ☐ 35-45 ☐ 45-65 ☐ بیش از 65 ☐

پ- تحصیلات شما چه میزان است؟

زیر دیپلم	دیپلم	فوق دیپلم	لیسانس	فوق لیسانس و دکتری
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ت- وضعیت خانوادگی شما در حال حاضر چگونه است؟

مجرد ☐ متاهل ☐ مطلقه ☐

ج- چند سال است که در این منطقه سکونت دارید؟

ج- وضعیت شغلی شما چگونه است؟

شاغل ☐ بیکار ☐ سایر موارد ☐

ح- آیا تا کنون در مشاغل مرتبط با گردشگری فعالیت نموده اید؟

خ- آیا کسی از اعضای خانواده شما در مشاغل مرتبط با گردشگری کار می کند؟ چند نفر؟

د- درآمد سالیانه شما چه میزان است؟ (مقادیر به تومان ارایه شده است)

کمتر از 3/500/000 ☐ بین 3/500/000 تا 8/500/000 ☐ بین 8/500/000 تا 15/000/000 ☐ بیش از 15/000/000 ☐

ذ- لطفاً چنانچه نظر دیگری در رابطه با اثرات گردشگری مبتنی بر طبیعت در مازندران دارید بنویسید.

با سپاس فراوان از همکاری شما

Appendix II RELIABILITY ANALYSIS - SCALE (ALPHA)

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
q1	133.68	208.969	.225	.346	.740
q2	133.58	211.336	.170	.302	.743
q3	134.10	211.396	.142	.312	.745
q4	133.97	211.073	.155	.202	.744
q5	134.34	207.058	.237	.192	.740
q6	134.29	205.649	.294	.385	.737
q7	133.58	205.668	.309	.423	.736
q8	133.53	206.093	.305	.325	.736
q9	133.69	206.133	.312	.346	.736
q10	134.69	213.601	.098	.168	.747
q11	134.04	202.321	.386	.491	.732
q12	134.20	202.807	.363	.513	.733
q13	134.12	204.469	.326	.452	.735
q14	134.45	209.233	.193	.301	.742
q15	134.08	208.505	.265	.267	.739
q16	133.17	209.749	.267	.196	.739
q17	134.20	204.939	.297	.378	.737
q18	133.48	209.815	.252	.252	.739
q19	133.73	208.846	.244	.281	.739
q20	133.55	213.891	.139	.192	.744
x15	133.60	207.936	.308	.159	.737

q22	134.32	210.744	.181	.286	.743
q23	133.67	210.907	.192	.209	.742
x16	134.40	220.926	-.101	.148	.755
q25	134.97	219.817	-.070	.195	.754
q26	134.04	204.401	.339	.490	.735
q27	133.97	210.568	.177	.410	.743
q28	134.52	211.236	.151	.242	.744
q29	133.98	210.649	.183	.363	.742
q30	133.08	208.928	.311	.391	.737
q31	134.17	210.337	.181	.342	.743
q32	133.15	207.925	.345	.383	.736
q33	133.93	208.599	.248	.451	.739
q34	133.84	207.078	.277	.312	.738
q35	133.51	206.501	.308	.408	.736
q36	133.55	207.107	.300	.335	.737
q37	132.92	211.144	.248	.333	.740
q38	133.32	208.235	.238	.298	.740
q39	134.77	209.693	.170	.167	.744

Appendix III Factor Analysis

Factor Analysis

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.832
Bartlett's Test of Sphericity	Approx. Chi-Square	3236.096
	df	325
	Sig.	.000

Communalities

	Initial	Extraction
x19	1.000	.643
x20	1.000	.581
x21	1.000	.532
x22	1.000	.558
x23	1.000	.570
x24	1.000	.452
x25	1.000	.459
x27	1.000	.587
Q6	1.000	.565
Q7	1.000	.495
Q8	1.000	.376
Q11	1.000	.623
Q12	1.000	.614
Q13	1.000	.586
Q16	1.000	.478
x31	1.000	.508
x30	1.000	.508
x32	1.000	.615
x33	1.000	.434
x34	1.000	.634
x35	1.000	.582
x36	1.000	.618
x37	1.000	.594
x38	1.000	.590
x40	1.000	.597
x39	1.000	.522

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.182	19.931	19.931	5.182	19.931	19.931	3.346	12.868	12.868
2	2.877	11.065	30.996	2.877	11.065	30.996	2.531	9.733	22.601
3	1.491	5.736	36.732	1.491	5.736	36.732	2.360	9.078	31.679
4	1.382	5.317	42.049	1.382	5.317	42.049	1.886	7.255	38.934
5	1.306	5.021	47.070	1.306	5.021	47.070	1.754	6.748	45.682
6	1.072	4.125	51.195	1.072	4.125	51.195	1.238	4.760	50.442
7	1.012	3.890	55.085	1.012	3.890	55.085	1.207	4.643	55.085
8	.939	3.610	58.695						
9	.885	3.403	62.098						
10	.860	3.308	65.406						
11	.820	3.152	68.558						
12	.770	2.962	71.519						
13	.732	2.815	74.334						
14	.713	2.742	77.076						
15	.684	2.629	79.705						
16	.670	2.579	82.284						
17	.579	2.228	84.512						
18	.572	2.198	86.710						
19	.544	2.092	88.802						
20	.495	1.903	90.705						
21	.485	1.866	92.571						
22	.445	1.711	94.282						
23	.427	1.641	95.923						
24	.391	1.503	97.426						
25	.352	1.353	98.778						
26	.318	1.222	100.000						

Extraction Method: Principal Component Analysis.

Component Matrix^a

	Component						
	1	2	3	4	5	6	7
x19	-.251	.462	.245	.465	.294	-.018	-.063
x20	-.224	.378	.437	.386	.154	.008	.156
x21	-.355	.436	.146	.298	.266	-.164	-.091
x22	-.198	.322	.121	-.026	.353	.509	.130
x23	-.242	.349	.036	-.322	-.015	-.069	.529
x24	-.343	.435	-.186	-.233	-.037	.107	-.209
x25	-.178	.506	.288	-.141	-.136	-.205	.086
x27	.316	.157	.063	.298	-.214	.568	.033
Q6	.593	.113	.084	.220	-.321	.059	.198
Q7	.613	.134	-.259	.064	.138	-.040	.099
Q8	.512	.187	-.012	-.078	-.146	.206	.096
Q11	.667	.194	.016	.170	-.259	-.103	.182
Q12	.670	.164	-.026	.278	-.245	-.006	-.012
Q13	.660	.158	-.166	.107	.044	-.280	-.076
Q16	.151	.332	.369	-.403	-.001	-.083	-.198
x31	.254	.277	.402	-.207	-.353	-.193	-.018
x30	.366	.275	.386	-.255	-.128	.120	-.232
x32	-.364	.445	-.447	-.054	-.152	.070	.233
x33	-.357	.458	-.191	.049	-.197	-.110	-.081
x34	-.365	.545	-.353	-.001	-.254	.122	-.019
x35	-.230	.558	-.324	.088	.004	-.191	-.262
x36	.694	.148	-.203	.131	.174	-.156	-.035
x37	.529	.199	-.025	-.201	.418	-.090	.226
x38	.481	.277	-.120	-.359	.310	.153	.138
x40	.480	.193	-.067	-.120	.062	.276	-.481
x39	.622	.165	-.076	-.004	.299	-.095	-.063

Extraction Method: Principal Component Analysis.

a. 7 components extracted.

Rotated Component Matrix^a

	Component						
	1	2	3	4	5	6	7
x19	-.010	.164	-.020	.775	-.011	-.055	.111
x20	-.129	-.005	.101	.710	.087	.163	.126
x21	-.027	.261	-.195	.652	.018	.010	.001
x22	-.006	.106	-.057	.273	.006	.075	.681
x23	.000	.238	-.079	.030	.146	.677	.165
x24	-.092	.578	-.205	.016	.172	-.036	.191
x25	-.068	.275	-.006	.288	.446	.306	-.057
x27	-.017	-.004	.641	.044	-.024	-.206	.361
Q6	.238	-.132	.683	-.037	.099	.035	-.108
Q7	.630	-.025	.282	-.097	-.078	-.046	-.025
Q8	.310	-.010	.439	-.174	.188	-.006	.147
Q11	.408	-.074	.618	-.030	.139	.062	-.212
Q12	.374	-.051	.633	-.005	.085	-.174	-.182
Q13	.631	-.026	.270	-.025	.071	-.147	-.295
Q16	.131	.029	-.088	.035	.668	.001	.063
x31	.017	-.012	.258	.013	.620	.133	-.197
x30	.131	-.062	.209	-.019	.633	-.158	.129
x32	-.057	.683	.012	-.012	-.182	.311	.124
x33	-.143	.603	-.031	.181	.046	.072	-.094
x34	-.145	.764	.073	.061	-.025	.087	.109
x35	.121	.678	-.128	.249	.023	-.113	-.124
x36	.702	-.066	.267	-.011	-.016	-.166	-.145
x37	.706	-.162	.003	-.002	.125	.179	.147
x38	.622	.015	.037	-.176	.195	.101	.348
x40	.357	.080	.159	-.150	.284	-.539	.212
x39	.678	-.122	.122	.020	.102	-.150	-.002

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 11 iterations.

Component Transformation Matrix

Component	1	2	3	4	5	6	7
1	.700	-.336	.515	-.229	.191	-.191	-.078
2	.294	.685	.185	.449	.392	.148	.184
3	-.310	-.563	.064	.437	.615	.087	.078
4	-.094	-.068	.433	.629	-.538	-.262	-.212
5	.511	-.263	-.586	.365	-.221	-.058	.376
6	-.229	.000	.322	-.160	-.110	-.243	.864
7	.074	-.167	.249	-.001	-.285	.896	.143

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Appendix IV Regressions

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.462 ^a	.214	.208	.59980	2.035

a. Predictors: (Constant), General understandin of economic benefits of tourism, community attachment, community concern, utilization of tourism facilities by residents

b. Dependent Variable: positive socio-cultural impacts

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	56.137	4	14.034	39.010	.000 ^b
	Residual	206.500	574	.360		
	Total	262.637	578			

a. Dependent Variable: positive socio-cultural impacts

b. Predictors: (Constant), General understanding of economic benefits of tourism, community attachment, community concern, utilization of tourism facilities by residents

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.063	.206		10.001	.000
	community concern	-.070	.028	-.095	-2.523	.012
	community attachment	.107	.027	.147	3.941	.000
	utilization of tourism facilities by residents	.229	.029	.301	7.931	.000
	General understandin of economic benefits of tourism	.211	.037	.216	5.722	.000

a. Dependent Variable: positive socio-cultural impacts

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.7156	4.7338	3.6177	.31165	579
Residual	-2.19154	1.85011	.00000	.59772	579
Std. Predicted Value	-2.894	3.581	.000	1.000	579
Std. Residual	-3.654	3.085	.000	.997	579

a. Dependent Variable: positive socio-cultural impacts

Negative socio-cultural impacts

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.744 ^a	.554	.550	.49143	1.856

a. Predictors: (Constant), General understandin of economic benefits of tourism, community attachment, community concern, utilization of tourism facilities by residents

b. Dependent Variable: negative socio-cultural impacts

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	171.897	4	42.974	177.948	.000 ^b
Residual	138.620	574	.241		
Total	310.517	578			

a. Dependent Variable: negative socio-cultural impacts

b. Predictors: (Constant), General understandin of economic benefits of tourism, community attachment, community concern, utilization of tourism facilities by residents

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.265	.169		7.489	.000
	community concern	.590	.023	.737	26.014	.000
	community attachment	.065	.022	.081	2.897	.004
	utilization of tourism facilities by residents	.038	.024	.046	1.622	.105
	General understandin of economic benefits of tourism	-.041	.030	-.038	-1.349	.178

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.1567	4.6180	3.5583	.54534	579
Residual	-1.39738	1.61705	.00000	.48972	579
Std. Predicted Value	-2.570	1.943	.000	1.000	579
Std. Residual	-2.844	3.291	.000	.997	579

a. Dependent Variable: negative socio-cultural impacts

Positive environmental impacts

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.535 ^a	.286	.281	.81346	1.909

a. Predictors: (Constant), General understandin of economic benefits of tourism, community attachment, community concern, utilization of tourism facilities by residents

b. Dependent Variable: positive environmental impacts

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	152.356	4	38.089	57.561	.000 ^b
	Residual	379.827	574	.662		
	Total	532.182	578			

a. Dependent Variable: positive environmental impacts

b. Predictors: (Constant), General understandin of economic benefits of tourism, community attachment, community concern, utilization of tourism facilities by residents

Support for tourism development

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.606 ^a	.367	.363	.74732	1.969

a. Predictors: (Constant), negative environmental impacts, positive environmental impacts, positive socio-cultural impacts, negative socio-cultural impacts

b. Dependent Variable: support for more tourism development

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	186.838	4	46.710	83.637	.000 ^b
	Residual	321.685	576	.558		
	Total	508.523	580			

a. Dependent Variable: support for more tourism development

b. Predictors: (Constant), negative environmental impacts, positive environmental impacts, positive socio-cultural impacts, negative socio-cultural impacts

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.478	.267		1.791	.074
	positive socio-cultural impacts	.806	.052	.582	15.613	.000
	negative socio-cultural impacts	.167	.054	.131	3.069	.002
	positive environmental impacts	.034	.036	.035	.936	.350
	negative environmental impacts	-.131	.049	-.113	-2.654	.008

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.398	.280		4.999	.000
community concern	-.179	.038	-.170	-4.753	.000
community attachment	.115	.037	.110	3.102	.002
utilization of tourism facilities by residents	.417	.039	.385	10.633	.000
General understandin of economic benefits of tourism	.265	.050	.190	5.286	.000

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.0437	5.2029	3.3364	.51341	579
Residual	-2.29698	2.17125	.00000	.81064	579
Std. Predicted Value	-2.518	3.636	.000	1.000	579
Std. Residual	-2.824	2.669	.000	.997	579

a. Dependent Variable: positive environmental impacts

Negative environmental impacts

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.512 ^a	.262	.257	.69614	1.880

a. Predictors: (Constant), General understandin of economic benefits of tourism, community attachment, community concern, utilization of tourism facilities by residents

b. Dependent Variable: negative environmental impacts

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	98.673	4	24.668	50.903	.000 ^b
Residual	277.682	573	.485		
Total	376.355	577			

a. Dependent Variable: negative environmental impacts

b. Predictors: (Constant), General understandin of economic benefits of tourism, community attachment, community concern, utilization of tourism facilities by residents

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.354	.239		9.834	.000
	community concern	.413	.032	.468	12.831	.000
	community attachment	.123	.032	.140	3.889	.000
	utilization of tourism facilities by residents	-.028	.034	-.031	-.836	.403
	General understandin of economic benefits of tourism	-.100	.043	-.085	-2.322	.021

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.483 ^a	.234	.228	.82173	1.939

a. Predictors: (Constant), General understandin of economic benefits of tourism, community attachment, community concern, utilization of tourism facilities by residents

b. Dependent Variable: support for more tourism development

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	118.242	4	29.561	43.778	.000 ^b
	Residual	387.587	574	.675		
	Total	505.830	578			

a. Dependent Variable: support for more tourism development

b. Predictors: (Constant), General understandin of economic benefits of tourism, community attachment, community concern, utilization of tourism facilities by residents

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.360	.283		4.813	.000
	community concern	.060	.038	.059	1.591	.112
	community attachment	.027	.037	.026	.713	.476
	utilization of tourism facilities by residents	.478	.040	.453	12.066	.000
	General understandin of economic benefits of tourism	.157	.051	.116	3.101	.002

Full model

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.666 ^a	.444	.436	.70167	1.920

a. Predictors: (Constant), General understandin of economic benefits of tourism, community attachment, community concern, utilization of tourism facilities by residents, positive socio-cultural impacts, negative environmental impacts, positive environmental impacts, negative socio-cultural impacts

b. Dependent Variable: support for more tourism development

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	223.693	8	27.962	56.793	.000 ^b
	Residual	280.144	569	.492		
	Total	503.838	577			

a. Dependent Variable: support for more tourism development

b. Predictors: (Constant), General understandin of economic benefits of tourism, community attachment, community concern, utilization of tourism facilities by residents, positive socio-cultural impacts, negative environmental impacts, positive environmental impacts, negative socio-cultural impacts

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.182	.287		.633	.527
	positive socio-cultural impacts	.713	.051	.515	13.937	.000
	negative socio-cultural impacts	.037	.067	.029	.551	.582
	positive environmental impacts	-.056	.038	-.057	-1.479	.140
	negative environmental impacts	-.113	.047	-.097	-2.396	.017
	community concern	.125	.048	.123	2.580	.010
	community attachment	-.031	.033	-.031	-.950	.343
	utilization of tourism facilities by residents	.333	.038	.316	8.797	.000
	General understandin of economic benefits of tourism	.011	.045	.008	.253	.800