



UNIVERSITY OF ALGARVE
FACULTY OF ECONOMICS

**Role of tourism in local communities' attitudes toward biodiversity
conservation: case study of Golestan National Park, Iran**

Siavash Ghoddousi

Dissertation

Master in Tourism Economics and Regional Development

**Work made under the supervision of:
Prof. Pedro Pintassilgo
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Work Authorship Declaration

I declare to be the author of this work, which is unique and unprecedented. Authors and works consulted are properly cited in the text and are in the listing of references included.

Siavash Ghoddousi



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ABSTRACT

Biodiversity conservation has a significant role in preserving protected areas (PAs) in Iran. However, biodiversity conservation cannot be efficient without local participation and a positive attitude toward conservation from the local communities. One of the most important tools, which can build the relationship between local communities live at the boundaries of PAs and biodiversity conservation, is tourism. By having benefits from the tourism industry, locals' negative attitudes against PAs can be minimized.

This dissertation addresses the role of tourism in biodiversity conservation in the Golestan National Park (GNP). This is the oldest national park in Iran and is characterized by a large biodiversity. Moreover, from January 2012 to November 2015 during regular visits to GNP and also interviews with accommodation providers and people who have income from tourism, we observed that the benefit from tourism do not distribute well among all locals and do not function as a tool to reduce conflicts between locals and biodiversity conservation.

In this study, we looked at the local community's perspectives over benefits and losses from tourism and their attitudes toward expansion of tourism in the future. The different employment sectors stated contrasting views about losses and benefits from living near the national park. Farmers revealed the highest losses from GNP due to conflict with wildlife. The study results show that tourism is a source of income for most individuals and communities in the three study villages. Moreover, we tested the differences between agriculture and other sectors regarding the benefits from tourism to compensate the GNP losses. Results shows that locals who makes benefits from tourism have less losses as consequence of living near the national park and the locals who do not have benefits from tourism have the most losses as consequence of living near GNP. The perceptions of locals toward tourists in their community were generally positive and they showed willingness to welcome more tourists in their villages. The majority of respondents claim that tourists do not have negative cultural and environmental effects on their community. This dissertation emphasize on the important role of local participation in tourism, in order to improve biodiversity conservation in protected areas. In this research we conclude that the GNP management system should design policies to involve locals in ecotourism in order to decrease conflicts between locals and the GNP.

RESUMO

A conservação da biodiversidade tem um papel significativo na preservação das áreas protegidas (APs) no Irão. No entanto, a conservação da biodiversidade não pode ser eficiente sem a participação das comunidades locais e a sua atitude positiva para com a conservação. O turismo constitui uma das ferramentas mais importantes para estabelecer um elo entre as comunidades locais que vivem junto às PAs e a conservação da biodiversidade. Ao auferirem benefícios do turismo, os habitantes locais dissipam as suas atitudes negativas para com as PAs.

Esta dissertação aborda o papel do turismo na conservação da biodiversidade no Parque Nacional de Golestan (PNG). Este é o mais antigo parque nacional do Irão e é caracterizado por uma grande biodiversidade. Entre janeiro de 2012 e novembro 2015, durante visitas regulares ao PNG e entrevistas com fornecedores de alojamento e pessoas que auferem rendimentos proveniente do turismo, observou-se que os benefícios do turismo não se encontram bem distribuídos na comunidade local e que não funcionam como uma ferramenta para reduzir conflitos entre os moradores e a conservação da biodiversidade.

Neste estudo, analisamos as perspetivas da comunidade local sobre os benefícios e as perdas de turismo, e as suas atitudes em relação à expansão do turismo no futuro. Os diferentes setores de emprego apresentam visões contrastantes sobre perdas e benefícios decorrentes de se viver perto do parque nacional. Os agricultores revelaram as maiores perdas decorrentes do PNG devido ao conflito com a vida selvagem. Os resultados do estudo mostram que o turismo é uma fonte de rendimento para a maioria dos indivíduos e das comunidades nas três aldeias em estudo. Além disso, foram testadas as diferenças entre a agricultura e outros setores relativamente os benefícios do turismo para compensar as perdas do PNG. Os resultados mostram que os moradores que têm mais benefícios do turismo têm menos perdas como consequência de viver perto do parque nacional, enquanto os moradores que não têm benefícios do turismo têm as maiores perdas como consequência de viver perto do PNG. As perceções dos moradores em relação ao turismo nas suas comunidades foram geralmente positivas, tendo sido manifestada a vontade para acolher mais turistas nas suas aldeias. A maioria dos inquiridos afirma que os turistas não têm efeitos culturais e ambientais negativos sobre a sua comunidade. Esta dissertação enfatiza o importante papel da participação local no turismo, tendo em vista melhorar a conservação da biodiversidade em áreas protegidas. Nesta investigação, concluímos que o sistema de gestão do PNG deve

conceber políticas que envolvam os moradores locais em projetos de ecoturismo, a fim de diminuir os conflitos entre os habitantes locais e o PNG.

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ABBREVIATIONS LIST

DoE	Department of environment
GC	Ghoshcheshmeh
GNP	Golestan national park
IUCN	International Union for Conservation of Nature
PA	Protected area
TIES	The International Ecotourism Society
TR	Tangeh-rah
TT	Tutlitamak
UNEP	United Nations Environment Program

1- INTRODUCTION

Current growth of human population has caused a boom in natural resource extraction and unsustainable development is affecting nature in different ways. This trend can be observed in Iran, where wildlife population has highly decreased in the last 40 year (Khorozyan, Ghoddousi, et al. 2015). Moreover, lack of sustainable development in rural areas in Iran generates significant migration to urban centers.

Notwithstanding, Iran is becoming a new tourism destination. Tour operators are seeing a surge of interest and bookings for Iran, after the political changes related to lifting of the embargo in 2015. Tourism development in Iran raises challenges regarding the conservation of protected areas (PAs), which require local support and participation.

Nowadays, tourism is a strong tool to give local communities economic and social benefits and encourage local people to support conservation. In recent years, local peoples' support for PAs management is playing an important role in biodiversity conservation worldwide (Udaya Sekhar 2003a; Naughton-Treves et al. 2005).

A few studies analyzed the relationship between local participation in conservation and benefits from tourism (Stem et al. 2010). In recent years conservationists recognized how PAs can be an important tool for sustaining local people's livelihood and how local people support for conservation can be effective for protecting natural resources and endangered species (Ninan & Sathyapalan 2005). Several studies have concluded that costs related with conservation such as wildlife depredation of crops and livestock have negative effects on local attitudes, whilst benefits from conservation may have positive effects (Maikhuri et al. 2001; Jimura 2011; Mbaiwa & Stronza 2011; Thapa Karki & Hubacek 2015).

Some studies suggest that a sustainable way to promote locals' attitude toward PAs and decrease the negative effects on people who are affected by PAs is to share the economic benefits generated by tourism (Udaya Sekhar 2003a; Stem et al. 2010; Mackenzie 2012). Tourism is viewed worldwide as an environmentally friendly way to regenerate rural communities and economies (Snyman 2012; Kim et al. 2013). Benefits generated by tourism should be distributed to cover the costs of coexisting with wildlife or be used for livestock protection improvement or other human resources (Hemson et al. 2009).

Golestan National Park (GNP) is one of the most important natural reserves in Iran. GNP located in northeastern Iran was the first area to be designated as a national park in Iran which occurred in 1957. GNP presents a large variety of flora and fauna. In this study we survey, Turkmen communities who live in small villages with close proximity to the forest zone of Golestan National Park. This brings up new opportunities for these villages to attract tourists because of the natural beauty of their surroundings. The Turkmen communities in Iran live mostly in Golestan Province and are considered as one of the economically poorer societies of the country (Rashidvash 2013). The area lacked basic infrastructure (e.g. roads, healthcare, clean water, education, etc.) until recent decades.

High rate of ungulate poaching, killing of predators, and land conversion in the GNP shows a high range of human-wildlife conflict (Kiabi et al. 2004; Khorozyan, Ghoddousi, et al. 2015). Also, there are conflicts between locals and GNP over livestock depredation and crop damage by wildlife (Khorozyan et al. 2015).

In this paper we aim to test whether income from tourism at Golestan National park has an effect on support for conservation. We tested three hypotheses about the relationship between respondent losses and benefits from GNP and tourism:

- Losses as a consequence of living near to the GNP are different for people working in the agriculture sector, when compared to other employment sectors (H1).
- Benefits from the tourism industry are different for people working in agriculture sector compared to other employment sectors (H2).
- There is a relationship between the benefits from tourism of the respondents and their losses as consequence of living near GNP (H3).

This dissertation is composed by six chapters. The first chapter is the introduction which aims to contextualize the study. The second chapter presents a literature review. It covers the following themes: biodiversity conservation, communities and biodiversity, ecotourism, local participation in ecotourism, ecotourism and local participation, benefit distribution among locals in ecotourism, and ecotourism management aspects toward community participation. The methodology is discussed in the third chapter. It explains the chosen approach to achieve the research goals, including descriptions of the study area, the survey and the data analysis method.

The results are presented in the fourth chapter. This includes findings about the locals' benefits and losses from GNP, and tourism, locals' benefits from tourism in relation to losses from GNP and locals' perceptions about tourism. Then the results are discussed in chapter five. Finally, chapter six presents the main conclusions and recommendations.

2. LITERATURE REVIEW

In this chapter we review important concepts related to this study, which are structured in eight sections. The first section explores the concept and importance of biodiversity conservation and also explains its limitations and difficulties. The second section addresses the relationship between local communities and biodiversity conservation. This section explains the benefits and losses for local communities by neighboring protected areas (PAs). It also analyses the dependency of biodiversity conservation on local communities support. The third section introduces tourism as a sustainable tool to reduce negative attitudes toward conservation among local communities and also to improve social welfare in rural areas. In the fourth section we address about ecotourism, which is a form of sustainable tourism. This section explains the definition and history of ecotourism, and also its efficiency on developing rural communities. The fifth section emphasize on the importance of local participation in ecotourism in terms of involvement and decision making in tourism development. The sixth section presents ecotourism as a tool, which creates income and employment in rural communities. The seventh section discusses the importance of well distribution of tourism benefits among local communities for reducing human-wildlife conflicts. The last section focuses on ecotourism management aspects toward community participation.

2.1. Biodiversity conservation

In the recent years, biodiversity conservation is receiving a significant consideration in terms of research and incorporation in decision-making. Conservation has drawn world attention particularly after the 1992 Rio Earth Summit (Ninan & Sathyapalan 2005; Ninan 2012). Biodiversity failure has impacts on both humans and other species and also impacts on the current and future generations. For this reason, the need for conserving biodiversity is fundamental (Maass 2008; Ninan 2012).

The definition of conservation by the IUCN (International Union for Conservation of Nature) is “The protection, care, management and maintenance of ecosystems, habitats, wildlife species and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence ”(IUCN 1980:13).

Over the last decades, conservation struggled to increase its resources for the scientific and technical requirements of protection, preservation and re-establishment of biodiversity (Brightsmith et al. 2008). Scientists have been battling with declines in funding, which makes carrying out long-standing monitoring difficult (Ninan 2012). Research in biodiversity conservation needs a deep understanding of the ecosystems and species. However, this is not always possible through the traditional funding sources, such as private organizations, universities and governmental grants. This is especially relevant in places facing major threats and where human knowledge of biodiversity conservation is weak (Myers et al. 2000; Brightsmith et al. 2008).

2.2. Communities and biodiversity conservation

Although biodiversity conservation may benefit not only the local communities but also the whole humanity, the costs are usually imposed to the local communities who depend on the natural resources for different goods and services (McNeely 1988; Ninan 2012).

Commonly, communities which are located at the boundaries of protected areas (PAs) bear the costs of conservation (Ninan & Sathyapalan 2005; Mackenzie 2012). For instance, economic losses generated by protected animals such as attack to livestock and crop damages (Naughton-Treves et al. 2005) and exclusion from resource exploitation (Kijazi & Kant 2010).

Nevertheless, there are some ways in which local people may profit from biodiversity conservation such as ecosystem services, tourism (Naughton-Treves et al. 2005), conservation and development programs (Goldstein 2003). Maximizing benefits and minimizing the costs is a basic rational human behavior (McNeely 1988). If local communities increase their benefits from the existence of a PA, they will support conservation and the existence of the PA. Hence, policies to make conservation economically beneficial to the local communities and to decrease the negative consequences to local livelihood are fundamental (Paul & Chakrabarti 2011; Clements et al. 2014; Lusetyowati 2015).

There are studies which emphasize that it is almost impossible to protect natural resources without the commitment of local population (Maikhuri et al. 2001; Sirivongs & Tsuchiya 2012). Also, there are many examples showing that if local residents are directly involved in PA selection, establishment and management, the local conservation system will be more likely

successful (Hamú et al. 2004; Thapa Karki 2013). Additionally, people may show higher respect for PAs if they are directly involved in reasonable approaches of conservation (Walpole & Goodwin 2002). Therefore, in any stage, local participation should be encouraged for more effective management (Sirivongs & Tsuchiya 2012). Also, participation of local communities is based on their local experiences and knowledge, which may result in a stronger conservation management and governance (Maass 2008; Mackenzie 2012).

Moreover, conservation scientists can benefit by increasing their connections with the general public (Brightsmith et al. 2008), as conservation is most effective when the general public contributes to the policies (Snyman 2012). Nowadays, tourism is a strong tool in different countries to give local communities economic and social benefits and encourage local people to support conservation (Fun 2014).

2.3. Tourism as a sustainable tool

Research on the relationship between local participation and support of conservation through benefits from tourism is still scarce (Udaya Sekhar 2003a; Lee 2013). However, some studies recommend that a sustainable way to promote local attitudes toward PAs is to share economic benefits, which can be achieved by tourism (Lee 2013). Tourism, as observed in many countries, can be an environmentally friendly way to restore rural economies (Sawathvong 2004; Ghaderi & Henderson 2012; Rastogi et al. 2015). Meanwhile, some studies concluded that the sharing of tourism income between the locals is a key factor to reduce conflicts and negative attitudes toward PAs. Also, it will encourage locals to protect nature as they receive economic benefits from the PAs (Eligh 1999; Maikhuri et al. 2001; Fun et al. 2014).

In the last decades, tourism has been introduced as a tool for regional economic development in many parts of the world (Kim et al. 2013). There are positive and negative cultural impacts of tourism on local communities recognized in several studies (Andriotis 2005; Vedeld et al. 2012). There are also impacts on social welfare (Fun et al. 2014; Lussetyowati 2015) and on the natural environment (Brightsmith et al. 2008; Hemson et al. 2009; Gallagher et al. 2015). Moreover, on the economic dimension, tourism may reduce poverty and employment and increase per capital income (Snyman 2012).

Studies on the environmental impacts of tourism focus on tourism development initiatives (Kim et al. 2013; Ionela et al. 2015). Regarding positive impacts, some researchers consider that tourism helps generating a greater understanding of the need to preserve the environment by capturing its natural beauty for tourism purposes and increasing the environmental infrastructure and education of the host country (Hillery et al. 2001; Reynolds & Braithwaite 2001). Also, tourism is known as a comparatively clean industry, creating less pollution compared to other sectors (Stylidis et al. 2014). Tourism as a “clean” industry assists the development process of the community and its neighboring communities (Sirivongs & Tsuchiya 2012). However, unorganized tourism can lead to the destruction of natural resources and vegetation and depletion of wildlife (Rastogi et al. 2015). Moreover, some studies suggest that economic benefits may not be sufficient to encourage local communities to support conservation (e.g Stem et al. 2010). Also, some of them do not find a connection between economic benefits achieved through tourism and a positive approach toward conservation (Walpole & Goodwin 2002; Mbaiwa & Stronza 2011).

On the other hand, there are studies that found that the attitude of local communities toward conservation is mainly dependent on the levels of human-animal conflict and crop damage degree (Hemson et al. 2009; Mbaiwa & Stronza 2011; Snyman 2012). Boer & S. Baquete (1998) found that promoting conservation and ecotourism, as a practical land use in rural areas is a feasible effort to decrease human-wildlife conflicts and reduce the negative impacts of living near wildlife.

2.4. Ecotourism

In the 1980's the focus on conservation and development projects increased significantly. Budowski (1984) proposed a relationship between tourism and conservation, and discussed briefly, if tourism adds positive development results or not. Policy-makers, researchers, developers and conservationists became attracted to the new concept of ecotourism as a specific, beneficial form of tourism (Brightsmith et al. 2008). The International Ecotourism Society (TIES, 2015) defines ecotourism as "Responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education". Ecotourism brings economic and human assets for conservation research through three main goals: creating income for local communities from nature-based attractions,

generating incentives and environmental education for tourists, and leading support to PAs and local communities (Brightsmith et al. 2008).

Ecotourism is known as providing a better connection between local communities and conservation goals and decreasing the outflow of benefits compared to mass tourism. Ecotourism generates local employment and supports sustainable development (Stem et al. 2003; Jones 2005; Brightsmith et al. 2008; Stem et al. 2010). Also, ecotourism can provide the economic justification to a PA and can generate motivation among the tourists to support conservation at a PA visited (Hunt et al. 2014).

However, in practice these claimed benefits can be challenging to measure and no meta-analysis has been attempted to assess the efficacy of these statements across a variety of circumstances (Krüger 2005). Many studies have questioned if ecotourism can provide maximum benefits to the local communities or not (Loon & Polakow 2001; Hillery et al. 2001). Many ecotourism success stories lead to failure (Mbaiwa & Stronza 2011; Rastogi et al. 2015). Successful projects in this industry may generate a large interest and attract a high number of tourists. In this case, tourism impacts such as environment disturbance and waste creation can seriously threaten the natural and cultural resources of the habitat (Stem et al. 2010; Sirivongs & Tsuchiya 2012; Lee 2013).

2.5. Local participation in ecotourism

In many cases, developing a tourism business in a destination, requires local communities to change from a manufacturing economy sector to services (Prabhakaran et al. 2014). Tourism has the potential to create positive economic impacts; however this industry does not always generates a set of achievements and constant positive results. In fact, tourism can influence environmental, social and cultural aspects and can be negative in some cases. Moreover, it can be a failure for regional development economic lift (Sharpley 2002; Prabhakaran et al. 2014).

Ecotourism projects can achieve success only if local communities' have some involvement and an equitable benefit sharing (Stem et al. 2003). According to Lea (1988) by applying community participation, tourism will be a significant part of national development plans. Community participation is a tool which aims to rebuild balance of authority between the developers and

local communities (Tosun 2000). Some authors discuss that community involvement is often considered as a permission given to the local community for decision-making about their regional development process (Ghaderi & Henderson 2012; Lee 2013). However, community participation is a part of a democratic system, which allows residents to say their opinions on the development process (van Niekerk 2014; Prabhakaran et al. 2014). Involving communities in decision making process impacts resident's subsistence (Boley et al. 2014). According to Prabhakaran et al. (2014), resident's participation in local development will make information exchange between communities and planners easier and improve governmental development projects.

In some studies, tourism is considered as a sustainable operation, only if community participation creates opportunities for local people to gain more profit from tourism than their own livelihood and cause a positive attitude toward conservation (Udaya Sekhar 2003a; Ninan & Sathyapalan 2005; Thapa Karki & Hubacek 2015). Local participation is about involvement of communities to strengthen up physical development, tourism planning and decision making in local level and also to guarantee economic improvement and recognizing local problems (Fun et al. 2014; Jimura 2011). When communities involve in tourism development, their local knowledge can be a significant element for tourism planning (Boley et al. 2014; Fun et al. 2014). In the other hand, local participation is observed as an effective tool for locals to become aware of their own rights and their role in the politics and environmental conservation of their region (Tosun 2000). In general, local participation in tourism activities creates an enjoyable experience for visitors and also facilitates economic benefits for the residents (Hanafiah et al. 2013).

2.6. Ecotourism & locals' employment

Community participation can be observed by at least three ideologies. The first ideology believes that most people have a tendency to keep themselves away from community participation even in the best conditions (van Niekerk 2014). The second considers community participation as an unpaid activity and that the community will only involve in decision-making and development process if it achieves benefit (van Niekerk 2014). The third ideology states that the community is willing to participate in the regional development process, however, the opportunities provided are not often successful (Sawathvong 2004; Prabhakaran et al. 2014; van Niekerk 2014).

In the tourism industry, when residents participate by involvement in decision-making and development process, employment of communities will bring more economic benefits straight to the household level (Boley et al. 2014). Also, it opens a new vision of understanding for communities to notice the fact that local participation influences the tourism development planning (Stylidis et al. 2014; Almeida García et al. 2015).

Many communities make most of their earning during a few month and basically they have seasonal incomes (Jimura 2011; Thapa Karki 2013). In the past, community's subsistence depended highly on primary activities such as farming and fishing (van Dillen 2003; Ellis & Mdoe 2003). Progressively people found their survival harder through these activities and realized the need of having stable employment and income (Mbaiwa & Stronza 2011). This phenomenon makes people to smoothly refuse traditional systems of subsistence in rural areas (van Dillen 2003).

Ecotourism is a tool, which promises, income, employment, and social welfare to the communities and also, has limited destructive impacts toward environment. This means that ecotourism has the potential to propose a feasible and sustainable land use in rural context (Stem et al. 2010).

Additionally, ecotourism should guarantee that communities would receive benefits by their participation, so that communities will show their interest toward conservation and national parks. As a result they reduce their motivation for their standard land uses such as commercial agriculture and livestock farming (Hemson et al. 2009; Mackenzie 2012; Thapa Karki 2013).

Some studies discuss that the income received by communities through ecotourism can lower or remove locals dependency to the use of natural resources. In addition, ecotourism can reduce the risk of dependence on the income from products that are affected by climate change or market fluctuations (Stem et al. 2010; Mbaiwa & Stronza 2011). Ecotourism may create important economic benefits to the locals and preserve PAs instead of changing them to agriculture or pasture lands (Rahmawati et al. 2014). Moreover, at the same time there is evidence that direct employment in ecotourism is having a considerable effect on local's attitude toward conservation (Andriotis 2005; Snyman 2012; Hunt et al. 2014).

Some studies note that conservation practices and tourism employment have a positive correlation. However, locals who get indirect benefits from tourism (indirect income, ideas

exchange, training, and infrastructure improvement) usually show a more positive attitude toward conservation perspectives than locals who earn benefits from direct participation in tourism (Stem et al. 2003; Mbaiwa & Stronza 2011).

2.7. Benefit distribution among locals in ecotourism

Hemson et al. 2009 suggests that if benefits from tourism are well distributed in the area, then they can be used as incentives for improvement in livestock protection or other human activities. Also, Eligh (1999: 204) concludes that “the success of any community-based wildlife utilization plan will depend on ensuring that individuals derive benefits from conservation and sustainable management of the resource”.

Tourism can bring benefits to the different groups of the community and hence contribute to reduce human-wildlife conflict (Sebele 2010). Benefits generated by tourism should be distributed to cover the costs of coexisting with wildlife or be used for livestock protection improvement or other human activities (Hemson et al. 2009). Meanwhile, some study results show that well distribution of tourism income between the locals is a key factor to decrease conflicts and negative attitude toward PAs. It also encourages locals to protect PAs as they receive economic benefits from them (Maikhuri et al. 2001). Community groups who benefited from tourism usually show a positive attitude for support of conservation and reinforcement of tourism development in PAs (Udaya Sekhar 2003). Some studies conclude that residents will not express positive attitude towards conservation without receiving direct benefits (Stem et al. 2010). Moreover, local involvement do not always attract everyone to support conservation (Stem et al. 2010).

2.8. Ecotourism management aspects toward community participation

Environmental management provides a consistent and complete framework for the local governments to recognize opportunities and risks of management, documentation and communication with the plan bodies and local stakeholders (UNEP, 2004). Community participation can provide an incentive for local governments and residents to take equal responsibilities and actions in managing their own environment, assigning part of the annual budget of PAs for tourism development, and introducing ecotourism activities as a source of income and employment for the local youth (Maikhuri et al. 2001; Eshliki & Kaboudi 2012).

These practical measures at the PA level, will lead to sustainable development and improve local tourism growth as a source of benefit for locals, and facilitate achieving the goals of biodiversity conservation (Hamú et al. 2004).

The PAs conservation policies may generate costs by excluding local people from having access to specific areas and resources on which they depend on their livelihood (Paul & Chakrabarti 2011; Vedeld et al. 2012). In this context, it has been found that some locals despite having a general agreement with conservation measures, they still involve in illegal resource extraction (Thapa Karki & Hubacek 2015).

3. METHODOLOGY

3.1. Study Area

3.1.1. Golestan National Park

Iran has a large variety of natural attractions and wide geographic expanses with exemplary biodiversity, such as deserts and salt lakes in the center and temperate forests in the north. The country is considered as one of the highest biodiversity areas in Southwest Asia (Khorozyan, Ghoddousi, et al. 2015). To conserve the existing biodiversity, national parks, protected areas (PAs), wildlife refuges and national natural monuments are four types of reserves, which have been designated for the conservation and protection of nature by Department of Environment (DoE).

Golestan National Park (GNP) located in northeastern Iran (Figure 1) was the first area to be designated as a national park in Iran in (1957) and is situated between the sub-humid Hyrcanian forests and semi-arid Irano-Turanian steppes (Djamali et al. 2009). The Park has mean annual precipitation of 142 and 866 mm in the east and west, respectively (Djamali et al. 2009). This UNESCO Biosphere Reserve comprises of 874 km², with an elevation range of 450 to 2411 m above sea level (Djamali et al. 2009). GNP represents three biomes such as temperate forest, semi-deserts and highlands. A large variety of habitats such as open woodlands, scrublands, mountains, steep rocky cliffs, and steppes can be found in this national park.

GNP presents a large variety of flora and fauna. Fauna consist of 69 mammals, 150 birds, two amphibians and 24 Reptile species. This spectrum of biodiversity contains large animals such as leopard (*Pantherapardus*), brown bear (*Ursusarctos*), red deer (*Cervuselaphus*), wild boar (*Susscrofa*), goitered gazelle (*Gazellasubgutturosa*) and bezoar goat (*Capra aegagrus*) and flora species including 1365 plants(Ghoddousi et al. 2016).The villages around GNP are inhabited by various ethnic groups: Turk, Turkmen, Persian and Kurdish (Khorozyan et al. 2015).Their main activities are agriculture, livestock farming, small businesses, silk production and tourism. We chose GNP as study area due to the long history of environmental protection, existence of local and international tourism, and ongoing conservation and development projects.

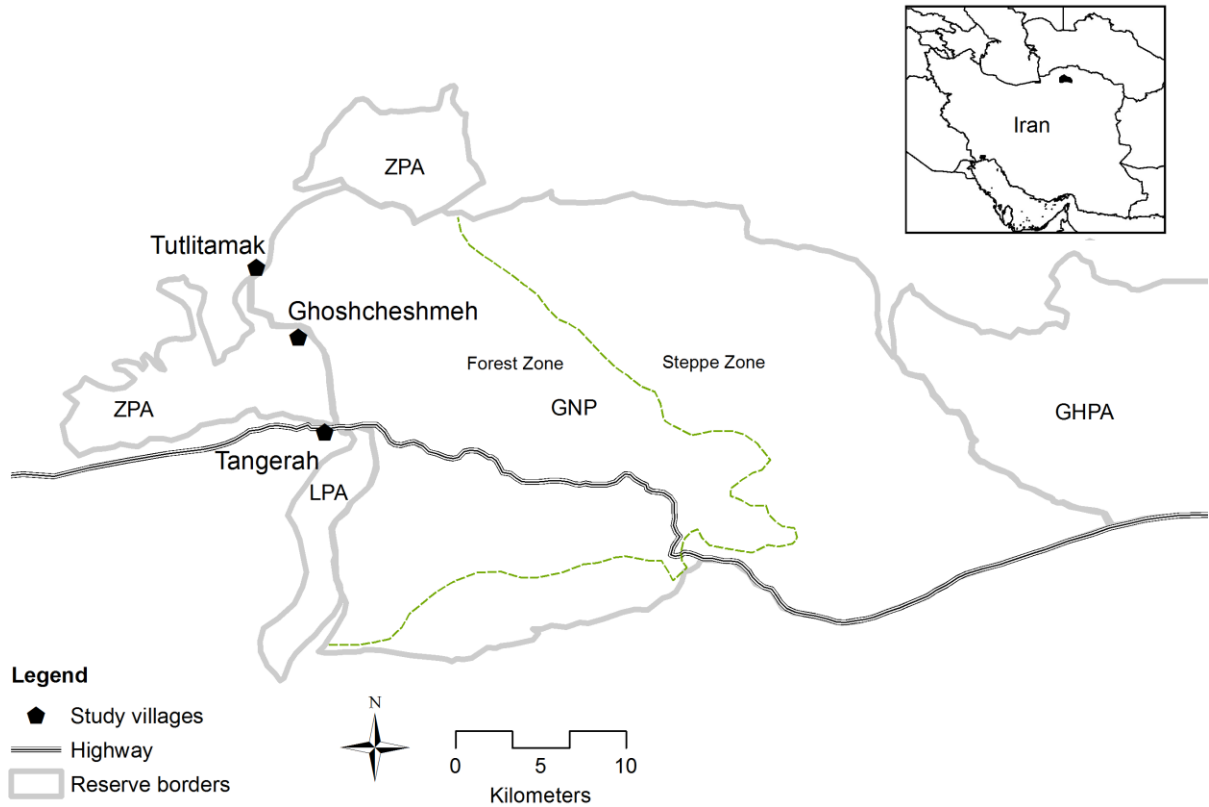


Figure. 1. Location of Golestan National Park (GNP) in Iran (inset map); study villages at the boundary of GNP; and the buffer areas Zav Protected Area (ZPA), Loveh Protected Area (LPA) and Ghorkhod Protected Area (GHPA).

3.1.2. Study villages

Our three study villages are located at a short distance from GNP and have some sources of income from tourism. Moreover, each of these villages shows a different scenario of tourism opportunities at the boundaries of the park.

Tangerah (TR) is the biggest village in the area with 292 households. It is located on a major road connecting north of Iran to northeast and crosses through the GNP, attracting many tourists every year. In TR there are few tourism infrastructures and there are conflicts between locals and GNP over livestock depredation and crop damage by wildlife and illegal hunting (Khorozyan et al. 2015). Ghoshcheshmeh (GC) is a small village with 74 households, which has a difficult

accessibility via road to TR. However, the beautiful landscapes of this village attract some tourists each year. The third village is Tutlitamak (TT), which is also a small village, with 59 households, located in the northwest of GNP. Some international and Iranian tourists visit this village since 2010 because of the establishment of an eco-lodge inside the village. This eco-lodge (Turkmen Eco-lodge) has goals of sustainable tourism in the area and makes efforts to support conservation and local participation (<http://www.turkmenecolodge.com/>).

The socioeconomic, demographic and geographical characteristics of our case study villages are provided in Table 1 (Khorozyan, Soofi, et al. 2015).

Table 1. The socioeconomic, demographic and geographical characteristics of the study villages near Golestan National Park (GNP).

Villages	Tangerah (TR)	Ghoshcheshmeh (GC)	Tutlitamak (TT)
Location to GNP	West	Northwest	Northwest
Distance to GNP	0.37 km	0.49 km	0.36 km
Distance to main road	0	5.82 km	11.58 km
Number of households	292	74	59
Number of males	549	181	120
Employed males	269	126	51
No of males with formal education	413	132	94
Number of female	660	194	131
Employed female	13	6	0
No of females with formal education	453	131	92

Source: (Khorozyan, Ghoddousi, et al. 2015)

TR is located on one of main national roads and has better accessibility compares to the other two villages. Although the number of people with formal education in these three villages is high, there is a considerably low number of employed females in each village.

3.2. Interview survey

To obtain information on tourism and conservation issues in GNP, we used both qualitative and quantitative methods in the data collection from local communities (Hemson et al. 2009). We

conducted structured interview surveys to the local communities in the three study villages (Cardozo 2011). Moreover, we used qualitative approaches in data gathering such as participant's observations from January 2012 to November 2015 during regular visits to GNP and also interviews with accommodation providers and people who have income from tourism (Rastogi et al. 2015). Also, a detailed data collection from the villages was conducted, which involved age, gender, employment and education information from the participants and data on population size, distance from GNP, accessibility and number of households in each village.

The quantitative approach was conducted on October-November 2016, by a close-ended structured interview questionnaire. The interview questionnaire was aimed to obtain information from around 10% of the 425 households of the three selected the villages by a random sampling approach. The respondents were approached in public spaces inside villages during the sampling period we tried to collect information from a wide variety of respondents to avoid any sampling bias. The aim of this questionnaire was to get an overview of the local people's attitudes towards tourism in GNP and their support for GNP conservation. A group of 6 interviewers including the author, two volunteers (one male and one female) and three locals collected the data from these three villages. To conform to the social norms of the communities, we ensured that a female volunteer interviewed female participants. Moreover, in these three villages, especially GC, residents usually live in close communities and do not feel comfortable to give interviews to outsiders. Also, there was a possibility that they could have thought we were working for the government, which would influence the results. To avoid this potential problem, we asked trusted and educated locals to help us during the interviews. This study was approved by Golestan provincial office of DoE and Golestan National Park. The participants gave their verbal consent, by agreeing to participate in this survey. Interviewees were informed about the aim of this study and were ascertained that their data will be handled with care and their information will not be disclosed with a third-party.

We followed general recommendation in preparing questionnaires (Newing 2010: 119-146). Interview questionnaire (consisting of 13 questions) was translated into Persian and also Turkmen language to give the participants the opportunity to discuss and answer without restraint, in order to allow us to achieve more reliable information from them. After data collection, the answers were translated into English.

Demographic data related to profession, income, occupational patterns, etc. were collected during our survey as well. This was followed by 13 questions related to their dependency on GNP for resources, their attitudes towards tourism and conservation (qualitative and quantitative data), their involvement and benefits from tourism. Some of the questions were close ended, and the respondents had multiple choices (agree or disagree or don't know). The socioeconomic data was later entered in SPSS for analysis.

3.3. Data analysis

We used descriptive statistics by frequency tables and cross-tabulation to understand respondent's socio-economical characteristics and responses about tourism and GNP conservation. We characterized respondents according to their employment in five categories: agriculture, public services, private services, business owners and unemployed. The purpose of characterizing respondents by their employment is to check the distribution of benefits from tourism or losses from proximity to GNP among all type of residents.

Also, the different hypotheses were tested using the Chi-square test. This test is used to investigate if the distributions of two categorical variables are independent. All the tests were performed with a 95% confidence level, the most commonly used value in science. So, if the p-value is smaller than 0.05, the null-hypothesis should be rejected. Collected data from the survey were analyzed using SPSS 21.0 (IBM, Armonk NY, USA) software.

4. RESULTS

This chapter presents the results from the questionnaire surveys in our case study villages and the statistical analyses conducted on data. This chapter is divided into five sections. The first section presents the distribution of responses in the case study villages by descriptive statistics. The demographic and socioeconomic analyses provide a vision of household conditions in the three villages. The second section explains locals' benefits and losses as a consequence of living near GNP (H1). In the third section, analyses of loss and benefits from tourism are shown (H2). Also, cultural effects of tourism on local's livelihood are presented. In the fourth section the differences between residents who have benefits from tourism and those who have losses due to living near GNP are explored (H3). In the fifth part, local resident's opinion about tourist's motivations to visit their villages and their willingness to have more tourism in their village is explored.

We interviewed 40 people from the three study villages: 22 participants in TR, 7 participants in GC and 11 participants in TT. Due to social limitation to ask females to answer the questionnaire, the percentage of female participants was considerably lower than the males (4 in TR, 1 in GC, 2 in TT).

4.1. Demographic and socioeconomic characteristics

Table 2 shows the distribution of participant's gender, age, employment status and educational qualification classes in the studied villages.

Table 2. The distribution of socioeconomic and demographic status of the respondents.

Gender	Male: 82.5%; Female: 17.5%
Age	18-25: 40%; 26-40: 35%; 41-60: 20%; Over 60: 5%
Employment	Agriculture: 22.5% ; Public services: 22.5%; Business owners: 17.5%; Private Services:22.5%; No job: 15 %
Educational qualifications	Traditional education: 2.5%; Primary education: 35% Secondary or high school: 45%; University degree: 17%

In our study villages, agriculture, public services and private services are the main employment sectors, each with a share of 22.5%. Agriculture includes farming and livestock farming, public services stands for formal governmental jobs, and private services include employment in private services such as tour guides and construction work. Business owners represent 17.5% of the respondents and they are mainly people who own small shops or sell handicraft. Finally, 15% referred to have no job, this represents housewives and unemployed people. The most frequent educational qualification among the respondents is secondary or high school degree (45%), followed by primary education 35%. Only 17% of respondents held a university degree.

4.2. Locals' benefit and loss from GNP

Most residents (80%) stated that they have economic benefits from the national park and the vast majority of respondents (97.5%) claimed that their community benefits from GNP (Table 3). Around 35% of participants stated to have economic losses by living near GNP. By analyzing qualitative information from the respondents, these losses are mostly due to wild animals such as depredation of livestock by leopards and wolves (*Canis lupus*), or because of damages by wild boar and porcupine (*Hystrixindica*) to their agricultural lands and products.

Table 3. The distribution of responses to the benefits and losses from living near to Golestan National Park at individual and community levels.

Do you have benefits from GNP?	Percentage
Agree	80
Don't know	0
Disagree	20
Does your community benefit from GNP?	Percentage
Agree	97.5
Don't know	0
Disagree	2.5
Do you have losses as consequence of living near GNP?	Percentage
Agree	35
Don't know	0
Disagree	65

Local communities benefit from the GNP, through the collection of wild fruits and other timber and non-timber forest products such as wild berries, medicinal herbs, and firewood (Table 4). Benefits by using GNP for tourism and livestock herding were among the other benefits stated by the respondents.

Table 4. Distribution of the stated benefits from GNP by the respondents.

What type of benefit do you receive from GNP?	Number of respondents	Percentage of respondents
Timber & non-timber forest products	30	75
Tourism	10	25
Livestock grazing	5	12.5
Water	4	10

The results of the relationship between respondent's employment sector and losses as consequence of neighboring to GNP showed the people employed in the agriculture sector experienced the highest losses (Table 5). On the other hand, all residents who work in businesses didn't experience any economic losses due to the national park.

Table 5. Participant's responses to the question "Do you have losses as a consequence of living near the GNP?"

Do you have losses as a consequence of living near GNP?		Disagree	Percentage	Agree	Percentage	Total
Employment	Business owners	7	100	0	0	7
	Agriculture	3	33	6	67	9
	Public services	6	67	3	33	9
	Private services	5	56	4	44	9
	No job	5	83	1	17	6
Total		26	65	14	35	40

The results of the Chi-square test for H1 show a p-value of 0.05. Thus, for significance levels above 5% the null hypothesis should be rejected. That is, there is a relationship between the employment activity and having losses as consequences of living near GNP between the agriculture sector and the other employment categories (Table 6 and 7). Residents who are employed in agriculture sector have higher economic losses as consequence of neighboring GNP in comparison to the other sectors.

Table 6. Participant’s responses to the question “Do you have losses as a consequence of living near the GNP?” according to their employment sector.

Do you have losses as a consequence living near the GNP?		Disagree	Agree	Total
Employment	Agriculture	3 (33%)	6 (67%)	9
	Others	23 (74%)	8 (26%)	31
Total		26	14	40

Table 7. Results of the Chi-square test for the difference in losses as consequence of living near GNP between the agriculture sector and the other employment categories (H1).

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.215	1	0.040		
Continuity Correction	2.762	1	0.097		
Likelihood Ratio	4.117	1	0.042		
Fisher's Exact Test				0.057	0.050
Linear-by-Linear Association	4.110	1	0.043		
N of Valid Cases	40				

It should be noted that one of the expected frequencies in the chi-square test is below 5. This indicates that the results of the chi-square test should be regarded with caution. This limitation comes from the fact that the sample size is small. However, using the sample proportions, the level of agreement to the question “do you have losses as consequence living near GNP?” is clearly higher for people employed in agriculture (67%) when compared to other sectors (26%).

4.3. Locals and Tourism

Around 58% of the respondents reveal to have benefits from tourism in our case study villages (Table 8). However, the vast majority (90%) expressed that their community have benefits from tourism. Our qualitative information shows that these benefits are mainly through renting accommodation, local tour guides, small shops and handicraft selling.

Table 8. The distribution of responses on the benefits from tourism at individual and community levels.

Do you have benefit from tourism?	Percentage
Agree	57.5
Don't know	0
Disagree	42.5
Does your community benefit from tourism?	Percentage
Agree	90
Don't know	2.5
Disagree	7.5

By looking into the employment sectors benefitting from tourism, people who have subsistence from agriculture had the lowest frequency of responses stating benefits from tourism compared to other sectors (Table 9). On the other hand, respondents from business owners had the highest frequency of responses stating benefits from tourism.

Table 9. Participant's responses to the question "Do you have benefits from tourism?"

Do you have benefits from Tourism?		Disagree	Percentage	Agree	Percentage	Total
Employment	Business owners	0	0	7	100	7
	Agriculture	8	88	1	12	9
	Public services	3	33	6	66	9
	Private services	3	33	6	66	9
	No job	3	50	3	50	6
Total		17	42.5	23	57.5	40

The results of the Chi-square test for the difference in benefits from the tourism industry between the agriculture sector and the other employment categories (H2) shows a significant (p -value<0.05) statistical difference between the agriculture sector and the other employment categories (Table 10 and 11). Residents who are employed in agriculture sector have lower benefits from tourism in comparison to the other sectors.

Table 10. Participant's responses to the question "Do you have benefits from tourism?" according to their employment sector (agriculture vs. other sectors)

Do you have benefits from Tourism?		Disagree	Agree	Total
Employment	Agriculture	8 (89%)	1 (11%)	9
	Others sectors	9 (29%)	22 (71%)	31
Total		17	23	40

Therefore, we can reject the null hypothesis of independence between the employment sector and the benefits from tourism. Thus, we can conclude that there is a relationship between the employment sector of the respondent and the benefits from tourism.

Table 11. Results of Chi-square test for the difference in making benefit from tourism between agriculture and others (H2).

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	10.226	1	0.001		
Continuity Correction	7.923	1	0.005		
Likelihood Ratio	10.918	1	0.001		
Fisher's Exact Test				0.002	0.002
Linear-by-Linear Association	9.970	1	0.002		
N of Valid Cases	40				

Again, it should be noted that one of the expected frequencies in the chi-square test is below 5. However, using the sample proportions, the level of agreement to the question “do you have benefits from tourism?” is clearly lower for people employed in agriculture (11%) when compared to other sectors (71%).

4.4. Locals’ benefits from tourism in relation to losses from GNP

This section aims to examine, whether the benefits from tourism compensates the locals who had losses as consequence of living near GNP (Table 12). The results of Chi-square test for H3 show that there is a significant ($p\text{-value}<0.05$) relation between having benefits from tourism and having losses as a consequence of living near the GNP.

Table 12. The relationship between benefits from tourism and respondents who have losses as consequence of living near GNP (H3).

		Do you have losses as a consequence living near the GNP?		
		Disagree	Agree	Total
Do you have benefits from Tourism	Disagree	5 (30%)	12 (70%)	17
	Agree	20 (86%)	3 (14%)	23
Total		25	15	40

There is a relationship between the benefits from tourism of the respondents and their losses as a consequence of living near the GNP. We reject the null hypothesis and conclude that there is a (negative) relationship between benefits from tourism and losses as a consequence of living near GNP. In this case no expected frequency below 5 was found in chi-square test. Thus, the results of the tests can be interpreted without any limitation.

Table 13. Chi-Square test result of the relationship between respondents who make benefits from tourism and respondents who have losses as consequence of living near GNP (H3).

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	13.811	1	<0.000		
Continuity Correction	11.465	1	0.001		
Likelihood Ratio	14.516	1	<0.000		
Fisher's Exact Test				<0.000	<0.000
Linear-by-Linear Association	13.465	1	<0.000		
N of Valid Cases	40				

4.5. Locals' perceptions about tourism

According to our questionnaire survey, most participants did not observe negative impacts from tourists in their community (82.5%) (Table 14). Also, most participants (82.5%) believed that

tourists are respecting their cultural values. Although 60% of participants disagree that tourists leave garbage in their villages, still near 38% were disappointed by tourists who leave garbage in the villages or make fire in the forest during their visit (Table 14).

Table 14. Respondent's perceptions about social and environmental effects from tourism on their community.

Does tourism have negative effects on your community?	Percentage
Agree	15
Don't know	2.5
Disagree	82.5
Do tourists respect your culture?	Percentage
Agree	82.5
Don't know	2.5
Disagree	15
Do tourists leave garbage in your village?	Percentage
Agree	37.5
Don't know	2.5
Disagree	60

As shown in table 15, most participants' stated that the main reason why tourists visit their villages is related to natural landscapes (62.5%). This includes nature-based activities such as hiking, mountain climbing and spending holidays in surrounding landscapes. The second reason was the GNP (57.5%). Also, the rich Turkmen culture attracted many tourists to these villages (25%). "*Many tourists love to know about our culture and food*" said a local shopkeeper in TR. Turkmens is also known for making beautiful carpets and rugs. Among the respondents, 15% referred that tourists visit their villages to see and buy these handicrafts.

Table 15. Respondent's perceptions about the reasons why tourists visit their villages.

Reasons tourists visit study villages	Number of respondents	Percentage
Nature-based activities	25	62.5
GNP	23	57.5
Local culture	10	25
Handicraft	6	15

One of the most important parts of this research is to assess if locals have the willingness to receive more tourists or not. For this purpose, we asked if they would like to have more tourists in their villages. Table 16 shows that the vast majority of the locals would like to have more tourists in their villages (85%).

Table 16. Participant's responses to the question "do you like to have more tourists in your village?" in Golestan National Park.

Do you like to have more tourists in your village?	Frequency	Percentage
Disagree	4	10
Don't know	2	5
Agree	34	85
Total	40	100

More than 42.5% of the respondents thought that their village lacks basic facilities such as restaurants, sports facilities and tourism centers (Table 17). Also, 35% of respondents complained about poor road accessibility to their villages. Most of these respondents were from the GS village, which is only accessible via a dangerous unpaved road. Also, 22.5% of respondents believed that villages need more and better accommodations for tourists, for example a hotel or a tourist complex. Some respondents complained about water issues (20%) such as lack of water in some days of year as it is provided by seasonal springs. However, 17.5%

of respondents had some other wishes for their village development in terms of tourism, such as: advertising and investing in tourism, promoting handicraft production, village waste management, and tour guide formation. Also, 10% of respondents suggested more health centers.

Table 17. Respondents' opinions on what is needed to attract more tourists to their villages.

What do you need to attract more tourists?	Number of respondents	Percentage
Basic facilities	17	42.5
Road	14	35
Better accommodation	9	22.5
Water	8	20
Others	7	17.5
Health center	4	10

5. DISCUSSION

5.1. Overview of findings

In this study, we studied three local communities living near the Golestan National Park. In particular, we inquired about their perspectives over benefits and losses from tourism, and their attitudes toward expansion of tourism in the future. The different employment sectors stated contrasting views about losses and benefits from living near the national park. Farmers have highest losses from GNP, due to conflict with wildlife, in comparison to other sectors. The study results show that tourism is a source of income for most individuals and communities in the three study villages. Meanwhile, we tested the differences between agriculture and other sectors regarding the benefits from tourism to compensate the GNP losses. Results shows that locals who makes benefits from tourism have less losses as consequence of living near the national park and the locals who do not have benefits from tourism have the most losses as consequence living near GNP. The perceptions of locals toward tourists in their community were generally positive and they showed willingness to welcome more tourists in their villages. The majority of respondents claim that tourists do not have negative cultural and environmental effects on their community.

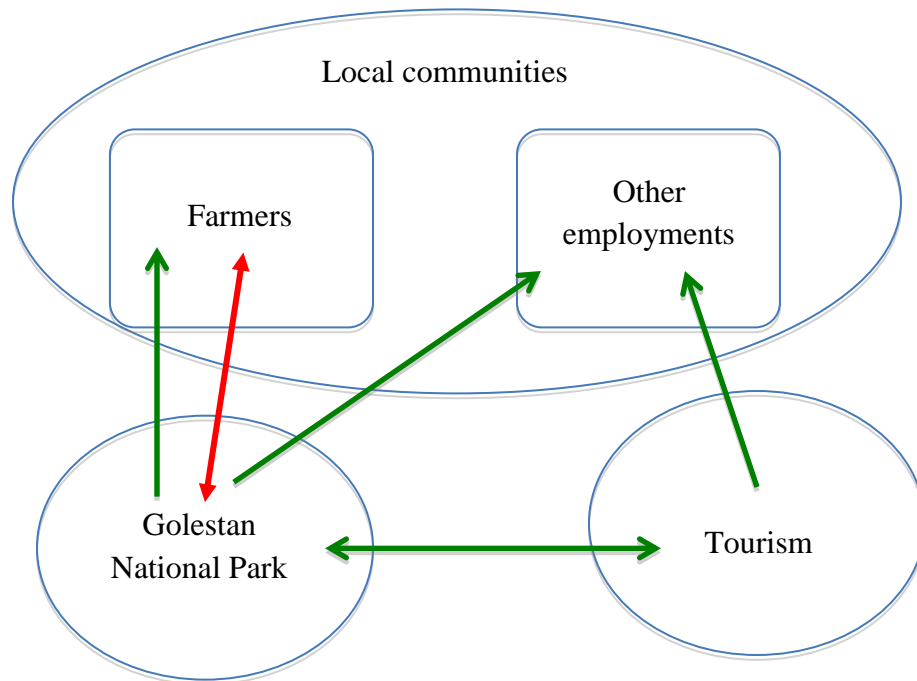


Fig. 2. Schematic overview of the main relationships between local communities, tourism and Golestan National Park with green arrows illustrating benefits and red arrow showing losses.

5.2. Studied villages and communities

The three Turkmen communities surveyed in this study live in small villages with close proximity to the forest zone of Golestan National Park. The Turkmen minority in Iran with just over 1.3 million people lives in the northeastern parts of the country with distinct language and culture from the rest of the country (Rashidvash 2013). They follow Sunni Islam, which constitutes 4-8% of Iran's total population, mainly in the west, southeast and northeast of the country. The Turkmen communities in Iran live mostly in Golestan Province and are considered as one of the economically poorer societies of the country (Rashidvash 2013). The area lacked basic infrastructure (e.g. roads, healthcare, clean water, education, etc.) until recent decades. Only Tangerah, one of the study villages, had historically good accessibility to the rest of Iran. The connectivity of Ghoshcheshmeh and Tutlitamak to the other towns and cities has been recently facilitated. This brings up new opportunities for these villages to attract tourists because of the natural beauty of their surroundings. Therefore, there is an increasing number of domestic and international tourists annually visiting Ghoshcheshmeh and Tutlitamak. In addition, Tangerah acts as a stopover for the tourists travelling to or from Mashhad, one of the holiest

cities of Iran with millions of visitors every year. Despite the potential of the tourism industry in the three villages, the agriculture sector containing farming and livestock rearing is still an important occupation of the locals, as it is evident from our survey as well (22.5 % of respondents).

5.3. Locals' benefits and losses from Golestan National Park

The majority of the respondents had benefit from Golestan National Park (80%); however 75% of them benefit from the national park for collection of timber and non-timber forest products, which do not add much economic benefit to the household. Only 25% of participants expressed that they make benefits through tourism. On the other hand, 42.5% of the respondents had economic losses by living near the national park mainly because human-wildlife conflicts (Khorozyan, Soofi, et al. 2015) or fines by Department of Environment (DoE) due to illegal grazing. Such high percentage of people having losses from the national park shows a high level of conflict between locals and DoE. This conflict is also evident from the high rate of ungulate poaching, killing of predators, and land conversion in the national park (Kiabi et al. 2004; Khorozyan, Ghoddousi, et al. 2015). Mackenzie (2012) obtained similar results in their case study with more than 70% of respondents having conflicts with the Kibale National park in Uganda. The types of conflicts in Mackenzie's study have similarities with the conflicts in our case study such as crop raiding and depredation. Mackenzie (2012) suggests that benefits from the national park should be significantly higher than losses to increase positive attitudes toward conservation, compensate losses and improve local's perception about national parks. When compared to other sectors, farmers had more losses due to neighboring to GNP as their livestock are killed or wild animals destroy their farms. Therefore, conservationists should focus on this group of the community to reach viable solutions for the current conflicts between local communities and the national park.

5.4. Locals' benefits from tourism

Results of this study show that tourism has a considerable presence in household's economy and is a source of benefit for the villages. However, most of these benefits to the locals in the study villages are received from renting accommodation and selling goods. By analyzing the status of farmers in the sample we can observe that they receive less benefit from tourism, compared to

other professions. Moreover, only a small fraction of farmers claim to receive economic benefit from tourism at the moment. On the other hand, the majority of residents who owned a business or worked in the services sector make some benefits from tourism in the three communities. An ecotourism project is operating in Tutlitamak village as an eco-lodge since 2009. This eco-lodge receives domestic and international tourists every year and has goals in sustainable tourism in the area with efforts to support conservation and local participation. However, most of the surveyed Tutlitamak residents showed a low awareness of the importance of Golestan National Park in terms of creating income by attracting tourist in their community. Ecotourism projects are established to bring benefits to local communities and create business opportunities but in many cases ecotourism make the outsiders benefit more than the majority of resident communities (Wishitemi et al. 2015).

In addition, according to a local inhabitant, conflicts between GNP and locals have not decreased in the last years in Tutlitamak. Stem et al. (2003:325) believe that ecotourism can fail in having an effective influence on conservation knowledge and perspectives and conclude: “Ecotourism is not likely to be an effective conservation strategy if it operates only through occupying community members’ time or creating economic incentives to make standing forests more valuable. Without attention to creating awareness and/or reinforcing respect for nature, questions will remain about people’s commitment to conservation”. One of the policies of this eco-lodge is that tourists and locals should not face each other, and tourists start their visit from eco-lodge directly to the national park and back without passing through the village. As Tutlitamak is a small, remote and conservative village, this policy was implemented to preserve social and environmental values from tourists. However, this policy is eliminating the indirect benefits of tourism to many residents of the village, such as ideas exchange and local involvement. A local participant in this study said: “There is a fear of tourists among the locals”. Stem et al. (2010) argue that indirect tourism benefits such as ideas exchange showed significant associations with pro-environmental responses among the locals. Ideas exchange can strength-up positive attitudes toward conservation and improve conservation perspectives among locals (Stem et al. 2010).

5.5. Compensation of tourism for GNP losses

In the study villages, farmers bear most losses from the national park and receive least benefits from tourism industry. Our analysis result shows that locals who are making benefits from

tourism have fewer losses as consequence living near GNP and locals who do not benefit from tourism have the most losses by neighboring GNP. Hemson et al. (2009) used the same method of this study to assess if residents of the Makgadikgadi community in Botswana receive benefits from tourism or not. The Makgadikgadi community presents a high range of conflicts by bordering a protected area. The results show that only 13% of the community receives benefit from tourism, which is far below what was found in our case study.

5.6. People's attitudes

Most of our respondents claim that tourists are attracted to their villages because of Golestan National Park. The results show that the majority of the communities' residents are aware of the national park's potentials to attract more tourism to the region and are willing to receive more tourists in the future. Stem et al. (2010) concludes that direct employment in tourism has an important impact on household's point of view about conservation. Hemson et al. (2009) concluded that tourism can be effective to improve positive attitudes toward conservation but only for the employees of this sector. By comparing the results of our study and of Hemson et al. (2009), we can conclude that the level of local participation in tourism in our communities is relatively high and it may develop a better relationship between residents and the national park in the future.

Sirivongs & Tsuchiya (2012) argue that villages, which have ecotourism projects show more positive attitude toward protected areas in China compared to the other villages. By comparing more than 80% of residents considered that tourists respect their culture and do not have bad effects on their community. Almeida García et al. (2015) also concluded that tourism brings social benefits to the communities. The majority of the respondents agree that tourists respect their culture; some of them stated that tourists enjoy rural culture and food. However, some complained about those tourists who disturb them by making noises at night or wearing inappropriate "hijab" (women Islamic covering), which counts as a disrespectful social behavior among some religious locals.

5.7. Limitations of the study

In this study, we aimed at sampling 10% of the households living in the three villages and we were successful in obtaining information from 40 respondents. However, this study would have

benefitted from a larger sample size to avoid any biased conclusions. Also, due to the social limitations of asking female residents to answer the questionnaire, the percentage of females is considerably lower than males in this study. We should add the fact that in most of the Turkmen households, economic activities are male-dominated. Moreover, in Turkmen societies women usually only speak in the presence of family member men (Rashidvash 2013).

6. CONCLUSIONS AND RECOMMENDATIONS

This dissertation suggests that an equitable distribution of tourism benefits in the study villages has the potential to reduce the conflicts between humans and wildlife. To strengthen-up attitudes and participation toward conservation in the study villages, a need for more engagement of farmers is necessary. Ecotourism could be an appropriate form of tourism for these communities. Ecotourism can offer economic benefits to the communities and also encourage locals to conserve nature and wildlife (Hunt et al. 2014). On the other hand, we should consider the fact that tourism growth can cause social and environmental problems in small villages such as Tutlitamak and Choshcheshmeh. As domestic ecotourism is increasing in Iran, tourism development should consider various circumstances in different regions and need a deep understanding of local culture and environment. Otherwise negative impacts such as loss of identity and cultural traditions may occur in the local communities (Vedeld et al. 2012).

Most of protected areas in Iran are still developing their management plans in terms of sustainable tourism (Reihanian et al. 2012). Developing management plans are necessary in Golestan National Park area to use the opportunities to facilitate community participation in tourism by measures such as involving tourism within national park's management structure (Walpole & Goodwin 2002; Kijazi & Kant 2010; Cardozo 2011).

Community-based tourism (CBT) is a subcategory of tourism, which engages communities controlling, managing and developing their own tourism industry. In CBT tourists and travelers can experience the community's way of life and consider their social, economic, and environmental impacts upon the destination they are visiting. CBT which tries to find ways to achieve sustainable tourism in order to develop community's living conditions without negative impacts of the environment (Ruiz-Ballesteros 2011; Tolkach & King 2015). CBT provides many

socio-economic benefits to local communities such as creating employment opportunities, local development, contributing to biodiversity conservation and tourism, and also promoting local goods and services. The development of CBT projects in the study villages is recommended to promote local cultural and natural values, better distribute benefits among local communities, and resolve existing conflicts of local communities with the national park. However, CBT without proper local community involvement, poor management and marketing may lead to failure (Sebele 2010) and therefore, requires proper planning and financial support.

As we discussed, if the farmers get more benefits from tourism than it will decrease the range of conflicts between locals and wildlife and improve locals' attitudes toward conservation. One of the innovative ways to engage farmers to tourism activities is eco-agritourism. Eco-agritourism is a combination of ecotourism and agritourism, which generally is a type of community-based tourism. Eco-agritourism requires the local community participation as the host and attraction itself (Tuzon et al. 2014). However, research would be needed to assess the economic, cultural and environmental effects of this new form of CBT in the study villages.

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APPENDICES

Village:	Age:	Gender:	Education:	Employment:		
Question				Agree	Disagree	Don't know
1. Do you have benefits from GNP?						
2. Does your community benefits from GNP?						
3. Do you have losses as a consequence of living near the GNP?						
4. Have you ever seen tourists in your village?						
5. What are the reasons why tourists visit your village?						
6. Do you have benefits from tourism?						
7. Does your community benefits from tourism?						
8. Does tourism has bad effects on your community?						
9. Do tourists respect your culture?						
10. Do tourists left garbage in your village?						
11. Would you like to have more tourism in your village?						
12. What do you need in your village to attract more tourists?						
13. What is the major problem in your village?						