



HAL
open science

Current challenges facing ecotourism development in Iran

Sarasadat Makian, Farid Hanifezadeh

► **To cite this version:**

Sarasadat Makian, Farid Hanifezadeh. Current challenges facing ecotourism development in Iran. Journal of Tourismology, 2021, 7 (1), pp.123-140. 10.26650/jot.2021.7.1.0007 . hal-03283468

HAL Id: hal-03283468

<https://hal.science/hal-03283468v1>

Submitted on 4 Sep 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution 4.0 International License



Current challenges facing ecotourism development in Iran

Sarasadat Makian¹ , Farid Hanifezadeh² 

Abstract

Iran is a rich country in terms of natural, historical, and cultural resources appropriate for ecotourism development. Despite its many valuable attractions and growth potential, Iranian ecotourism has faced various problems that have slowed or even prevented its expansion. Thus, in order to plan to address these challenges, we need to identify them. This study highlights the challenges of Iranian ecotourism and identifies areas where further research is required by reviewing some of the previous studies on Iran's ecotourism. Based on a literature review and thematic analysis, six different categories of challenges are presented: governance and planning, political, socio-economic, cultural; legal aspects; infrastructure; community awareness and knowledge; and environmental challenges. The study results indicated that the most significant challenges facing the Iranian ecotourism industry are governance, management, and planning issues. The research findings enhance our understanding of the current challenges of ecotourism in Iran that need to be rigorously investigated in the future and before any development planning projects. This study provides valuable insights for researchers, managers, and tourism officials on the development of Iranian ecotourism, which can be considered for future studies and planning.

Keywords

Ecotourism, Development Challenges, Ecotourism Planning, Ecotourism Challenges, Ecotourism Potentials, Iran

1 **Correspondence to:** Sarasadat Makian (PhD candidate), Geography, Grenoble Alpes University, Urban Planning and Alpine Geography Institute, Grenoble, France. E-mail: sarasadat.makian@univ-grenoble-alpes.fr ORCID: 0000-0002-9935-5877

2 Farid Hanifezadeh (M.A.), Allameh Tabataba'i University, Faculty of Management and Accounting, Department of Tourism Management, Tehran. E-mail: iran.f.hanifezadeh@gmail.com ORCID: 0000-0002-2249-4270

To cite this article: Makian, S., & Hanifezadeh, F. (2021). Current challenges facing ecotourism development in Iran. *Journal of Tourismology*, 7(1), 123-140. <https://doi.org/10.26650/jot.2021.7.1.0007>



Introduction

Over the past few years, due to environmental and ecological potentials, a great deal of attention has been paid to ecotourism, considered to be one of the most favourable types (Kamyabi & Rajaei Rizi, 2018) and the fastest-growing segment of tourism (Carvache-Franco, Segarra-Oña, & Carrascosa-López, 2019). While there are no reliable statistics on the number of nature tourists and the growth rate of ecotourism, it has grown faster than mainstream tourism (Moghimehfar, Halpenny, & Ziaee, 2014). Ecotourism is a potentially efficient tool for mass tourism adopted by policy-makers and planners (Mosammam, Sarrafi, Nia, & Heidari, 2016). It supports nature's protection and improves local communities' socio-economic conditions (Ahmadi, Khodadadi, & Shahabi, 2018; Shemshad & Malek Mohammadi, 2012) and contributes to increasing their education level (Mansoori, Behzad, & Jaybhaye, 2014). Ecotourism is directly linked to natural factors such as topography, hydrology networks, meteorological and the biological characteristics of the destinations linked to natural, intact, and protected areas (Mohajer & Avagyan, 2014). It can be taken as an alternative approach to protecting natural resources and biological diversity, promoting the sustainable use of resources, developing ecological experience, and making tourists aware of the environment (Mosammam et al., 2016). Ecotourism creates new employment opportunities based on local resources for people living in remote areas with poor economic conditions and high underemployment rates. It requires less investment (Shemshad & Malek Mohammadi, 2012) and could positively impact on urban and rural transformations with sustainable management and development (Ghorbani, Raufirad, Rafiaani, & Azadi, 2015).

For developing countries with distinctive natural and cultural environments and opportunities, the potential to benefit from ecotourism is available (Asadpourian, Rahimian, & Gholamrezai, 2020). One of these countries is Iran, rich in cultural, natural, and historical attractions (Asadi, 2012; Ghorbani et al., 2015; Goharipour & Hajiluie, 2016). Ecotourism is also identified in Asadi's (2012) study as the most important competitive advantage of the Iranian tourism industry. On the other hand, according to Goharipour & Hajiluie (2016), ecotourism's development brings many benefits to Iran, such as economic growth, the preservation of cultural values, the conservation of natural resources, community participation, and employment. In addition, feasibility studies on Iran's ecological attractions highlight ecotourism as its unique economic resource (Hadizadeh Zargar, 2016). Numerous studies were carried out on the potential of ecotourism in different regions of Iran and on various aspects of its development (e.g., Ahmadi et al., 2018; Ganjali et al., 2014; Mobaraki et al., 2014; Rakhshan Nasab & Zarabi, 2010; Zarabi & Safarabadi, 2014). On the contrary, some of the existing literature shows that ecotourism in this country has many challenges and obstacles. Given the global importance of ecotourism (Nee &

Beckmann, 2011), the potential of Iran's nature for ecotourism (Ghorbani et al., 2015; Mansoori et al., 2014), the positive role of ecotourism in the development of Iranian rural areas (Khalili, Moridsadat, & Soltaninejad, 2020) and in the conservation of biodiversity in Iran (Ghoddousi, Pintassilgo, Mendes, Ghoddousi, & Sequeira, 2018; Kolahi, Sakai, Moriya, Yoshikawa, & Esmaili, 2014), it is necessary to consider the challenges facing the development of ecotourism. Therefore, by reviewing Iranian ecotourism literature, this study highlights the main challenges of Iranian ecotourism, provides an overview of the different challenges confronting ecotourism development, presents the categorization of these challenges, identifies gaps that require further research in the future, and discusses existing challenges. It is hoped that the findings provide a better understanding of ecotourism's current challenges and problems in Iran for relevant organizations and researchers.

Literature Review

General Challenges of Ecotourism

Ecotourism has contributed to eradicating poverty and conservation of natural resources in many parts of the world (Das & Chatterjee, 2015) by generating income for conservation, developing local businesses, and creating employment opportunities (Teresa, 2015). This type of tourism helps us understand, appreciate, and preserve the environment and the local culture (Tripathi & Jain, 2017). Despite all the opportunities that ecotourism creates, some challenges prevent its proper and sustainable development in every destination. Mgonja, Sirima, & Mkumbo (2015) state that the lack of access to capital prevents local people's participation in ecotourism activities. According to González Fonseca (2012), one of Mexico's challenges in the field of ecotourism is the absence of an appropriate design of public policies capable of generating economic prosperity and social welfare. Otago (2014) identifies challenges such as limited awareness and concern of local communities for the conservation of environmental attractions and the degradation of natural resources in Ethiopia.

Bego & Malltezi (2011) examine the challenges of ecotourism in Albania and conclude that the main challenges are uncontrolled grazing, illegal hunting, and poaching. The main challenges of ecotourism in Nigeria include inadequate facilities and financing, poor infrastructure, and seasonal inaccessibility, according to Ijeomah & Okoli (2016). In addition, Cetinkaya (2004) mentions the challenges of ecotourism development in Turkey, such as the lack of an operating plan, the absence of a responsible organization, and the lack of adequate services and qualified staff. Fernando & Shariff (2017) highlight the key challenges of ecotourism in Sri Lanka: a lack of financial and human resources, poor management, a lack of a clear

vision, and a lack of basic tourism infrastructure. According to Okech (2011), a lack of appropriate management plans and guidelines, insufficient staff, and a lack of partnership programs and security issues are the challenges facing ecotourism development in Kenya. Furthermore, a lack of national strategies and regulatory frameworks and inappropriate use of ecosystems by the inhabitants pose challenges for Ethiopia's ecotourism (Teresa, 2015).

Iranian Ecotourism Potential

Iran's tourist opportunities, natural attractiveness, unspoiled landscapes, and favourable climate reinforce the potential for the development of ecotourism (Pourasghari & Amar, 2018). It is a predominantly arid country, more than half of which is covered by rangelands, less than 10% by forests, and about 20% by arid deserts and salt marshes (Dabiri, Fazel, Moghaddasi, & Mehrasa Mehrdadi, 2016). Iran's climate diversity, biodiversity, beautiful and diverse natural landscapes have contributed to its ecotourism wealth (Hosseinalizadeh, Jabbari, & Haghlesan, 2018). In addition to many natural characteristics (see Mohajer & Avagyan, 2014), the country's protected areas have increased steadily to 185, 150 with national designations and 35 with international designations (UNEP-WCMC, 2020).

The Iranian ecotourism industry is relatively new. It has excellent growth potential, as there are many natural attractions in different parts of the country (Riasi & Pourmiri, 2015). Many individuals are interested in visiting Iran's natural landscapes (Soroushnia, 2020). However, Iran accounts for less than 1% of the 5.2% of the Middle East's global ecotourism market (FinancialTribune, 2017). In addition, leading organizations have not presented an official categorization of ecotourism activities. Very few researchers, however, have worked on this. According to a general classification developed by Karami (2008), Iranian ecotourism activities include winter sports, nature excursions, hunting, fishing, water sports, desert excursions, eco-therapy, climbing, and caving. Having considered the previous category, Salehi & Fayaz (2013) introduced other possible types of activities in Iran such as hiking, trekking, cycling in nature, stargazing, bird watching, visiting geomorphological attractions, visiting wildlife and national parks, jungle excursions, village tours, surviving in the wilderness and experiencing nomadic life.

In the country's 20-year vision document (2005-2025), the position of ecotourism is unclear (Ghadiri & Sabzi, 2011). It is not mentioned to any extent in any of the country's upstream documents and is not supported by the government, planners, and policy-makers (Veicy, 2018). On the other hand, one of the strategic objectives of Iran's National Biodiversity Strategies and Action Plan (2016-2030) is to reduce the pressure on biodiversity and promote the sustainable use of natural resources through the revision and improvement of environmental regulations, especially by

developing national legalisation on biosafety and ecotourism (Dabiri et al., 2016). In addition, Asadi (2011) indicated in his study that ecotourism is one of Iran's most promising forms of tourism. Despite Iran's great potential and the growing demand for ecotourism worldwide, Iran does not have a large share of the world ecotourism market (Yekani Motlagh, Hajjarian, Hossein Zadeh, & Alijanpour, 2020).

Methodology

This study aims to provide an overview and in-depth understanding of the current challenges of ecotourism development in Iran based on a literature review. Concerning the study's scope, we focused on studies conducted on ecotourism in Iran to contribute to this field's theoretical knowledge. Using keywords such as "ecotourism" and "Iran", we searched in online search engines such as Google scholar and Sid.ir (Scientific journals database of Iran) and obtained 59 papers. After reading the abstracts to determine whether the articles were relevant to our question, 27 papers were appropriate for our study (from 2007 to 2020). We reviewed these empirical studies' findings and extracted the relevant data, which were the challenges stated by researchers facing ecotourism development in Iran. Then we organized the challenges into six thematic categories and discussed each category with different secondary data (related academic papers, reports, and websites such as government news agencies).

Findings and Discussion

Iran tried to get itself on the tourists' travel list after the lifting of sanctions in 2015. As a result, ecotourism travels have been increasing, attracting domestic and foreign backpackers to the country's pristine and relatively untouched natural areas (IRNA, 2018; TehranTimes, 2017). According to the Iranian Department of Environment, Iran's small share of the global ecotourism market does not reflect its potential in the sector (FinancialTribune, 2017). Regardless of all of ecotourism's attractions and potential, Iran faces many challenges in developing this type of tourism. Table 1 shows the previous studies addressing these challenges.

Table 1

Papers Used for Content Analysis

Author(s) and Year published	Title of the paper	Category of thematic
Abdolahi, 2007	Ecotourism compatible with environmental protection and sustainability of natural resources	Governance and planning challenges / Political, socio-economic, and cultural context
Ahmadi, Khodadadi, & Shahabi, 2018	Planning for ecotourism in the protected area of Manesht and Ghelarang, Ilam Province, Iran	Governance and planning challenges / Political, socio-economic, and cultural context/ Infrastructural challenges
Akbari, Khodadad, Musazadeh, & Rudgar Safari, 2017	Evaluating the ecological capability of Tehran province in the development of ecotourism using geographic information system	Legal aspects
Amiri, Zoghi, Sadat, & Karimi, 2015	Assessing ecotourism potential in protected areas to contribute to sustainable rural development (Case study: Arasbaran protected area- Mishehpareh)	Legal aspects
Asadi, 2012	Strategies for Iran Ecotourism	Political, socio-economic, and cultural context / Infrastructural challenges / Community awareness and knowledge toward ecotourism / Environmental challenges
Bazm Ara, Tavakoli, & Kaveh, 2017	Assessing Appropriate Areas for Ecotourism Development of Protected Areas. Case Study: Khaeez Protected Area	Governance and planning challenges / Community awareness and knowledge toward ecotourism
Mohajer & Vahagan Varazdat, 2017	Prospects and Problems of Ecotourism in Iran	Governance and planning challenges / Political, socio-economic, and cultural context
Farajzadeh Asl & Karim Panah, 2009	Possibility Study of Ecotourism Development Zones in Kurdistan Province Using Geographic Information System (GIS)	Political, socio-economic, and cultural context
Ganjali, Shayesteh, Ghasemi, & Mohammadi, 2014	Environmental and strategic assessment of ecotourism potential in Anzali Wetland using SWOT analysis	Governance and planning challenges / Political, socio-economic, and cultural context / Legal aspects / Environmental challenges
Ghadiri Masoum, Nasiri, Hosseini, & Rafii, 2012	Ecotourism Planning Using Remote Sensing and GIS: A Case Study for Marvdasht, Iran	Political, socio-economic, and cultural context
Ghorbani nia, Mirsanjari, & Liaghati, 2018	Evaluating ecotourism potential development in Dena county using multi-criteria evaluation of specific hybrid indices	Governance and planning challenges
Ghorbani, Raufirad, Rafiaani, & Azadi, 2015	Ecotourism sustainable development strategies using SWOT and QSPM model: A case study of Kaji Namakzar Wetland, South Khorasan Province, Iran	Infrastructural challenges

Habibi Kutanaie & Zande Moghadam, 2013	Analysis and leveling of ecotourism potentials and its impact on permanent development using TOPSIS multivariate model (a case study: Mazandaran province)	Governance and planning challenges
Hosseinalizadeh, Jabbari, & Haghlesan, 2018	Assessment of Ecotourism from the Perspective of the Sustainable Development Based on SWOT Model (Case: Azerbaijan Region of Iran)	Environmental challenges / Infrastructural challenges
Kiakojori & Isa Karkroodi, 2015	Feasibility study of the rural ecotourism in the Javaherdeh village of Ramsar using SWOT	Political, socio-economic, and cultural context
Kolahi, Sakai, Moriya, & Aminpour, 2013	Ecotourism Potential for Financing Parks and Protected Areas: A Perspective From Iran's Parks	Governance and planning challenges / Political, socio-economic, and cultural context
Kolahi, Moriya, Sakai, Khosrojerdi, & Etemad, 2014	Introduction of Participatory Conservation in Iran: Case Study of the Rural Communities' Perspectives in Khojir National Park	Governance and planning challenges / Political, socio-economic, and cultural context
Mobaraki, Abdollahzadeh, & Kamelifar, 2014	Site suitability evaluation for ecotourism using GIS and AHP: A case study of Isfahan Townships, Iran	Infrastructural challenges
Modiri, Salimimanesh, Abbasi, & Bagheri Seyyed Shokri, 2011	Analysis and Evaluation of Ecotourism Development Potential and Strategies in Rijab Region (Kermanshah Province)	Governance and planning challenges / Political, socio-economic, and cultural context / Legal aspects
Moharramnejad & Aghakhani, 2009	Evaluation of threats and opportunities of ecotourism industry strategic factors (Case study: protected area of Jajroud)	Governance and planning challenges / Political, socio-economic, and cultural context
Najafi Kani, Motiei Langarodi, & Najafi, 2012	Feasibility study of ecotourism development in rural areas using SWOT analytical model Case study: Amol city	Governance and planning challenges / Political, socio-economic, and cultural context / Legal aspects
Omidi Najafabadi, Haghbin, & Farajolah Hosseini, 2016	Factors affecting ecotourism development: a case study of Lavasan-e Kuchak rural district	Infrastructural challenges
Rakhshan Nasab & Zarabi, 2010	Challenges and opportunities of ecotourism development in Iran	Infrastructural challenges
Ramezani Gourabi & Rajabi, 2015	Environmental vulnerability assessment of Tourism in Anzali Coastal using SWOT.	Infrastructural challenges
Shomalizade, Dashti, & Hemadi, 2015	Analysis and evaluation of potential and strategies for ecotourism development in lake of Dez dam using Freeman's method	Governance and planning challenges / Political, socio-economic, and cultural context
Soltani, Baygloo Shaykh, & ChamanMah, 2009	Conservation of international ecotourism attractions (case study: Gavkhuni swamp in Iran)	Legal aspects / Community awareness and knowledge toward ecotourism / Environmental challenges
Zarabi & Safarabadi, 2014	Assessment of sustainable ecotourism development in Kermanshah city	Governance and planning challenges / Legal aspects / Community awareness and knowledge toward ecotourism

Governance and Planning Challenges

Iranian researchers most commonly discuss governance and tourism planning as the most important tourism development issue in Iran (Ghaderi, Abooli, & Henderson, 2018; Torabi, Rezvani, & Badri, 2019). Desirable governance and management are the key factors in tourism development (Alipour, Vaziri, & Ligay, 2011; Churugsa, McIntosh, & Simmons, 2007; Siakwah, Musavengane, & Leonard, 2019). Simultaneous attention to three categories of natural resources, local communities, and tourists ensure ecotourism's successful development (Yekani Motlagh et al., 2020). Current tourism development strategies in Iran have proven to be ineffective, and its position in the international tourism market is not comparable to its high potential. Therefore, there is a need for a long-term approach to tourism development obstacles (Golghamat Raad, 2019) with appropriate ecotourism development management in order to conserve and maintain the area's biological richness and economic well-being (Ghadiri Masoum et al., 2012).

An inappropriate use of natural resources (Bazm Ara et al., 2017), a lack of management and plans for environmental conservation (Abdolahi, 2007; Kolahi et al., 2014), the poor performance of the National Ecotourism Committee (Abdolahi, 2007), a lack of environmental pollution taxes (Ahmadi et al., 2018), an absence of priority given to ecotourism development projects (Bazm Ara et al., 2017), the ambiguity of approaches to ecotourism development (Modiri et al., 2011), a lack of consolidated management for accurate targeting and monitoring of ecotourism development and its sustainable maintenance (Esmacil Mohajer & Vahagan Varazdat, 2017), a lack of ecotourism promotion strategies (Shomalizade et al., 2015) and the presentation of natural attractions without taking into account the principles of responsible tourism (Zarabi & Safarabadi, 2014), are some of the challenges related to governance and planning of ecotourism development in Iran.

The need for appropriate institutions, decision-making rules, and established practices are effective governance components (Bramwell & Lane, 2011). Tourism policies and plans need to address the opportunities, conditions, and constraints of national or local planning (Jenkins, 2015), facilitating cooperative behaviour that is a prerequisite for sustainable development (Nunkoo, 2017). Although tourism planning began in Iran in 1980 and despite the progressive policies adopted to encourage tourism development (Ghanian, Ghoochani, & Crofts, 2014), the following challenges in the field of tourism planning and governance in Iran can be mentioned, such as the absence of strategic planning with intersectoral coordination (Abdolahi, 2007) and organizational management practices (Ganjali et al., 2014), the unbalanced development of tourism activities (Ghorbani nia et al., 2018), the lack of forward-looking development policies based on the environmental capacities of each region (Habibi Kutanaie & Zande Moghadam, 2013), the existence of a traditional (top-

down) approach to biodiversity protection (Kolahi et al., 2013), the lack of effective land-use planning, the lack of regional carrying capacity studies (Makhdoum, 2008), the lack of comprehensive biodiversity protection management plans (Moharramnejad & Aghakhani, 2009) and the lack of appropriate planning adapted to the ecological conditions of the regions (Najafi Kani et al., 2012).

Political, socio-economic, and cultural context

As Jenkins (2015) states, for tourism policymaking in developing countries, internal issues are important to establish a process to facilitate policy formulation, planning, and monitoring of the tourism sector. Such internal challenges to ecotourism development in Iran include economic recessions (Asadi, 2012), inexperienced workforces (Shomalizade et al., 2015), insufficient management experts and ecotourism professionals (Ahmadi et al., 2018; Kiakojori & Isa Karkroodi, 2015), a lack of coordination between ecotourism related organizations and local agencies (Abdolahi, 2007; Shomalizade et al., 2015), a lack of local people's agreement on the benefits of ecotourism development (Farajzadeh Asl & Karim Panah, 2009; Kolahi et al., 2013; Esmail Mohajer & Vahagan Varazdat, 2017) and a lack of community participation in the planning, development, and conservation of natural resources (Abdolahi, 2007). However, in partnership with local communities and conservation projects, the development of ecotourism can restore local livelihoods (Ghadiri Masoum et al., 2012).

Political systems shape the preconditions for participation in the tourism development process (Causevic & Lynch, 2013). Still, the lack of two-way interactions between local people and government officials (Kolahi et al., 2014) as well as between public and private organizations have led to the absence of private sector supports (Ganjali et al., 2014) and insufficient government budgets for environmental conservation in Iran (Moharramnejad & Aghakhani, 2009). Tensions, unrest, and insecurity in the Middle East (Asadi, 2012), the unstable international political condition (Modiri et al., 2011), increased and intensified competition in global markets and the existence of competent competitors (Najafi Kani et al., 2012) are other challenges that have affected Iranian tourism.

Legal aspects

The country's legislators do not adequately address tourism, especially ecotourism, to protect natural attractions because of the weak governance we face in developing tourism in Iran. While the government's role in development has shifted to addressing issues such as economic and socio-cultural impacts, political responsibilities, power relations, and environmental awareness (Yang, Wall, & Smith, 2008), the role of the government is still not well understood in the development of tourism in Iran. Countries or regions successful in ecotourism have stipulated strict laws and regulations or have special institutions to oversee the implementation of these laws and regulations (Wang,

2010). Tourism development requires appropriate regulations because not all tourism is environmentally friendly or socially acceptable (Tisdell, 2011).

In Iran, a wide range of policies, laws, and regulations directly or indirectly lead to the loss or work against biodiversity conservation (Kolahi et al., 2012), particularly in ecotourism, as there is a poor connection between environmental laws and tourism (Modiri et al., 2011). Too frequent exploitation of natural resources in an economical way (Zarabi & Safarabadi, 2014) and excessive recreational use (Makhdoum, 2008) are the most prevalent challenges in Iran's ecotourism zones, along with illegal fishing, mining exploitation, sewage disposal (Soltani et al., 2009) and illegal hunting (Ganjali et al., 2014). Some of the major legal challenges are related to the lack of explicit rules and mechanisms in protected areas (Ganjali et al., 2014), the lack of regulatory provisions to limit the damage caused by ecotourists (Amiri et al., 2015), and the lack of monitoring in ecotourism areas (Makhdoum, 2008). Other challenges affecting the development of ecotourism in Iran are the lack of institutionalized capacity (Akbari et al., 2017), laws and regulations for the development of ecotourism by related organizations to reduce the risk of natural landscape loss (Akbari et al., 2017; Najafi Kani et al., 2012). The main debate in environmental ethics is about how to value nature (Thompson, 2001). However, there is no environmental ethics code to be respected by the different beneficiaries in Iran (Makhdoum, 2008).

Infrastructural Challenges

Infrastructure is a significant factor in developing destinations (Adeola & Evans, 2020; Khadaroo & Seetanah, 2008, 2014) and in overall tourist impression and destination image (Imikan & Ekpo, 2012). The lack of infrastructure is one of the main limitations hindering tourism development in this country, despite its diverse cultural and natural attractions (Ahmadi et al., 2018; Hashemi & Ghaffary, 2017; Nematpour & Faraji, 2019; Tahbaz, 2016; Zamani-Farahani, 2016). Infrastructure problems are another obstacle to the development and implementation of ecotourism activities in Iran, reflected in the lack of reception and accommodation centers, the inadequacy of the transport system to facilitate access to ecotourism activities, the poor access to modern technology in areas likely to develop ecotourism (Asadi, 2012), the lack of tourist facilities in regions capable of developing ecotourism activities (Mobaraki et al., 2014) and the lack of appropriate environmental as well as physical infrastructure (Ghorbani et al., 2015). It is necessary to pay attention to the infrastructure dimension for tourism development to promote destinations' competitive advantage (Imikan & Ekpo, 2012).

Community Awareness and Knowledge Toward Ecotourism

The weaknesses in the sustainable development of ecotourism in Iran and the main problem regarding the preservation of its attractions are the low level of environmental

education of the host communities (Hosseinalizadeh et al., 2018), a lack of education for attitude change, and awareness of tourists on ecotourism issues (OmidiNajafabadi et al., 2016), insufficient information on natural phenomena (Soltani et al., 2009) and irresponsibility towards environmental and natural conservation (Asadi, 2012; Ramezani Gourabi & Rajabi, 2015). The lack of awareness of ecotourism development opportunities among residents is linked to the decrease in local initiatives and benefits (Nault & Stapleton, 2011). Another challenge is the absence of indigenous community empowerment (Bazm Ara et al., 2017). However, ecotourism in Iran requires indigenous communities in the decision-making process in agreement with managers. Kolahi et al. (2014) point out that one of the main concerns requiring more attention is ineffective management in participatory conservation and the insufficient link between man and nature. On the other hand, weak marketing efforts (Asadi, 2012), a lack of adequate presentation of ecotourism attractions (Zarabi & Safarabadi, 2014), and a lack of public understanding of the absolute value of the country's natural resources (Rakhshan Nasab & Zarabi, 2010) are additional factors affecting ecotourism development in Iran.

Environmental Challenges

Environmental impact challenges have received very little attention and research among tourism researchers. In contrast, environmental crises are the main threats to Iran's natural resources (Atlantic Council, 2018). Such hidden challenges affecting the development of ecotourism in Iran have many long-term effects on the country's natural and cultural attractions, such as environmental pollution (Ganjali et al., 2014), ecological changes (Hosseinalizadeh et al., 2018), climate change, consequent droughts, natural disasters (Asadi, 2012), water pollution (Soltani et al., 2009) and in particular environmental degradation (Laylin, 2018; Makhdom, 2008). While tourism growth is likely to continue, the natural resources that make destinations attractive to tourists do not expand but risk being lost and taking a long period to replenish (Hübler, 2019). Sustainable and practical solutions (Tahbaz, 2016) and the implementation of long-term tourism planning (Nematpour, Khodadadi, Rezaei, & Makian, 2020) are required to address the challenges caused by the destruction of biodiversity in Iran.

Conclusion and Implications

Iran has a comparatively advantageous position in ecotourism compared to other tourism branches because of its territorial varieties, historical and cultural attractions, and biological diversity (Ahmadi et al., 2018). However, the development of ecotourism currently faces major challenges. Unbridled tourism development can pose a severe threat to these areas, leading to irreversible environmental changes in the absence of

a systematic and knowledge-based management system (Ziaee & Mirzaee, 2005). Despite measures taken in the past, including the approval of ecotourism regulations by the Iranian Parliament, the creation of the National Ecotourism Committee in 2005, the establishment of the Iranian Ecotourism Scientific Association in 2016, and the government's efforts to develop ecotourism through supportive programs, especially in the post-Corona era (Irangov, 2020), some challenges persist. Challenges related to the management and planning of tourism in Iran have led to the emergence of other challenges, such as legal, infrastructural, environmental, political, socio-economic, cultural, and community awareness problems. However, many of the challenges mentioned in the findings section may overlap. Studying and evaluating existing challenges will provide planners and policy-makers with an overview of Iran's current ecotourism situation to improve the design and implementation of programs and identify what could be done better in the future (OECD, 2012).

A regional vision for ecotourism development planning must identify and promote a range of unique tourist experiences that can be environmentally, socially, and economically sustainable while meeting visitor and local community's needs (Azimi & Hajipour, 2008). So, the principles of ecotourism, such as minimizing the negative environmental impact, building environmental awareness, creating positive experiences, providing financial support for conservation, empowering local people, and raising awareness about the political, environmental, and social situations of the host community, should be followed by those who implement and participate in ecotourism activities (Ghorbani et al., 2015). To make sustainable use of natural resources and attractions for the planning of ecotourism in Iran, it is essential to study and evaluate the main challenges in ecotourism regions that will affect future development. As the natural environment is a fundamental basis for ecotourism activities, tourism authorities must adopt corrective strategies to minimize these negative effects. By looking retrospectively at the past challenges of Iranian ecotourism and its performance, businesses, academics, and government agencies can plan their strategic future (O' Regan, 2018). For future research, it is suggested to study the challenges of ecotourism development in Iran, using methods such as scenario planning to determine strategies for its future planning and development.

Peer-review: Externally peer-reviewed.

Conflict of Interest: The authors have no conflict of interest to declare.

Grant Support: The authors declared that this study has received no financial support.

Authors Contributions: Conception/Design of study: S.M.; Data Acquisition: S.M., F.H.; Data Analysis/Interpretation: S.M.; Drafting Manuscript: S.M., F.H.; Critical Revision of Manuscript: S.M.; Final Approval and Accountability: S.M., F.H.

References

- Abdolahi, E. (2007). *Ecotourism compatible with environmental protection and sustainability of natural resources*. Presented at the Sixth Iranian Agriculture Economics Conference, Mashhad-Iran.
- Adeola, O., & Evans, O. (2020). ICT, infrastructure, and tourism development in Africa. *Tourism Economics, 26*(1), 97–114. <https://doi.org/10.1177/1354816619827712>
- Ahmadi, M., Khodadadi, M., & Shahabi, H. (2018). Planning for ecotourism in the protected area of Manesht and Ghelarang, Ilam Province, Iran. *Journal of Quality Assurance in Hospitality & Tourism, 19*(2), 243–268. <https://doi.org/10.1080/1528008X.2017.1394956>
- Akbari, M., Khodadad, M., Musazadeh, H., & Rudgar Safari, V. (2017). Evaluating the ecological capability of Tehran province in the development of ecotourism using geographic information system. *Geographical Journal Of Tourism Space, 6*(21), 117–132.
- Alipour, H., Vaziri, R. K., & Ligay, E. (2011). Governance as Catalyst to Sustainable Tourism Development: Evidence from North Cyprus. *Journal of Sustainable Development, 4*(5), 32–49. <https://doi.org/10.5539/jsd.v4n5p32>
- Amiri, M. J., Zoghi, M., Sadat, M., & Karimi, S. (2015). Assessing ecotourism potential in protected areas to contribute to sustainable rural development (Case study: Arasbaran protected area- Mishehporeh). *Journal of Research and Rural Planning, 4*(3), 39–50.
- Asadi, R. (2012). Strategies for Iran Ecotourism. *World Applied Sciences Journal, 18*(3), 414–424. <https://doi.org/10.5829/idosi.wasj.2012.18.03.1710>
- Asadpourian, Z., Rahimian, M., & Gholamrezai, S. (2020). SWOT-AHP-TOWS Analysis for Sustainable Ecotourism Development in the Best Area in Lorestan Province, Iran. *Social Indicators Research, 152*(1), 289–315. <https://doi.org/10.1007/s11205-020-02438-0>
- Atlantic Council. (2018). Iran's Environmental Impasse. Retrieved October 10, 2020, from <https://www.atlanticcouncil.org/commentary/event-recap/iran-s-environmental-impasse/>
- Azimi, N., & Hajipour, A. H. (2008). Planning the Cultural Tourism and Ecotourism Industry for Economic Development: A Case Study of Iran. *Environmental Sciences, 6*(1), 53–64.
- Bazm Ara, M., Tavakoli, M., & Kaveh, J. (2017). Assessing Appropriate Areas for Ecotourism Development of Protected Areas. Case Study: Khaeez Protected Area. *The Journal of Spatial Planning, 21*(3), 95–118.
- Bego, F., & Malltezi, J. (2011). Ecotourism Opportunities and Challenges in Butrint, Albania, a Unique UNESCO and Ramsar Site. *Journal of Coastal Research, 61*, 150–157. <https://doi.org/10.2112/SI61-001.9>
- Bramwell, B., & Lane, B. (2011). Critical research on the governance of tourism and sustainability. *Journal of Sustainable Tourism, 19*(4–5), 411–421. <https://doi.org/10.1080/09669582.2011.580586>
- Carvache-Franco, M., Segarra-Oña, M., & Carrascosa-López, C. (2019). Segmentation by Motivation in Ecotourism: Application to Protected Areas in Guayas, Ecuador. *Sustainability, 11*(1), 1–19. <https://doi.org/10.3390/su11010240>
- Causevic, S., & Lynch, P. (2013). Political (in)stability and its influence on tourism development. *Tourism Management, 34*, 145–157. <https://doi.org/10.1016/j.tourman.2012.04.006>
- Cetinkaya, G. (2004). Challenges for ecotourism development in Çukurova delta Biosphere Reserve, Turkey. *Budownictwo, 16*, 89–96.
- Churugsa, W., McIntosh, A. J., & Simmons, D. (2007). Sustainable tourism planning and development: Understanding the capacity of local government. *Leisure/Loisir, 31*(2), 453–473. <https://doi.org/10.1080/14927713.2007.9651391>

- Dabiri, F., Fazel, A. M., Moghaddasi, N., & Mehrasa Mehrdadi. (2016). *Revised National Biodiversity Strategies and Action Plan (NBSAP2) of Islamic Republic of Iran*. <https://doi.org/10.13140/RG.2.2.17561.62567>
- Das, M., & Chatterjee, B. (2015). Ecotourism: A panacea or a predicament? *Tourism Management Perspectives*, 14, 3–16. <https://doi.org/10.1016/j.tmp.2015.01.002>
- Farajzadeh Asl, M., & Karim Panah, R. (2009). Possibility Study of Ecotourism Development Zones in Kurdistan Province Using Geographic Information System (GIS). *Physical Geography Research Quarterly*, (65), 33–50.
- Fernando, S. L. J., & Shariff, N. M. (2017). Wetland ecotourism in Sri Lanka: Issues and challenges. *Geografia-Malaysian Journal of Society and Space*, 9(4), 99–105.
- FinancialTribune. (2017, May 23). Iran Ecotourism Untapped. Retrieved June 17, 2020, from Financial Tribune website: <https://financialtribune.com/articles/travel/65072/iran-ecotourism-untapped>
- Ganjali, S., Shayesteh, K., Ghasemi, A., & Mohammadi, H. (2014). Environmental and strategic assessment of ecotourism potential in Anzali Wetland using SWOT analysis. *Caspian Journal of Environmental Sciences-University of Guilan*, 22(1), 155–164.
- Ghadery, Z., Abooli, G., & Henderson, J. (2018). Community capacity building for tourism in a heritage village: The case of Hawraman Takht in Iran. *Journal of Sustainable Tourism*, 26(4), 537–550. <https://doi.org/10.1080/09669582.2017.1361429>
- Ghadiri Masoum, M., Nasiri, H., Hosseini, A., & Rafii, Y. (2012). Ecotourism Planning Using Remote Sensing and GIS: A Case Study for Marvdasht, Iran. In R. Abu (Ed.), *Current Issues in Hospitality and Tourism: Research and Innovations* (pp. 225–229). CRC Press. <https://doi.org/10.1201/b12752>
- Ghadiri, N., & Sabzi, A. (2011). *Analytical article on ecotourism and its place in the vision document for the development of Iran's cultural heritage and tourism sector*. Presented at the 11th Congress of Geographers of Iran, Iran.
- Ghanian, M., Ghoochani, O. M., & Crofts, J. C. (2014). An application of European Performance Satisfaction Index towards rural tourism: The case of western Iran. *Tourism Management Perspectives*, 11, 77–82. <https://doi.org/10.1016/j.tmp.2014.04.005>
- Ghoddousi, S., Pintassilgo, P., Mendes, J., Ghoddousi, A., & Sequeira, B. (2018). Tourism and nature conservation: A case study in Golestan National Park, Iran. *Tourism Management Perspectives*, 26, 20–27. <https://doi.org/10.1016/j.tmp.2017.12.006>
- Ghorbani, A., Raufirad, V., Rafiaani, P., & Azadi, H. (2015). Ecotourism sustainable development strategies using SWOT and QSPM model: A case study of Kaji Namakzar Wetland, South Khorasan Province, Iran. *Tourism Management Perspectives*, 16, 290–297. <https://doi.org/10.1016/j.tmp.2015.09.005>
- Ghorbani nia, V., Mirsanjari, M., & Liaghathi, H. (2018). Evaluating ecotourism potential development in Dena county using multi-criteria evaluation of specific hybrid indices. *Journal of Rangeland*, 12(3), 316–329.
- Goharipour, H., & Hajiluie, M. M. (2016). A Study on River Ecotourism Development: Case Study: Karaj River. *International Journal of Geography and Geology*, 5(4), 73–85. <https://doi.org/10.18488/journal.10/2016.5.4/10.4.73.85>
- Golghamat Raad, N. (2019). A Strategic Approach to Tourism Development Barriers in Iran. *Journal of Tourism & Hospitality*, 08(03), 1–8. <https://doi.org/10.35248/2167-0269.19.8.410>

- González Fonseca, F. (2012). Challenges and Opportunities in the World of Tourism from the Point of View of Ecotourism. *Higher Learning Research Communications*, 2(4), 5–22. <https://doi.org/10.18870/hlrc.v2i4.82>
- Habibi Kutanaie, S., & Zande Moghadam, M. (2013). Analysis and leveling of ecotourism potentials and its impact on permanent development using TOPSIS multivariate model (a case study: Mazandaran province). *Geographical Journal of Tourism Space*, 2(8), 99–111.
- Hadizadeh Zargar, S. (2016). Tourism Environmental Zoning Powers of Mazandaran Province to Develop Ecotourism. *Journal of Urban Economics and Management*, 5(1(17)), 31–46.
- Hashemi, N., & Ghaffary, G. (2017). A Proposed Sustainable Rural Development Index (SRDI): Lessons from Hajij village, Iran. *Tourism Management*, 59, 130–138. <https://doi.org/10.1016/j.tourman.2016.07.021>
- Hosseinalizadeh, S., Jabbari, S., & Haghlesan, M. (2018). Assessment of Ecotourism from the Perspective of the Sustainable Development Based on SWOT Model (Case: Azerbaijan Region of Iran. *European Journal of Sustainable Development*, 7(1), 163–174. <https://doi.org/10.14207/ejsd.2018.v7n1p163>
- Ijeomah, H. M., & Okoli, C. I. C. (2016). Challenges of Ecotourism in Selected Destinations of Nigeria. *International Journal of Agriculture and Rural Development*, 19(2), 2655–2668.
- Imikan, A. M., & Ekpo, K. J. (2012). Infrastructure and Tourism Development in Nigeria: The Case Study of Rivers State. *International Journal of Economic Development Research and Investment*, 3(2), 53–60.
- Irangov. (2020). Efforts to approve the tourism support package in the government. Retrieved October 11, 2020, from the government of the Islamic Republic of Iran website: <http://dolat.ir/detail/347916>
- IRNA. (2018, November 13). Ecotourism in Iran: Pure joy of staying in heavenly spots. Retrieved June 20, 2020, from IRNA English website: <https://en.irna.ir/news/83097910/Ecotourism-in-Iran-Pure-joy-of-staying-in-heavenly-spots>
- Jenkins, C. L. (2015). Tourism policy and planning for developing countries: Some critical issues. *Tourism Recreation Research*, 40(2), 144–156. <https://doi.org/10.1080/02508281.2015.1045363>
- Kamyabi, S., & Rajaei Rizi, M. A. (2018). Ecotourism Development Strategies in Chahardangeh District of Sari County. *Journal of Research and Rural Planning*, 6(4), 107–126.
- Khadaroo, J., & Seetanah, B. (2008). The role of transport infrastructure in international tourism development: A gravity model approach. *Tourism Management*, 29(5), 831–840. <https://doi.org/10.1016/j.tourman.2007.09.005>
- Khadaroo, J., & Seetanah, B. (2014). Infrastructure, tourism. In J. Jafari & H. Xiao (Eds.), *Encyclopedia of Tourism* (pp. 1–2). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-01669-6_447-1
- Khalili, S., Moridsadat, P., & Soltaninejad, H. (2020). Toward Sustainable Rural Ecotourism Evolution: The Case Of Kiskan, Iran. *Geography, environment, sustainability*, 13(3), 39–48. <https://doi.org/10.24057/2071-9388-2019-133>
- Kiakojori, D., & Isa Karkroodi, N. (2015). Feasibility study of the rural ecotourism in the Javaherdeh village of Ramsar using SWOT. *Quarterly Natural Ecosystems of Iran*, 6(1–2), 111–124.
- Kolahi, M., Moriya, K., Sakai, T., Khosrojerdi, E., & Etemad, V. (2014). Introduction of Participatory Conservation in Iran: Case Study of the Rural Communities' Perspectives in Khojir National Park. *International Journal of Environmental Research*, 8(4), 913–930. <https://doi.org/10.22059/ijer.2014.784>

- Kolahi, M, Sakai, T., Moriya, K., Yoshikawa, M., & Esmaili, R. (2014). From paper parks to real conservations: Case study of social capital in Iran's biodiversity conservation. *International Journal of Environmental Research*, 8(1), 101–114.
- Kolahi, Mahdi, Sakai, T., Moriya, K., & Aminpour, M. (2013). Ecotourism Potentials for Financing Parks and Protected Areas: A Perspective From Iran's Parks. *Accounting Auditing & Accountability Journal*, 9(1), 144–152.
- Kolahi, Mahdi, Sakai, T., Moriya, K., & Makhdom, M. F. (2012). Challenges to the Future Development of Iran's Protected Areas System. *Environmental Management*, 50(4), 750–765. <https://doi.org/10.1007/s00267-012-9895-5>
- Laylin, D. (2018). *Environmental and Wildlife Degradation in Iran*. Atlantic Council. Retrieved from Atlantic Council website: https://www.jstor.org/stable/resrep17110?seq=1#metadata_info_tab_contents
- Makhdom, M. F. (2008). Management of protected areas and conservation of biodiversity in Iran. *International Journal of Environmental Studies*, 65(4), 563–585. <https://doi.org/10.1080/00207230802245898>
- Mansoori, S., Behzad, R., & Jaybhave, R. G. (2014). The Role of Ecotourism in the Prosperity of Local People in the Tandooreh National Park and the Shir-Ahmad Wildlife Refuge- Iran. *The International Journal Of Humanities & Social Studies*, 2(8), 111–114.
- Mgonja, J. T., Sirima, A., & Mkumbo, P. J. (2015). A review of ecotourism in Tanzania: Magnitude, challenges, and prospects for sustainability. *Journal of Ecotourism*, 14(2–3), 264–277. <https://doi.org/10.1080/14724049.2015.1114623>
- Mobaraki, O., Abdollahzadeh, M., & Kamelifar, Z. (2014). Site suitability evaluation for ecotourism using GIS and AHP: A case study of Isfahan Townships, Iran. *Management Science Letters*, 4(8), 1893–1898. <https://doi.org/10.5267/j.msl.2014.6.038>
- Modiri, M., Salimimaneh, J., Abbasi, M., & Bagheri Seyyed Shokri, S. (2011). Analysis and Evaluation of Ecotourism Development Potential and Strategies in Rijab Region (Kermanshah Province). *Scientific- Research Quarterly of Geographical Data (SEPEHR)*, 20(78), 43–50.
- Moghimehfar, F., Halpenny, E. A., & Ziaee, M. (2014). How big is the gap? Comparing the behaviours and knowledge of mountain hikers with ecotourism ideals: a case study of Iran. *Journal of Ecotourism*, 13(1), 1–15. <https://doi.org/10.1080/14724049.2014.925466>
- Mohajer, E., & Avagyan, A. (2014). Evaluation of Ecotourism Capabilities of Golestan Province. *Bulletin of Environment, Pharmacology and Life Sciences*, 3(12), 116–128.
- Mohajer, Esmail, & Vahagan Varazdat, G. (2017). Prospects And Problems of Ecotourism in Iran. *World Journal of Environmental Biosciences*, 6. Retrieved from <https://environmentaljournal.org/index/ArchivDetail/21-37HED/articles/R4.pdf>
- Moharramnejad, N., & Aghakhani, M. (2009). Evaluation of threats and opportunities of ecotourism industry strategic factors(Case study: Protected area of Jajroud). *Journal Of Environmental Science And Technology*, 11(3), 237–248.
- Mosammam, H. M., Sarrafi, M., Nia, J. T., & Heidari, S. (2016). Typology of the ecotourism development approach and an evaluation from the sustainability view: The case of Mazandaran Province, Iran. *Tourism Management Perspectives*, 18, 168–178. <https://doi.org/10.1016/j.tmp.2016.03.004>
- Najafi Kani, A. A., Motiei Langarodi, S. H., & Najafi, K. (2012). Feasibility study of ecotourism development in rural areas using SWOT analytical model Case study: Amol city. *Journal of Geography*, (19–18), 121–137.
- Nault, S., & Stapleton, P. (2011). The community participation process in ecotourism development: A case study of the community of Sogoog, Bayan-Ulgii, Mongolia. *Journal of Sustainable Tourism*, 19(6), 695–712. <https://doi.org/10.1080/09669582.2010.536240>

- Nee, I., & Beckmann, I. (2011). Ecotourism: The growth, its implications and trends. In A. Papathanassis (Ed.), *The Long Tail of Tourism* (pp. 115–127). Wiesbaden: Gabler. https://doi.org/10.1007/978-3-8349-6231-7_13
- Nematpour, M., & Faraji, A. (2019). Structural analysis of the tourism impacts in the form of future study in developing countries (case study: Iran). *Journal of Tourism Futures*, 5(3), 259–282. <https://doi.org/10.1108/JTF-05-2018-0028>
- Nematpour, M., Khodadadi, M., Rezaei, N., & Makian, S. (2020). Structural analysis of the development of the Iranian tourism market employing a MICMAC approach: A new long-range planning method to attract the ASEAN international tourist market. *Journal of Hospitality and Tourism Insights, ahead-of-print*(ahead-of-print). <https://doi.org/10.1108/JHTI-04-2020-0053>
- Nunkoo, R. (2017). Governance and sustainable tourism: What is the role of trust, power and social capital? *Journal of Destination Marketing & Management*, 6(4), 277–285. <https://doi.org/10.1016/j.jdmm.2017.10.003>
- O' Regan, M. (2018). Backpacking's future and its drifter past. *Journal of Tourism Futures*, 4(3), 193–204. <https://doi.org/10.1108/JTF-04-2018-0019>
- OECD. (2012). Evaluating Tourism Policies and Programmes. In OECD, *OECD Tourism Trends and Policies 2012* (pp. 55–85). OECD. <https://doi.org/10.1787/tour-2012-4-en>
- Okech, R. N. (2011). Ecotourism Development and Challenges: A Kenyan Experience. *Tourism Analysis*, 16(1), 19–30. <https://doi.org/10.3727/108354211X12988225899967>
- Omidi Najafabadi, M., Haghbin, A., & Farajolah Hosseini, S. J. (2016). Factors affecting ecotourism development: A case study of Lavasan-e Kuchak rural district. *Journal of Agricultural Extension and Education Research*, 99(3), 11–21.
- Otago, G. S. (2014). Planning for Sustainable Tourism: Challenges and Opportunities for Ecotourism Development in Addis Ababa, Ethiopia. *American Journal of Human Ecology*, 3(2), 20–26.
- Pourasghari, M., & Amar, T. (2018). Feasibility of Ecotourism Development in Anzali Wetland: An Emphasis on Bird Watching Stations. *Journal of Tourism & Hospitality Research*, 6(1), 59–77.
- Rakhshan Nasab, H., & Zarabi, A. (2010). Challenges and opportunities of ecotourism development in Iran. *Journal of Geographic Space*, 9(28), 41–55.
- Ramezani Gourabi, B., & Rajabi, R. (2015). Environmental vulnerability assessment of Tourism in Anzali Coastal using SWOT. *Journal of Environmental Science and Technology*, 16(1), 245–256.
- Riasi, A., & Pourmiri, S. (2015). Effects of online marketing on Iranian ecotourism industry: Economic, sociological, and cultural aspects. *Management Science Letters*, 5(10), 915–926. <https://doi.org/10.5267/j.msl.2015.8.005>
- Salehi, N., & Fayaz, M. A. (2013). *Ecotourism in Iran*. Iran: Mirmah.
- Shemshad, M., & Malek Mohammadi, I. (2012). Analysis of Factors Affecting the Ecotourism Development (In Pasture and Forest Cooperatives in Golestan Province, Iran). *International Journal of Architecture and Urban Development*, 2(4), 19–24.
- Shomalizade, F., Dashti, S., & Hemadi, K. (2015). Analysis and evaluation of potential and strategies for ecotourism development in lake of Dez dam using Freeman's method. *Journal of Wetland Ecology*, 7(3), 5–20.
- Siakwah, P., Musavengane, R., & Leonard, L. (2019). Tourism Governance and Attainment of the Sustainable Development Goals in Africa. *Tourism Planning & Development*, 17(4), 1–29. <https://doi.org/10.1080/21568316.2019.1600160>
- Soltani, Z., Baygloo Shaykh, R., & ChamanMah, M. (2009). Conservation of international ecotourism attractions (case study: Gavkhuni swamp in Iran). *Journal of Environmental Research And Development*, 4(2), 594–600.

- Soroushnia, S. (2020). Developing Rural Ecotourism Strategies in Wetland Protected Areas. The Case Study of Helleh Wetland, Iran. *Geography and Human Relationships*, 2, 22–36. Retrieved from http://www.gahr.ir/article_105182_3aadbceea4f74459b30a2fa886b52dbe.pdf
- Tahbaz, M. (2016). Environmental Challenges in Today's Iran. *Iranian Studies*, 49(6), 943–961. <https://doi.org/10.1080/00210862.2016.1241624>
- TehranTimes. (2017, April 15). Iran moves into flourishing ecotourism market. Retrieved June 17, 2020, from Tehran Times website: <https://www.tehrantimes.com/news/412621/Iran-moves-into-flourishing-ecotourism-market>
- Teressa, D. K. (2015). Development of community based ecotourism in Wenchi Crater Lake, Ethiopia: Challenges and prospects. *Journal of Hospitality Management and Tourism*, 6(4), 39–46. <https://doi.org/10.5897/JHMT2014.0133>
- Thompson, J. (2001). Environmentalism: Philosophical Aspects. In *International Encyclopedia of the Social & Behavioral Sciences* (pp. 4679–4685). Elsevier. <https://doi.org/10.1016/B0-08-043076-7/01060-3>
- Tisdell, C. (2011). Economic Aspects of Ecotourism: Wildlife-based Tourism and Its Contribution to Nature. *Sri Lankan Journal of Agricultural Economics*, 5(1), 83–95. <https://doi.org/10.4038/sjae.v5i0.3478>
- Torabi, Z.-A., Rezvani, M. R., & Badri, S. A. (2019). Pro-poor tourism in Iran: The case of three selected villages in Shahrud. *Anatolia*, 30(3), 368–378. <https://doi.org/10.1080/13032917.2019.1595689>
- Tripathi, U. N., & Jain, A. K. (2017). Opportunities And Challenges Of Ecotourism With Reference To Its Employability Potential: Uttar Pradesh, India. *Journal for Interdisciplinary Studies*, 4(37), 8872–8882.
- UNEP-WCMC. (2020). Protected Area Profile for Iran (Islamic Republic Of) from the World Database of Protected Areas, May 2020. Retrieved May 9, 2020, from Protected planet website: <https://www.protectedplanet.net/country/IR#ref1>
- Veicy, H. (2018). The study of Tourism Industry in National Basic Laws of Islamic Republic of Iran. *Strategic Studies of public policy*, 7(25), 93–112.
- Wang, X. (2010). Critical Aspects of Sustainable Development in Tourism: Advanced Ecotourism Education. *Journal of Sustainable Development*, 3(2), 261–263. <https://doi.org/10.5539/jsd.v3n2p261>
- Yang, L., Wall, G., & Smith, S. L. J. (2008). Ethnic tourism development: *Annals of Tourism Research*, 35(3), 751–771. <https://doi.org/10.1016/j.annals.2008.06.005>
- Yekani Motlagh, E., Hajjarian, M., Hossein Zadeh, O., & Alijanpour, A. (2020). The difference of expert opinion on the forest-based ecotourism development in developed countries and Iran. *Land Use Policy*, 94, 1–9. <https://doi.org/10.1016/j.landusepol.2020.104549>
- Zamani-Farahani, H. (2016). Host Attitudes toward Tourism: A Study of Sareyn Municipality and Local Community Partnerships in Therapeutic Tourism. *Journal of Tourismology*, 2(1), 16–34.
- Zarabi, A., & Safarabadi, A. (2014). Assessment of sustainable ecotourism development in the Kermanshah city. *Journal of Geography and Planning*, 17(46), 147–170.
- Ziaee, M., & Mirzaee, R. (2005). Management challenges and tourism development in the protected areas of the southern coast of the Caspian Sea (Case study of the Miankaleh Wildlife Sanctuary). *Tourism Management Studies*, 48(10), 1–34.