

Key Factors of Nature-Based Tourism Future Development in Less-Developed Nature Destinations – Case study: Ardabil province of Iran

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ABSTRACT

The study examines key factors influencing nature-based tourism (NBT) development in less-developed nature destinations, selecting Ardabil province of Iran as a case study. It employed a qualitative approach involving fifteen semi-structured interviews and thematic analysis. The study identified seven factors contributing to the development of NBT: tourism development requirements, new managerial initiatives, political support and planning, democratic approach, destination management, sustainability and awareness. The study highlights the importance of sustainability in shaping the future of NBT, which must be considered in policymaking and planning and environmental and climate change impact management. The study recommends knowledge circulation for effective future-based planning. The findings provide valuable insight into the factors required for NBT development at macro and micro levels and can assist DMOs and policymakers of less-developed nature destinations better underrated NBT destination management, allowing them to be better prepared for the future.

Introduction

By creating a symbiotic relationship between tourism and natural areas (Wolf et al., 2019), nature-based tourism (NBT), also known as nature tourism (An et al., 2019) accounts for a large, growing proportion of global tourism (Pickering & Weaver, 2003) with significant economic, socio-cultural, and environmental consequences for host communities (Buckley, 1994). NBT consists of activities based on “consumptive uses, such as recreational hunt-

ing and fishing; outdoor recreation and adventure; passive enjoyment of scenery, geology, flora and fauna; and non-consumptive activities for conservation and research” (Wolter, 2014, p. 13). When the setting for tourism activities is nature, specific elements of the natural environment are the reason for tourism flows. Even when tourism is developed to conserve natural areas (Hall & Boyd, 2004), the type of tourism development may be considered

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as NBT. Padma et al. (2022) argued that it could contribute to reducing carbon footprints, energy consumption and climate change if several fundamental factors are considered, including stakeholder empowerment, monitoring the state of nature, economic development of local areas, adopting environmentally friendly solutions and changing stakeholders' mindsets.

NBT is developed and managed by public agencies, private sectors, and NGOs (Pickering & Weaver, 2003) with certain characteristics depending on the nature of the societies. As a subcategory of the tourism system, NBT development is heavily influenced by society's macro natural, socio-cultural, political and economic systems (Hall & Boyd, 2004). Since these factors differ depending on the context in which tourism develops, identifying the specific factors that influence NBT development is critical. Meanwhile, despite recent increases in NBT studies (Hall & Boyd, 2004), to the best of the authors' knowledge, little is known about the various factors that influence its development in less-developed nature destinations, which place economically significant value on environmental resources upon which tourism depends (Dixon et al., 2001) and where natural heritage is often traded for economic gain (Larrán et al., 2015). Therefore, it is important to investigate what contributes to or hinders NBT in contexts where development plans (including tourism) degrade environmental resources mainly because of economic dilemmas and poor management (Shahbaz et al., 2021). In this regard, this study aims to identify the key elements influencing the development of NBT in the Ardabil province of Iran.

Tourism development in Ardabil has received considerable attention in recent years, ranging from government investments in developing tourism projects (MENAFN, 2020) to authorities planning to transform Ardebil into a winter tourism destination (Tehran Times, 2020) and the selection of the province as the OECD tourism capital in 2030 (Mehr

News Agency, 2019). Despite its potential, the province of Ardabil is still not regarded as one of Iran's top tourist destinations. Recent statistics show that the annual number of Iranian visitors to Ardabil is less than three million, in contrast to the Province of Guilan, which received over ten million tourist arrivals as one of the top Iranian tourist destinations (Statistic Center of Iran, 2018). According to Rahmani et al. (2010, 2012), Tavakoli et al. (2014) and Varesi et al. (2012) Ardabil can be regarded as a nature destination, with a solid potential to attract tourists in different seasons because of its natural attractiveness and varied climate (Jafari & Salmani, 2018). However, despite the potential for NBT development in this destination, several factors influence the development process in the future and identification of these factors is the main objective of this study. This is particularly significant in less-developed countries with less diverse economies, as NBT may warrant special attention in such contexts (Tisdell, 2013).

This study makes a two-fold contribution. It provides a theoretical discussion of the understating of NBT development within less-developed nature destinations, with a specific focus on the Ardabil province of Iran and expands current knowledge in this important area of tourism literature. By examining the key factors that influence NBT development in such contexts, this study aims to provide valuable insight into the complex dynamics that shape sustainability development. The findings may provide practitioners with an informative perspective from which to comprehend the factors influencing the evolution of NBT. These insights can potentially play a crucial role in promoting the sustainable development of nature destinations. Particularly in the case of Iran, implementing sustainable solutions and long-term ecologically sound strategies is essential. These measures are necessary to address the multifaceted challenges arising from the destruction of biodiversity (Makian & Hanifezadeh, 2021).

Literature review

Nature-based tourism development

Rooted in the post-Fordism dialectic and the environmental movement since 1980 (Arnegger et al., 2010), NBT concept is used to describe tourism activities based on natural resources (including landscape, topography, vegetation, wildlife, etc.) that remain relatively undeveloped (Yıldırım et al., 2008). Individuals benefit from natural attractions for spiritual and physical richness, cognitive development, leisure, environmental awareness, and aesthetic experiences (Teles da Mota & Pickering, 2021). Fossgard & Fredman (2019) conceptualized NBT as an intersection between tourism, outdoor recreational activities and natural resources. Economically, it is a significant part of the growing tourism sector (Arnegger et al., 2010; Fossgard &

Fredman, 2019). According to the Center for Responsible Travel (2018) report, NBT accounts for approximately 20% of all types of tourism globally, and this share is continuously increasing (Metin, 2019). This is likely because this broad concept includes ecotourism, adventure tourism, sustainable tourism, and cultural tourism (Roxana, 2012). Although not the focus of this study, several researchers (Buckley, 1994; Nyaupane, 2007) believed that these terms are interchangeable; however, ecotourism and NBT concepts (Hall & Boyd, 2004) have significant differences in quality and responsibility.

Newsome et al. (2002) categorized ecotourism as one of the NBT types with the highest level of sustainability. Consequently, "different points of view of the definitions

for NBT might be the consideration of experience, motivation, and attraction” (Metin, 2019, p. 178). Despite potentially negatively impacting natural resources (An et al., 2019) NBT is more compatible with the environment than mass tourism (Holden, 2003). As Kim et al. (2020) stated, it contributes to biodiversity conservation by providing financial stability and enhancing visitors’ interest in nature. The development of NBT relies heavily on the natural environment and numerous multidisciplinary factors (Zhang & Chan, 2016). Additionally, planning and management of NBT have been influenced by the paradigm of sustainability (Pickering & Weaver, 2003).

NBT development in developed and less developed destinations

Regarding the factors affecting NBT’s development, Yildirim et al. (2008) focused on conservation and adequate management, improving infrastructure and transportation networks, determining the carrying capacities, the cultural aspects of communities, and the sustainable use of natural-cultural resources. Considering the importance of the last-mentioned factor and focusing on the complexity of the sustainability approaches of actors in NBT, Sørensen & Grindsted (2021) argued how different actors’ sustainability orientations and priorities can limit the tourism development in natural parks. They also emphasize the importance of destination management organizations in recognizing development limitations. In light of the conflict between environmental concerns and business interests between various stakeholders, destination managers are responsible for implementing sustainable projects to achieve the optimal balance between the sustainability aspects and the involvement of all interested parties (Haid et al., 2021). However, Larrán et al. (2015) identified obstacles to implementing sustainability measures, including reluctance to change, a lack of expertise in sustainability, inadequate support, and limited financial resources.

To promote sustainable NBT activities in Pennsylvania’s rural counties, besides highlighting the importance of coordination and partnership between stakeholders, Shafer and Choi (2006) recommend knowledge and resource management. Also, Priskin (2001) emphasized that “the future of NBT is strongly resource-dependent and requires access to high-quality natural environments.” Larson and Poudyal (2012) proposed integrating insights from relevant fields into adaptive natural resource management strategies to address current tourism concerns to resolve the ambiguity between resource management goals and strategies within tourism projects in less-developed countries. A successful adaptive management approach relies heavily on stakeholder involvement and collaborative decision-making. It facilitates collective learning among stakeholders (Meszaros, 2015), which is the core of knowl-

edge-sharing and management concepts (Weinberger et al., 2007). According to Ruhanen (2008), a fundamental shift in the public sector of tourism toward knowledge management is essential. Education, guides, instructional materials, and models of successful practices can overcome barriers to knowledge access, allowing tourism to achieve long-term development objectives.

Several studies have focused on how tourists contribute to NBT development. Araújo (2017) believed that the success of NBT depends on the effectiveness of environmental education and tourists’ satisfaction. As such, Lee and Jan (2018) recommended that NBT destination managers provide plans focusing on nature experiences, increasing tourists’ behavior intentions and environmental attitudes. Fernandes (2011) also confirmed that a lack of knowledge of tourist behavior leads to adverse ecological impacts in NBT destinations. Based on cognitive dissonance, Orams (1995) named interpretation an education-based management strategy to minimize tourism pressure on environmental resources. The spatial and temporal distribution of different activities in these areas is the managerial suggestion of Teles da Mota and Pickering (2021). Moreover, Fossgard and Fredman (2019) categorized the multifaceted aspects of NBT development factors such as adapting to guests’ needs, availability of resources, facilitating nature experiences, risk management, crowd management, and connections to the place.

NBT development generally requires specific situations and circumstances in most third-world countries. One of the main obstacles in emerging economies is centralized decision-making and planning controlled by the government (Larson & Poudyal, 2012). Also, as Reid & Schwab (2006) stated, obtaining legitimacy for innovative projects that demand an alternative political strategy is challenging and time-consuming in this context. Describing the weaknesses of the tourism planning process in less-developed countries, Tosun and Timothy (2001) believed that the participatory approach is an absent factor of NBT planning due to its significance in power and resource sharing. From a broader perspective, Karamustafa (2012) argued that low-income nations are compelled to embrace mass tourism to earn foreign exchange and create employment opportunities; then, implementing sustainable tourism policies may necessitate difficult political decisions because of the economic structure. Yfantidou and Matarazzo (2017) also attributed the failure to adhere to NBT principles in tourism policies to the significant macroeconomic challenges in developing communities.

NBT development may differ between developed and less developed destinations in many aspects. Less developed and developing regions often possess rich natural resources, which grants them a comparative advantage in NBT (OECD, 2008). However, there is a specific concern about the significance of biodiversity preservation in these

nations, and the direct and indirect dependence of conservation on NBT (Coldrey & Turpie, 2020). From an economic perspective, NBT plays diverse roles in developed and less developed destinations. NBT can catalyze green growth in developed regions and facilitate sustainable development (Shang et al., 2023). However, in less developed areas, it is seen as a significant source of income for local communities and rural households (Gupta et al., 2023). On the other hand, it may be challenging to achieve sustainability in NBT in less developed destinations that have a top-down regime (Torn, 2007). Meanwhile, developed countries have implemented strategies to diversify their tourism, resulting in the adaptation of infrastructure, policies and management approaches to promote the sustainability of NBT (Mushawemhuka et al., 2022).

While several studies examined the factors influencing NBT, the present study goes beyond merely reiterating previous findings. Ardabil province of Iran serves as an illustration of how this study distinguishes itself by focusing on the specific context of less-developed nature destinations. By looking deeply into this case, this study may reveal nuanced insights that may not have been adequately addressed in prior studies conducted in more general contexts. Identifying, analyzing and interpreting the key influencing factors is essential for developing tailored strategies and targeted interventions to address the challenges and opportunities of NBT inherent to destinations such as Iran.

Study context: Tourism development in Ardabil

Iran offers many natural attractions (Ghorbani et al., 2015). Located in the northwest of Iran (Fig 1) in a cold and mountainous region with a temperate climate (Sobhani et al., 2018), Ardabil province is one of the most promising NBT destinations. It has been among the desired destinations for domestic nature lovers. 47% of the total 8.121.837 visits were made from February to September 2019 from natural attractions in the province of Ardabil (Country Travel Coordination Center, 2019). This province has attracted great attention due to its climatic characteristics

and geomorphological conditions, including abundant mineral springs and thermal sources with unique therapeutic properties scattered throughout the province (Hoseinpour & Riyahi, 2018; Jafari & Salmani, 2018).

According to previous studies on Ardabil province (Rahmani et al., 2010; 2018; Sobhani, 2010; Tavakoli et al., 2014; Varesi et al., 2012), it seems that despite its rich history, it is more of a nature-based destination. In addition, policymakers have recognized tourism as the second most important development driver in this province,

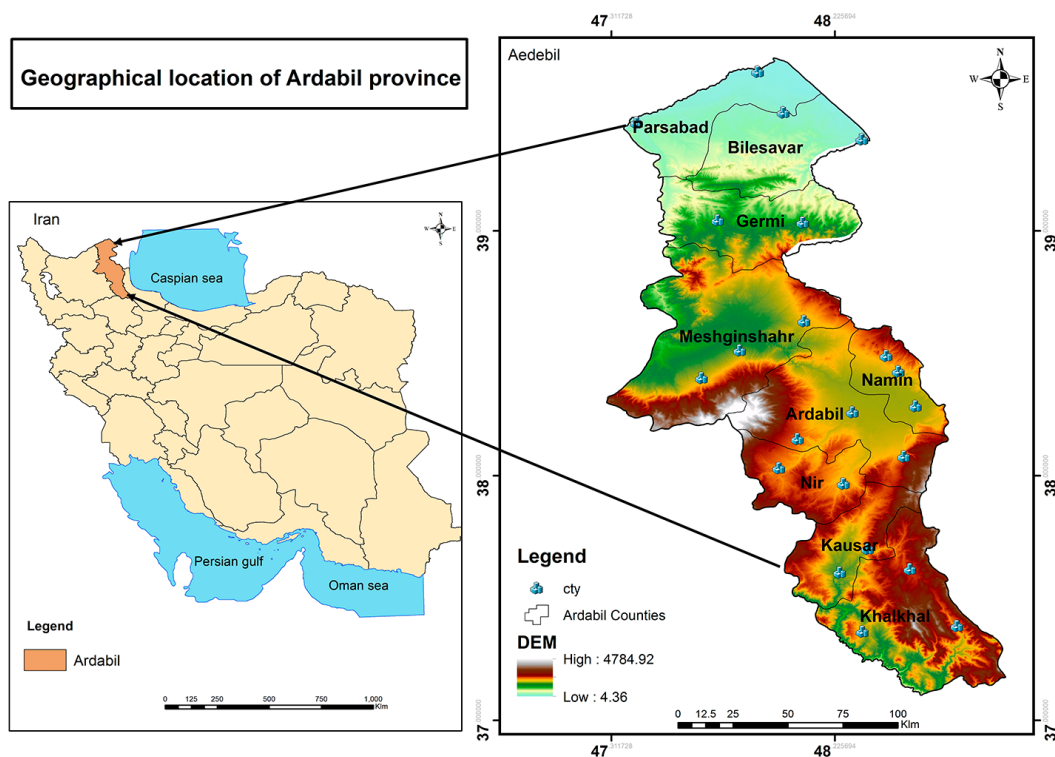


Figure 1. The location of Ardabil province
Source: authors

after agriculture. Despite their natural, economic, social, and cultural potential, rural areas of the province face widespread poverty and rural exclusion (Yarihesar et al., 2016). Ardabil suffers from a lack of tourist facil-

ities despite its real potential. Insufficient information on this destination has left the province isolated and has failed to exploit these resources for tourism development (Varesi et al., 2012).

Methodology

This study used a case study approach to thoroughly examine Ardabil province to comprehend the phenomenon of NBT development and gain insight into how it will develop (Fyall, 2014) to determine factors influencing the future development of NBT. Ardabil province was selected due to its considerable potential for NBT development in Iran. The data were collected through semi-structured interviews during a field trip to Ardabil from August to September 2021. Using purposive sampling, participants were chosen based on their knowledge and activities in the tourism field, specifically NBT in Ardabil. Qualitative research often uses this method to find and select participants with relevant information (Palinkas et al., 2015). The authors included participants in the sample who were believed to be worthy of inclusion (Taherdost, 2016) based on their relevant expertise and experience with NBT and their availability to participate. Table 1 summarizes the participants' characteristics.

The number of interviews was not predetermined. Therefore, data were collected until saturation was reached. Finally, 15 semi-structured interviews were done, and each interview lasted between 30 and 40 minutes. Participants agreed to be interviewed for this study

and allowed the recording of interviews, which were then transcribed. The interviews were carried out using an interview guide prepared by the researchers. The questions were open-ended, within predetermined thematic frameworks for identifying the factors influencing the future development of NBT, including the general understating of NBT in the region, future trends shaping its future and existing challenges and opportunities.

One of the authors conducted the interviews and then completely transcribed them. Second, the texts were carefully translated from Persian into English. A qualitative research method was used based on a thematic analysis. An inductive approach was adopted, which involved going line by line through the data and coding paragraphs or segments of text as the concepts evolved (Azungah, 2018). This results in creating categories in a framework that summarizes the primary data and reports the main themes and processes (Thomas, 2006). The data analysis process underwent the following phases: data familiarization; initial code creation; themes scanning; themes review: themes description and naming; and report production (Nowell et al., 2017).

Table 1. Participants' profile

Nº	Position	Specialties	Nº	Position	Specialties
P1	Assistant Professor	Tourism geography	P9	Assistant Professor	Geomorphology and NBT
P2	Assistant Professor	Geography, rural planning, and tourism development	P10	Travel agency manager	Cultural and nature-based tours
P3	Expert of Cultural heritage, Tourism and Handicraft Organization	Cultural tourism and NBT development	P11	Environmental NGO Manager	Environment, sustainability and NBT
P4	Tour operator manager	Nature-based tours	P12	Expert of Cultural heritage, Tourism and Handicraft Organization	NBT development
P5	Tour guide	Nature-based tours	P13	Associate Professor	Geomorphology and NBT
P6	Faculty member	Physical geography, climatology, and tourism	P14	NGO manager	Environment and responsible tourism
P7	Professor	Climatology and NBT	P15	Researcher	NBT and ecotourism development
P8	Tour guide	Nature-based tours			

To familiarize themselves with the text, the authors carefully read the transcripts and individually performed the initial coding according to the research objective. During four two-hour online sessions, the authors closely examined and discussed the initial codes to reach a consensus, identify concepts and finalize the themes. Subsequently, the authors reviewed the themes and interpreted the findings. Four experts from the participants reviewed the results and suggested revisions to increase the credibility of the findings. Additionally, direct quotations were cited as allowing the reader to enter the described situation, which is viewed as a validation process (Eldh et al., 2020).

Findings

The results of the thematic analysis are presented in Table 2. During the review of codes, the authors decided to exclude the general factors influencing tourism in Iran, such as international relations and infrastructure, because this study focuses on developing a specific type of tourism (NBT). After several steps of merging the raw codes, we arrived at 51 initial codes and 18 concepts. Finally, the analysis provided seven main factors in developing NBT.

Table 2. Thematic analysis of semi-structured interviews

Nº	Initial code	Concept	Theme
1	Changes in policies and strategies as a result of a change in management	Managerial stability	Tourism development requirements
2	Management dependency on political changes		
3	The inefficiency of the country's tourism organization	Tourism governance structure	
4	Undefined roles of each organization in tourism development		
5	Lack of regional financial capacity for tourism development	Budget allocation	
6	Insufficient programs to benefit from allocated budgets		
7	Lack of detailed guidelines for the development of NBT activities	Guidelines and instructions	
8	Not considering the region's carrying capacity requirements in tourism planning		
9	Managers' inability to evaluate natural potential	Specialized managerial skills	New managerial initiatives
10	Lack of specialized NBT management		
11	Insufficient attention to scientific studies, including systematic analyses of the tourism system and environmental baseline studies	Knowledge management	
12	Lack of information sharing between related organizations		
13	Importance of considering existing research for planning		
14	The importance of policymaking in developing NBT in the future	Forward-looking management	
15	Lack of in-depth studies for future tourism planning		
16	Need to determine the future vision for NBT		
17	Insufficient focus on tourism as a development priority	Prioritizing tourism	Political support and planning
18	Lack of government support for NBT		
19	Tourism is not seen as an option for economic development		
20	Lack of commitment to national land-use planning	Implementing plans	
21	Unimplemented Tourism Master Plan		
22	Governmental and non-governmental organizations' poor performance		
23	Need to revise provincial tourism development plans		
24	Lack of cooperation between public organizations	Integrated Management	
25	Lack of comprehensive, integrated, and long-term vision		
26	Lack of cooperation between neighboring provinces in developing tourism		
27	The importance of involving organizations alongside the Ministry of Cultural Heritage, Tourism, and Handicrafts	Local participation	
28	Need for NGOs' involvement in planning		
29	Lack of local's participation in tourism planning		
30	Need for local investment in NBT plans		

Nº	Initial code	Concept	Theme
31	Need to increase the length of stay of the tourist	Destination supply and demand management	Destination management
32	Increase in the number of domestic tourists due to rising temperatures in many other parts of Iran		
33	Strong seasonality		
34	Ignoring the importance of climate in tourism planning	Specific climatic potentials	
35	NBT potential due to suitable climate conditions		
36	Failure to identify the potential and activities of NBT	NBT resource management	
37	Availability of natural potential and attractiveness for NBT		
38	Lack of environmental policies	Sustainable approach to planning and policymaking	Sustainability
39	Improper use of natural potentials		
40	Lack of respect for rules governing the protection of natural resources		
41	Prioritizing economic interests	Environmental impact management	
42	Ignoring the human impacts on nature		
43	Degradation of the natural environment due to the increase in NBT activities	Climate change impact management	
44	Importance of climate change impacts on NBT development		
45	Importance of environmental vulnerability as a result of the effects of climate change		
46	Failure to accept natural resources as the country's national capital	Awareness raising and understanding	
47	Degradation of nature by local people		
48	Lack of education on respect for nature		
49	Need to raise awareness of the importance of environmental conservation among locals and tourists		
50	Need for local knowledge in the tourism planning process		
51	Need for awareness-raising on NBT features among managers		

Tourism development requirements

The participants addressed a few factors as prerequisites for developing NBT, allowing the authors to develop four concepts: tourism governance, managerial stability, budget allocation, and guidelines and instructions. In particular, the significance of tourism governance and its poor structure in Iran was highlighted by several interviewees. This issue is not only limited to the development of NBT. Respondents also underscored the need for managerial stability. Organizational changes due to personnel changes in an affiliated organization can obscure role clarity, resulting in conflict and increased ambiguity for the involved employees (Verlinden, Wynen, Kleizen, & Verhoest, 2022). A participant commented on the absence of tourism governance, stating,

“When the main organization is weak, the whole tourism system collapses. The roles are not fully defined for everyone” [P2].

Similarly, another participant argued the problem of managerial instability, stating,

“As people (managers) change, all policies and strategies change, which is our management system’s biggest drawback. We lack long-term planning and a common goal” [P7].

Budget allocation was also mentioned as one of the strategies for facilitating NBT development. Since individual provinces cannot independently allocate the required funds, it is necessary to apportion budgets specifically for specialized tourism projects while ensuring concomitant and long-term follow-up consultations and feedback. The authors believe that confusion in the task and agenda performance leads to passivity in using allocated financial resources. One of the respondents can be directly quoted in this regard:

“In the governor’s meetings, they say that the budget has been approved for the development of tourism, but they do not know how to spend it, and then they return the budget” [P13].

Most responses emphasized the importance of carefully considering the initiatives for destination management, particularly in areas where the natural resources have substantial value and where the discourse surrounding resil-

ience and the capacity to meet the host community's and tourists' needs outweighs that of other sources. In addition, several respondents noted that developing guidelines and instructions for NBT to preserve natural attractions is necessary. One respondent remarked:

"Rules for natural areas, including checking the carrying capacity of a natural area or identifying areas that are allowed for tourist entry or residence; none of which are defined" [P10].

New managerial initiatives

Due to the changing nature of tourism and the competitiveness of destinations, conventional management strategies are deemed ineffective for modern tourism development. Respondents highlighted that new management tools include specialized managerial skills, knowledge management, and forward-looking management, which are not limited to the development of NBT. However, a specialized branch of tourism necessitates distinctive management skills. One respondent stressed the need for specialization in NBT development, stating,

"In my opinion, tourism in Iran is not specialized, which means that you can easily apply for a travel agency license, and you can arrange any tour you want with that license, whether cultural, natural, religious, etc. This is a structural weakness" [P4].

In addition, a country's natural resources are recognized as valuable assets. However, it is necessary to transform them into attractions through knowledge management to create, organize, use, and share collective knowledge to gain a competitive advantage (Girard & Girard, 2015) and enhance the performance of national tourism organizations. Knowledge management represents an innovative approach to managing information and human resources that can contribute to the tourism industry's growth. However, some participants pointed out that managers tend to overlook existing knowledge. As one respondent stated:

"Studies and many projects are done in this area. Natural areas, for example, were explored to identify potentials, but these studies are not used for planning" [P15].

Effective management is formulating policies, making decisions with an eye toward the future, and considering the current situation. Consequently, forward-looking management is a key component of any country's development plan, seeking to identify gaps in previous plans and learn from them. As mentioned by a participant:

"If the management is based on the current situation, a favorable future for the future of NBT in the region cannot be imagined, but if the planning is based on new trends, Ardabil's ecotourism

potential is certainly very high and can play a major role in the local economy" [P6].

This quote emphasizes the importance of implementing sustainable development practices through up-to-date plans to respond more effectively to future challenges.

Political support and planning

Planning for tourism development requires a country's political will to prioritize tourism in developing and implementing plans. Several participants mentioned that developing tourism is not among the priorities of Iranian authorities at the macro level. Prioritizing land use requires communicating pertinent discussions with political and decision-making institutions. Decision-makers have not yet shifted from nonrenewable resources and have tied their current needs to past resources; it is unrealistic to anticipate that tourism development requirements will be met without the necessary political support. Little governmental support is available for NBT development. According to one respondent:

"I see a perfect future for NBT, as long as there is a belief among the authorities that tourism can take the place of oil revenues and that planning is done for its implementation, along with receiving funding" [P7].

In addition, an important issue in NBT planning is the follow-up, continuity, and cohesive connection between written documents for long-term development. Due to the sensitivity of tourism to change, planners and implementers must regularly update their knowledge and be prepared to face new challenges. In this regard, one respondent mentioned shortcomings in the implementation of tourism plans:

"Development plans have been written but have not yet been implemented / such as a comprehensive provincial plan that has expired should be revised" [P1].

Democratic approach

An essential factor influencing the development of NBT is the democratic approach to tourism management and planning, which includes concepts of integrated management and local participation. Multiple participants mentioned a lack of cooperation and involvement among relevant organizations in developing NBT, not only in Ardabil province but also at the national level. Effective and appropriate communication between organizations is lacking. Integration and synergy in provincial programs with shared objectives are of great importance. For example, one respondent highlighted the issue of independent operations by neighboring provinces, stating:

“We have problems with neighboring provinces. If the planning is integrated, it is in the interest of all three provinces, but each province operates independently, and the tourism profit is not distributed equally” [P12].

Participation in a democratic approach to tourism requires those affected by a decision to have the right to participate actively in the decision-making. Participants believe the local community's participation is essential in achieving NBT development goals. This can be attained through good education and justifying the shared goals between the visiting and host communities. One respondent elaborated on the importance of local participation:

“We try very hard to tie the interests of the local communities in some way with the protection of nature, which means that the local community knows that the livelihood that has been created for it is due to the preservation of this nature” [P14]

Destination management

Based on findings, destination supply and demand management, specific climatic potentials, and NBT resource management are all important in nature-based destination management. Managing the destination's supply and demand lengthens tourists' stays, allowing them to maximize their vacation opportunities while contributing to the local economy. However, one of the challenges associated with managing nature destinations is the issue of seasonality. The participants highlighted monitoring climate change and forecasting appropriate vacation times as potential solutions for managing destination supply and demand. One respondent described the seasonality phenomenon in Ardabil as follows:

“Another problem is the lack of growth in NBT in the region due to its seasonal nature, and unfortunately, we are not active in autumn and winter, and visits are generally one-day” [P5].

Ardabil province has diverse climates that have yet to be leveraged as potential for NBT development. Creating specialized intra-organizational working groups dedicated to assessing and identifying specific climatic potentials of each region can improve the quality of holiday management decision-making and planning. One respondent highlighted this significance:

“Temperature differences create different climates for us. We must use these climates by designing climate atlases and planning to have tourists every 12 months of the year” [P3].

Furthermore, in managing NBT destinations, the existence of potential is a double-edged sword. As tourism natural resource management is linked to sustainability in long-term planning, the more potential and resources

there are, the greater the need for attention and research. One respondent has pointed out the importance of resource management in NBT development, stating,

“One of the important factors in developing NBT is the use of resources. What more potential should we use to develop these areas better? For example, is it better to plan for NBT activities such as mountaineering, forest areas, or protected areas for development?” [P1].

Sustainability

The concept of sustainability in NBT should be considered in planning, policy formulation, and impact management of this type of tourism and climate change. The findings indicate that the depletion of natural resources in Ardabil is primarily attributed to the lack of well-defined plans and strategies. This issue arises as a result of inadequate coordination, confusion, and divergent objectives among executive entities. Meanwhile, the participants emphasized the need for a sustainable planning and policymaking approach for NBT. For example, one participant commented on the degradation of natural resources:

“... But in recent years, due to the lack of proper management of natural resources, unfortunately, our natural resources have been exposed to degradation and destruction” [P3].

Environmental impact management of NBT development is another important tool for reducing negative impacts on natural resources and improving the outdoor recreation experience. The absence of carry capacity studies in the province's macro-management for estimating the capacity of tourists in natural areas exacerbates behavioral anomalies in the destination environment. Tourists' non-pro-environmental behavior accelerates environmental degradation and eradicates the local community's indigenous culture (Tang et al., 2022). One participant brought up the destructive tourists behavior:

“Based on my experiences, I can point to the destructive effects that tourists make on nature, such as throwing garbage - disrupting the natural order of the environment - feeding animals” [P8].

Considering the importance of climate change impacts on natural areas and the dependence of nature-based activities on climatic conditions, managing the consequences of climate change is essential to developing NBT. According to participants, climate change's significant impacts on natural areas cannot be overstated, and if they are not properly managed, negative consequences could prevent NBT development. They mentioned that if climate change is managed rationally, various areas can benefit from tourism. Otherwise, these adverse effects on natural

areas may be a demotivating factor for NBT development. One participant mentioned climate change's dual role:

“The effects of climate change can be positive because it produces a new spatial flow, but in a sense, because there is not enough management, it can be a negative factor and challenge natural areas” [P6].

Awareness

According to the findings, awareness and understanding are the most critical determinants of the future development of NBT. Like the two sides of the same coin, to increase stakeholders' knowledge and understanding of the contributions of NBT development, improving the mechanisms of knowledge exchange and communication between managers and the local community is essential. According to several participants, a lack of understanding of how to approach the nation's capital from both policy-makers and the local community's perspectives resulted in destruction and a lack of concern for environmental protection. In addition, there is a disagreement between the government and locals regarding natural resources as the country's assets due to the absence of protection laws. One participant said:

“We have no law to protect natural resources, and everyone allows themselves to be treated in any way because they do not consider them a national capital” [P11].

Other participants believed that the lack of reasonable communication and accurate perception between the highest and lowest levels of the executive bodies is the primary cause of the recent destruction of the natural environment. There is a lack of awareness regarding preventing environmental degradation in Ardabil. Unawareness on the part of tourists regarding their responsibility to protect the environment is another issue contributing to environmental degradation in Ardabil's natural sites. Two respondents pointed out this challenge:

“Tourists are not aware that they are responsible for protecting the environment. We can see the destruction of the environment at its highest level in the region's nature tourism sites” [P14].

and

“We should act according to the principles and rules because natural attractions are vulnerable assets. Public awareness can be effective in this regard” [P9].

Discussion

This study attempted to identify the critical factors shaping NBT's future development. Every destination's future is unknown. Thus, destination managers must make decisions in a complex and uncertain setting, considering internal and external factors (Makian & Nematpour, 2021). Based on the findings, careful consideration must be given to the following factors to ensure that nature destinations are developed sustainably through NBT: *tourism development requirements, new managerial initiatives, political support and planning, democratic approach, destination management, sustainability, and awareness.*

This study suggests that the development of NBT in less-developed nature destinations depends on several development requirements, including managerial stability of the related organizations, an effective tourism governance structure, budget allocation, guidelines, and instructions. The importance of managerial stability has been emphasized in promoting tourism development (Ozguzel, 2020), which is in an administrative system's design, operation, and direction over time, contributing positively to the overall system's performance (O'Toole, 2004). The present study highlights the need for an effective tourism governance structure that enables industry and other private and public stakeholders to coordinate, cooperate, and collaborate in effective, rational decision-making and management processes (Islam et al., 2018). Meanwhile, as sup-

ported by the findings, Petursson and Kristofersson (2021) also discussed the impact of ambiguity on actors' roles in coordinating the governance system.

Based on the findings, budget allocation and management are critical in achieving optimal NBT development. The authors believe that the tourism budget allocation issues in Iran are related to the country's central, top-down budgeting system, which requires reform following the socio-economic needs of the society (Firouzfar, 2012). When it comes to managing natural resources, it is critical to provide concise guidelines and instructions to stakeholders of NBT, including tour operators, tour guides, locals, and tourists. Since various organizations manage natural resources in Iran, they are regarded as shared resources that anyone can utilize; therefore, it is essential to create local regulations and adopt international ones. Abou and Hady (2019) believed the institutional framework could be strengthened by establishing specific guidelines and rules for providing related products and services, especially at the supply level.

Considering the shift from undifferentiated mass tourism to more custom-tailored experiences, Monaco (2018) highlighted the need for new managerial initiatives in NBT development. This requires specialized managerial skills, knowledge and forward-looking management. To plan for the future of NBT in Ardabil province, local tour-

ism stakeholders should engage in foresight- a participatory knowledge gathering process- that identifies potential trends and factors affecting the sector locally (Makian & Nematpour, 2021). This can assist stakeholders in anticipating and adapting to change. The findings also highlighted the importance of knowledge sharing in promoting solutions for environmental preservation, as it allows tourism organizations to promote best practices, facilitate knowledge creation, and improve effectiveness and efficacy (Yiu & Law, 2014), when the organizational structure is subject to governance complexity (Gajdošík & Valeri, 2022), especially in countries like Iran.

The authors believe that the managerial-political body of the Iranian government is unaware of the significance of tourism research and the knowledge-generation roles of researchers; therefore, knowledge transfer and learning in Iranian NBT-related organizations necessitate the establishment of an appropriate knowledge-sharing context, allowing for the effectiveness and efficiency of various decision-making agendas. The importance of knowledge management in achieving sustainability in tourism is also pointed out by Ruhanen (2008). Remarkably, Rääkkönen et al. (2023) emphasized incorporating scientific knowledge and research into NBT activities to improve visitor experiences and promote sustainable tourism practices in more developed countries.

The findings also highlight the importance of political support. Tosun (2006) also emphasized this point, stating that many developing countries lack centric political will, necessitating the assistance and collaboration of national and international organizations to overcome this political barrier and facilitate the emergence of a participatory tourism development approach and NBT. Given political issues and the Iranian government's emphasis on economic growth over environmental protection, it may be challenging for Iran's national bodies to prioritize tourism simply in policymaking and planning. However, according to Tosun (2001), re-structuring the public administration system toward decentralization and community empowerment can strengthen the political will in developing countries for sustainable tourism development.

Importantly, the results highlight the necessity of local participation in NBT development. Meanwhile, according to Zielinski et al. (2021), local communities in developed countries are more capable of initiating or participating in tourism development due to their enhanced understanding of tourism, government policies, infrastructure, and dependence on domestic tourism. The findings also emphasize the significance of a democratic approach, as Teleda Mota and Pickering (2021) believe. This approach recognizes integrated management as an essential governance tool for the immediate needs of decision-makers for the future development of NBT, including active socio-environmental organizations and institutions. Integrated

management systems effectively interact with all tourism stakeholders, developing and implementing a series of internally correlated processes that result in the more prudent use of available resources (Ionescu et al., 2018). In addition, the right policy, structured control, and synergy between various parts of the decision-making sides will be the foundation for effective communication and, ultimately, the desired feedback for Iranian tourism authorities.

Furthermore, according to the findings, natural area destination management is a multifaceted process that includes destination supply and demand management, consideration of specific climatic potentials, and NBT resource management. One aspect of destination management is balancing supply and demand, including addressing seasonality and generating interest in nature-based destinations (Pearce, 2016). Destination managers can avoid over-tourism and ecosystem degradation by managing supply and demand. However, despite the increase in demand, there is a challenge in extending the length of tourists' stays in Ardabil, which must be considered in future planning. Meanwhile, natural attractions have unique characteristics, such as climatic potential, which can be considered in planning. Tkaczynski et al. (2015) believe that engaging in nature-based activities in a climate-variable destination is a major draw for tourists, influencing demand for specific activities. This is particularly relevant in the case of Ardabil, which has a diverse climate. Tourism planners in Iran can capitalize on these opportunities by designing a holiday calendar based on each region's climate. On the other hand, NBT resource management can be viewed as balancing the conservation of natural resources and promoting tourism development through identifying and prioritizing potentials. This management approach emphasizes the significance of considering an area's environmental characteristics to assess its tourism potential and guarantee that the natural resources are utilized sustainably. In addition, this highlights the necessity of evaluating natural resources when selecting the appropriate regions for NBT development, as also suggested by Rahayuningsih et al. (2016).

The future development of NBT requires considering the sustainability paradigm in policymaking and planning and managing environmental and climate change impacts. A sustainable approach to tourism policymaking, as also highlighted by Dhami et al. (2017), aligns with NBT planning, which prioritizes preserving natural resources. However, despite implementing tourism sustainability strategies in policymaking and planning, the prioritization of economic growth over the welfare of local communities and environmental preservation has been observed (Sørensen & Grindsted, 2021). Similar challenges exist in the province of Ardabil, where the development of NBT is highly dependent on the quality of regional en-

vironmental assets. Therefore, based on findings, environmental impact management is crucial in less developed destinations. In contrast, according to Faraji Vaghaslo et al. (2023), developed countries tend to prioritize environmental indicators due to heightened concerns regarding the environmental impacts of NBT development. A regulatory framework is thus necessary to evaluate the effects of NBT activities on the environment, enabling management plans to align with long-term sustainability goals (Canteiro et al., 2018).

On the other hand, climate change is a critical aspect of sustainability, and its related issues will cause nature-based destinations to lose attractiveness (Alizadeh, Mirzaei, & Dittmann, 2021). Accordingly, potential personal risks/threats to visitors caused by climate change impacts, as noted by De Urioste-Stone et al. (2016), may play a crucial role in travel behavior, such as selecting a tourism destination. As a result, given Iran's future warmer temperatures and drier zones (Rahimi et al., 2013), the findings suggest that climate change management be incorporated into sustainable development plans to reduce the risk associated with these impacts while maintaining the attractiveness of natural destinations.

Conclusion

This study constitutes a specialized and contextually nuanced contribution to the large discourse on NBT development. In conclusion, it is imperative to carefully consider several factors to ensure the sustainable development of nature destinations through NBT. These factors include the requirements for tourism development, implementation of new managerial initiatives, political support and planning, adoption of a democratic approach, effective destination management, promotion of sustainability and raising awareness. Therefore, the findings may have the potential to contribute to policy formulation, inform the decision-making processes and support the development of sustainable strategies for NBT in regions like Ardabil province of Iran. As awareness and understating are important factors for NBT development, the findings of this study enable a deeper understating of NBT complexities by the relevant Iranian authorities. Furthermore, it provides policymakers and managerial stakeholders with substantial information regarding the necessary macro- and micro-level requirements crucial for the holistic development of NBT.

In a non-democratic society, such as Iran, that lacks support for developing knowledge-sharing, it may be challenging to implement the solution of determining nature's guidelines and rules. In this instance, potential solutions may include grassroots activism, lobbying of government officials, and public education about the significance of nature-based sustainable development. Bringing the

The final concept in developing NBT involves raising awareness among managers, tourists, and locals about the benefits of conserving natural assets and developing tourism. Insufficient awareness has been identified as a barrier to tourism development in Iran, including a lack of awareness among locals (Aref, 2011) and inadequate environmental awareness (Kolahi et al., 2014). As Qiu et al. (2021) stated, positive relationships between visitors and nature may enhance visitors' awareness of the interdependence of human and nature's well-being, encouraging them to protect and use natural destinations from a sustainability perspective, thus promoting harmony between humans and nature. In contrast, Li et al. (2021) argue that developed nations, having already fulfilled their basic needs, exhibit a heightened level of awareness regarding preserving their natural environments for the benefit of future generations, demonstrating a greater understanding of sustainability issues. Therefore, young Iranians must receive education about environmentally conscious behavior in schools. In the meantime, in developing countries, NGOs play a significant role in training locals and tourists on relevant topics (Kennedy & Doran, 2009).

sub-society closer to the active and accountable body in the relevant departments can raise awareness among the affiliated institutions and the general public. All decisions must be encompassed by "environmental democracy" (Parola, 2013), giving locals a peaceful attitude toward nature. Another approach could be to work within the existing frameworks, such as industry associations or business groups, to encourage their members to adopt sustainable practices. Building networks and partnerships can create a culture of collaboration and information sharing that can help drive sustainable development. Ultimately, the solution will depend on the context and challenges of less-developed destinations.

Practical implications

The findings of this study have various practical implications. Regarding local engagement and knowledge sharing, it is recommended to foster community participation by organizing local and regional workshops and information sharing networks. It is suggested to develop specialized training programs for managers and operational planners to enhance their understanding of executive-level realities and improve decision-making within NBT development. Considering the importance of raising public awareness about the value of nature and environmental conservation, developing and widely distributing a clear code of conduct and guidelines for visitors is suggested,

highlighting respectful and environmentally conscious behaviors while enjoying NBT activities. On the other hand, for developing climate change adaptation strategies for NBT, one suggestion could be conducting thorough vulnerability assessments of NBT sites to identify specific climate-related risks and potential impacts, such as extreme weather events or shifts in biodiversity.

Limitations and avenues for future research

This study also has limitations. Firstly, the field of NBT in Iran is relatively niche, with few specialists available for consultation. Secondly, the findings are context-specific

and may be generalized to all nature-based destinations but only to those with the same characteristics as the case study. Thirdly, future studies are advised to employ alternative data collection methods as this may yield additional or supplementary results. Finally, while Iran is typically portrayed as a cultural destination, tourism authorities can use the findings of this study to diversify products and services based on the development of NBT, thereby enhancing the destination's competitive advantage. It is important to note that a greater understanding of the factors that influence the development process can aid in planning for the future.

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