



Examining Socio-Cultural Dimensions of Ecotourism and Sustainable Economic Development: Insights from the Border Regions of Ardabil Province

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Abstract

Background and Aim: Ecotourism, as a sustainable approach to utilizing natural resources, plays a significant role in improving the livelihoods and economic resilience of local communities. In border regions, this approach can, in addition to creating employment opportunities, enhance cultural identity and social interactions. This study examined the impact of cultural–social dimensions of ecotourism on the sustainable economic development of border residents in Ardabil Province, Iran. The novelty of this research lies in its localized focus on border areas and in analyzing the effects of cultural–social dimensions on sustainable economic indicators, an issue that has received limited attention in previous studies.

Methodology: This applied research employed a descriptive–analytical method. The statistical population consisted of residents of the border areas of Ardabil Province, with a sample size of 384 individuals determined using Cochran’s formula and selected through stratified random sampling. Data were collected via a structured questionnaire and analyzed using SPSS through descriptive statistics, Spearman’s correlation, and multiple regression analysis.

Results and Findings: The results indicated that all cultural–social components had a positive and significant relationship with sustainable economic development at the bivariate level. However, in the multivariate model, environmental education and awareness and institutional trust had the strongest positive effects, whereas cultural attitudes and social capital showed significant negative effects. Local participation also had a positive and significant, but weaker, effect compared to the correlations. The findings highlight the importance of investing in environmental education, strengthening institutional trust, and enhancing local participation to promote sustainable economic development. Moreover, the need to reform cultural approaches and improve social capital to align with sustainability goals was emphasized. Overall, the results can serve as a strategic basis for developing ecotourism-oriented policies in the country’s border regions.

Keywords: Ecotourism, Sustainable Economic Development, Socio-Cultural Dimensions, Sustainability, Border Regions, Ardabil Province.

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Extended Abstract

Introduction:

Ecotourism, as a sustainable development strategy, has the potential to balance environmental preservation with economic growth, particularly in border regions where socio-cultural factors play a decisive role in shaping community attitudes and behaviors. In Ardabil Province, Iran, the interplay of local participation, cultural perceptions, social capital, institutional trust, and environmental awareness creates a complex framework influencing the path toward sustainable economic development. This study aims to examine the impact of these socio-cultural dimensions and components of ecotourism on the economic sustainability of border communities, providing evidence-based insights for policymakers and practitioners.

Methodology:

The research employed a quantitative, descriptive-correlational design with a survey-based approach. A total of 386 valid questionnaires were collected from border residents of Ardabil Province using Cochran's formula to determine sample size. The measurement tool was developed based on archival research and prior validated studies, covering five socio-cultural components of ecotourism and one dependent variable—sustainable economic development. Data analysis included descriptive statistics, Spearman's correlation (due to non-normal data distribution), and multiple regression analysis, conducted using SPSS.

Results and Discussion:

Findings indicated that, at the bivariate level, all socio-cultural components were positively and significantly correlated with sustainable economic development, with environmental education and institutional trust showing the strongest associations. However, multiple regression analysis revealed shifts in both the magnitude and direction of effects. Environmental awareness ($\beta = 0.644$) and institutional trust ($\beta = 0.485$) emerged as the most influential positive predictors, while local participation retained a moderate but significant positive role ($\beta = 0.144$). Notably, cultural attitude ($\beta = -0.219$) and social capital ($\beta = -0.242$) exhibited significant negative effects after controlling for other variables, suggesting potential suppressor effects. These results underscore the importance of nuanced, multi-dimensional policy approaches, recognizing that some socio-cultural features may act as barriers under certain conditions.

Conclusion:

The study demonstrates that socio-cultural dimensions of ecotourism exert substantial, yet complex, influences on the sustainable economic development of Ardabil's border communities. Strengthening environmental education programs and institutional trust is critical for maximizing the economic benefits of ecotourism, while fostering inclusive local participation can ensure equitable benefit distribution. Conversely, cultural conservatism and closed social networks may hinder innovation and openness to tourism-led change, necessitating targeted interventions to align local values with sustainable development objectives. The results provide actionable guidance for integrating socio-cultural strategies into ecotourism development plans, ensuring economic resilience alongside environmental and cultural preservation.

Declarations

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Authors' Contribution

Authors contributed equally to the conceptualization and writing of the article. All of the authors approved the content of the manuscript and agreed on all aspects of the work declaration of competing interest none.

Conflict of Interest

The authors declare no conflict of interest.

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References

- Abdurakhmanova, A., & Ahrorov, F. (2025). The economic and social impacts of ecotourism on local employment and income: A case study of rural Samarkand, Uzbekistan. *Regional Science Policy & Practice*, 17(3), 100180. <https://doi.org/10.1016/j.rspp.2025.100180>
- Alamineh, G. A., Hussein, J. W., Endaweke, Y., & Tadesse, B. (2023). The local communities' perceptions on the social impact of tourism and its implication for sustainable development in Amhara regional state. *Heliyon*, 9(6). <https://www.cell.com/action/showPdf?pii=S2405-8440%2823%2904296-2>
- Atanga, R. A. (2019). Stakeholder views on sustainable community-based ecotourism: a case of the Paga crocodile ponds in Ghana. *Geo Journal of Tourism and Geosites*, 25(2), 321-333. <https://doi.org/10.30892/gtg.25204-362>.
- Austin, J., Stevenson, H., & Wei-Skillern, J. (2012). Social and commercial entrepreneurship: same, different, or both?. *Revista de Administração*, 47(3), 370-384. <https://doi.org/10.5700/rausp1055>
- Badkou, B., Ghasemi Siani, M., & Hoseini Sabegh. (2022). Investigating the impact of community-based tourism on development of rural communities from the perspective of the local community: A Case Study of Paveh Tourist Villages. *JOURNAL OF SOCIAL STUDIED IN TOURISM*, 9(18), 205-230. <https://sid.ir/paper/411485/fa> [In Persian]
- Bhatta, K. D. (2019). Exploring socio-cultural impacts of ecotourism in the Annapurna conservation area, Nepal. *Journal of Engineering Technology and Planning*, 1, 55-74. <http://dx.doi.org/10.3126/joetp.v1i0.38245>
- Choi, H. C., & Murray, I. (2010). Resident attitudes toward sustainable community tourism. *Journal of sustainable tourism*, 18(4), 575-594. <https://doi.org/10.1080/09669580903524852>
- da Costa, R. A., Almeida, L. F., Chim-Miki, A. F., & Brandao, F. (2025). Identifying social value in tourism: The role of sociocultural indicators. *Journal of Hospitality and Tourism Management*, 62, 148-162. <https://doi.org/10.1016/j.jhtm.2025.01.006>
- da Silva, A. E., Maracajá, K. F., Batalhão, A. C., Silva, V. F., & Borges, I. M. (2025). Ecotourism and Co-Management: Strengthening Socio-Ecological Resilience in Local Food Systems. *Sustainability*, 17(6), 2443. <https://doi.org/10.3390/su17062443>

- Esfandyari, F. , Zolghadr Khazineh Jadid, S. and nezafat taklhe, B. (2024). Investigating and identifying geotourism and geomorphological capacities effective in attracting tourism (Case study: Malekan city). *Journal of Sustainable Urban & Regional Development Studies (JSURDS)*, 5(4), 28-41.
https://www.srds.ir/article_211787.html?lang=en [In Persian]
- Eshun, G., & Tichaawa, T. M. (2019). Reconsidering participation for local community well-being in ecotourism in Ghana. *Geo Journal of Tourism and Geosites*, 27(4), 1184-1200. <https://doi.org/10.30892/gtg.27406-425>
- Fennell, D. A., & de Grosbois, D. (2023). Communicating sustainability and ecotourism principles by ecolodges: A global analysis. *Tourism Recreation Research*, 48(3), 333-351. <https://doi.org/10.1080/02508281.2021.1920225>
- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge university press.
- Ghasemi, J., Gholami, H., Afzali Groh, A., & Alambeigi, A. (2022). Analyzing the effects of ecotourism on empowering local communities (Case study: Savadkouh County). *Environmental Education and Sustainable Development*, 11(2), 87–106. <https://doi.org/10.30473/ee.2023.58331.2344> [In Persian]
- Gholipour, M. R., Cheraghali, M. R., & Sanaeipour, H. (2020). Designing an Ecotourism Entrepreneurship Development Model with a Social Welfare Approach in Tourism Target Villages. *Geography (Regional Planning)*, 10(41), 331–345. <https://dor.isc.ac/dor/20.1001.1.22286462.1399.11.1.20.4> [In Persian]
- Hammerfeldt, C. (2023). Social Relationships within Ecotourism Cooperation: Case of the ARK56 Network. <https://www.diva-portal.org/smash/get/diva2:1763583/FULLTEXT01.pdf>
- Hasana, U., Swain, S. K., George, B., & Silva, A. (2022). Management of ecological resources for sustainable tourism: A systematic review on community participation in ecotourism literature. *International Journal of Professional Business Review*, 7(1), e0269. https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID3948162_code1878699.pdf?abstractid=3948162&mirid=1
- Hasanpour, A., Soleymani, H., Gandomkar, A., & Ghafari, S R. (2022). Explaining the Optimal Model of Ecotourism Resorts in the Process of Achieving Rural Sustainable Development (Case Study: Moran Section of Garhi County of Ardabil Province). *JOURNAL OF THE STUDIES OF HUMAN SETTLEMENTS PLANNING (JOURNAL OF GEOGRAPHICAL LANDSCAPE)*, 17(2 (59)). <https://sid.ir/paper/1030800/fa> [In Persian]
- Hooshyar, M., Ahangari, I., & Javanbakht, N. (2021). Local Communities Participation in Wetland Ecotourism Development (Case study: International Kani Barazan Wetland of Mahabad). *Wetland Ecobiology (Wetland)*, 13(47), 51–60. <https://sid.ir/paper/1032042/fa> [In Persian]
- Irmawati & Hasnawati. (2024). Community-based Ecotourism Strategy for Local Economic Empowerment. *Journal of Education. Humaniora and Social Sciences (JEHSS)*, 7(2), 395-404. https://www.researchgate.net/publication/386285509_Community-based_Ecotourism_Strategy_for_Local_Economic_Empowerment
- Jiang, Y., Guo, Y., & Zhou, H. (2023). Residents’ perception of tourism impact, participation and support in destinations under the COVID-19 pandemic: The intermediary role of government trust. *Sustainability*, 15(3), 2513. <https://doi.org/10.3390/su15032513>
- Karimifar, S., Khatibi, S M R, & Beigdelirad, V. (2023). Meta-analysis of the most important factors for sustainable ecotourism development in Iran. *Future Cities Perspective Quarterly*, 4(4), 37–58. <http://jvfc.ir/article-1-277-fa.html> [In Persian]

- KC, B., & Kusi, R. (2025). Social capital approach to promote sustainable ecotourism in protected areas. *Current Issues in Tourism*, 1-6. <https://doi.org/10.1080/13683500.2025.2466038>
- Kim, K., Wang, Y., Shi, J., Guo, W., Zhou, Z., & Liu, Z. (2023). Structural relationship between ecotourism motivation, satisfaction, place attachment, and environmentally responsible behavior intention in nature-based camping. *Sustainability*, 15(11), 8668. <https://doi.org/10.3390/su15118668>
- Kumar, S., Hasija, N., Kumar, V., & Sageena, G. (2023). Ecotourism: a holistic assessment of environmental and socioeconomic effects towards sustainable development. *Current World Environment*, 18(2), 589. <http://dx.doi.org/10.12944/CWE.18.2.14>
- Mariani, L., Parisi, S. G., Cola, G., Laforteza, R., Colangelo, G., & Sanesi, G. (2016). Climatological analysis of the mitigating effect of vegetation on the urban heat island of Milan, Italy. *Science of the Total Environment*, 569, 762-773. <https://doi.org/10.1016/j.scitotenv.2016.06.111>
- Mosavi, M. N. and Kamelnia, R. (2026). Assessment of social resilience in villages around Urmia city. *Journal of Sustainable Urban & Regional Development Studies (JSURDS)*, 7(1), 136-151. https://www.srds.ir/article_219749.html?lang=en [In Persian]
- Naparin, M., & Karsudjono, A. J. (2025). Wetland conservation tourism marketing: the effects of perceived sustainability and biodiversity knowledge on environmental awareness and pro-environmental behavior in Bakut Island. *Cogent Social Sciences*, 11(1), 2486552. <https://doi.org/10.1080/23311886.2025.2486552>
- Pineda, F., Padilla, J., Granobles-Torres, J. C., Echeverri-Rubio, A., Botero, C. M., & Suarez, A. (2023). Community preferences for participating in ecotourism: A case study in a coastal lagoon in Colombia. *Environmental Challenges*, 11, 100713. <https://doi.org/10.1016/j.envc.2023.100713>
- Rachmawati, E., Hidayati, S., & Rahayuningsih, T. (2021). Community involvement and social empowerment in tourism development. *Media Konservasi*, 26(3), 193-201. <https://doi.org/10.29244/medkon.26.3.193-201>
- Razeghi Meleh, H., & Ebrahimi, G. (2018). Analysis of the causal relationship between social capital and sustainable tourism development (Case study: Sari city citizens). *Tourism Planning and Development*, 7 (25), 46-71. <https://doi.org/10.22080/jtpd.2018.1999> [In Persian]
- Ribeiro, M. A., Kim, Y. H., & Woosnam, K. M. (2020). Residents' perception and their support for tourism development: The case of South Korea. In *Handbook of research on resident and tourist perspectives on travel destinations* (pp. 140-165). IGI Global. <https://doi.org/10.4018/978-1-7998-3156-3.ch007>
- Rodrigues, A. P., Vieira, I., Fernandes, D., & Sousa, N. (2022). The role of public trust in fostering residents' support for tourism development: evidence from a Portuguese historic town. In *Eurasia Business and Economics Society Conference* (pp. 267-281). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-51212-4_15
- Sabourjanati, M., and Ghalandarian, I. (2022). Empowering Urban Ecotourism: A New approach to Development Local Communities Empowerment. *Quarterly Journals of Urban and Regional Development Planning*, 7(23), 87-120. <https://doi.org/10.22054/urdp.2022.69232.1466> [In Persian]
- Samal, R., & Dash, M. (2023). Ecotourism, biodiversity conservation and livelihoods: Understanding the convergence and divergence. *International Journal of Geoheritage and Parks*, 11(1), 1-20. <https://doi.org/10.1016/j.ijgeop.2022.11.001>
- Sepahvand, F., Karimi, S., & Gholamrezaei, S. (2021). Strategies for developing sustainable ecotourism based on the capabilities of local communities in the Kahman tourist area

- in Selsela County. *Tourism and Development*, 10 (2), 185-199. <https://doi.org/10.22034/jtd.2020.227007.2018> [In Persian]
- Shi, H., & Chen, W. (2024). Environmental values, face, and ecotourism intention in China: The mediating role of ecotourism attitude and the moderating role of emotional intelligence. *Journal of Hospitality and Tourism Management*, 61, 101-114. <https://doi.org/10.1016/j.jhtm.2024.09.008>
- Situmorang, D. B. M., & Mirzanti, I. R. (2012). Social entrepreneurship to develop ecotourism. *Procedia Economics and Finance*, 4, 398-405. [https://doi.org/10.1016/S2212-5671\(12\)00354-1](https://doi.org/10.1016/S2212-5671(12)00354-1)
- Sobhani, P., Esmailzadeh, H., Sadeghi, S. M. M., Wolf, I. D., & Deljouei, A. (2022). Relationship analysis of local community participation in sustainable ecotourism development in protected areas, Iran. *Land*, 11(10), 1871. <https://doi.org/10.3390/land11101871>
- Stojanović, T., Trišić, I., Brđanin, E., Štetić, S., Nechita, F., & Candrea, A. N. (2024). Natural and sociocultural values of a tourism destination in the function of sustainable tourism development—An example of a protected area. *Sustainability*, 16(2), 759. <https://doi.org/10.3390/su16020759>
- Surya, A. P. (2024). The role of ecotourism in promoting sustainable economic development in Indonesia. *Journal of World Economy*, 3(1), 43-48. <https://www.pioneerpublisher.com/jwe/article/view/703>
- Tien, N. D., Duyen, T. N. L., Huyen, N. T. T., Anh, P. Q., Oanh, N. T., Van Tich, V., ... & Trang, V. H. (2024). Community-based ecotourism for sustainability: An evaluative analysis of Binh Son district, Quang Ngai province in Vietnam. *Social Sciences & Humanities Open*, 9, 100807. <https://doi.org/10.1016/j.ssaho.2024.100807>
- Tolai, S., Soleimany, M., Jahani Dowlatabad, R., & Jahani Dowlatabad, E. (2017). The role of participation in sustainable tourism industry (Case study: Sarein). *Human Geography Research*, 49(1), 95–113. <https://doi.org/10.22059/jhgr.2017.53814> [In Persian]
- Üzülmez, M., Ercan İştin, A., & Barakazı, E. (2023). Environmental awareness, ecotourism awareness and ecotourism perception of tourist guides. *Sustainability*, 15(16), 12616. <https://doi.org/10.3390/su151612616>
- Watson, R. T., & Mathew, S. K. (2021). *Capital, systems, and objects*. Springer.
- Widiartanto, Wahyudi, F. E., Santoso, R. S. S., & Priyotomo. (2022). The Role of Social Capital in Community Based Ecotourism: A Case of Batang District, Central Java, Indonesia. *Research Horizon*, 2(5), 511–531. <https://doi.org/10.54518/rh.2.5.2022.511-531>
- Wondirad, A. (2019). Does ecotourism contribute to sustainable destination development, or is it just a marketing hoax? Analyzing twenty-five years contested journey of ecotourism through a meta-analysis of tourism journal publications. *Asia Pacific Journal of Tourism Research*, 24(11), 1047-1065. <https://doi.org/10.1080/10941665.2019.1665557>
- Xaba, F., & Adanlawo, E. F. (2024). The potential role of ecotourism in sustainable development: A systematic review. *Journal of Ecohumanism*, 3(4), 3356-3367. <https://doi.org/10.62754/joe.v3i4.3852>