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A Qualitative Meta-Analysis of Factors Influencing the Empowerment of Rural Women

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Abstract

Purpose- Empowering women is essential for the development of any country across economic, social, political, and other dimensions. When a woman is empowered, she gains the opportunity to better understand and advocate for her rights, thereby enhancing her economic and social standing. Accordingly, the aim of this study is to identify and examine the most significant factors influencing the empowerment of rural women and to classify these factors based on their relative importance using a qualitative meta-analysis approach.

Design/methodology/approach- In this study, from a total of 73 published articles on the topic of rural women's empowerment, 48 relevant articles were selected based on their alignment with the research objectives and their use of fieldwork and literature-based methodologies. The timeframe for the domestic studies ranged from 2012 to and for international studies from 2011 to 2024. Initially, the research problem and objectives were defined, and then, among the available studies, those meeting the inclusion criteria were sampled. The data extracted from these studies were then collected, coded, and categorized based on the research aims. Ultimately, the findings were standardized to a common scale to allow for comparison. The geographical scope of the selected studies included Iran, as well as countries in Asia, Africa, the Middle East, and Latin America.

Findings- The results indicate that in the economic domain, income generation (17.1%), employment (13.8%), access to loans and banking facilities, and land ownership (9.2%) are among the most influential factors. In the socio-cultural domain, factors such as literacy and education (8.5%), cultural norms (7.6%), and knowledge and skills (6.7%) play a critical role. In the psychological domain, self-confidence (14.4%), the ability to make independent choices (9.8%), and self-esteem (8.5%) were key determinants. Politically, mobility freedom (26.1%), women's participation in managerial and governmental positions (19.1%), and restrictive governmental regulations (14.2%) were the most significant. Among these categories, political factors accounted for the largest share (12.4%), followed by economic (5.5%), psychological (3.5%), and socio-cultural (3.2%) factors in contributing to the overall empowerment of women.

Originality / Value- The findings of this study can contribute to identifying the most critical factors affecting the empowerment of rural women and can inform the development of effective support policies. Such policies may include promoting gender awareness through mass media, forming rural self-help groups through governmental and non-governmental organizations to provide social and economic support and etc.

Keywords: Empowerment, Rural women, Indicators, Qualitative Meta-Analysis.

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1. Introduction

According to international reports, rural women in developing countries face unfavorable conditions across various indicators such as poverty, literacy, employment, and access to resources and job opportunities. Therefore, strategies aimed at creating diverse opportunities for these women—as half of the population and human capital—through their engagement in different sectors, can contribute to their empowerment and, ultimately, to community development (Ahmadi & Fakour, 2019). Today, women's empowerment has become a higher priority in the global development agenda and is strongly linked to multiple development outcomes. Achieving gender equality and empowering women is the fifth Sustainable Development Goal (SDG), which is set to be realized by 2030 (Soharwardi & Ahmad, 2020). Women's empowerment has emerged as a focal point in the programs and activities of the United Nations and other governmental and non-governmental organizations. Consequently, it has also become a major concern for social scientists, policymakers, bureaucrats, and researchers. However, there is no consensus among scholars on the exact definition of the term “empowerment.” Different academics have attempted to define the concept from their own perspectives. The term “empowerment” carries diverse meanings across socio-cultural, economic, and political contexts. Exploring local interpretations of empowerment across the globe reveals a wide range of definitions. These definitions often encompass concepts such as power, self-control, self-reliance, personal choice, the ability to fight for one's rights, independence, decision-making power, and freedom. Such definitions are deeply embedded in local value systems and belief structures. One of the most common interpretations of empowerment refers to increasing the power of disadvantaged groups to a level that becomes comparable to that of dominant groups (Mandal, 2013).

The empowerment of women is a dynamic and multidimensional process that enables women to gain control over their lives and strengthens their agency (Mazaheri et al., 2015). It improves women's quality of life and enhances their ability to participate in decision-making processes across social, cultural, and economic dimensions, contributing to their present and future well-being

(Falahati et al., 2020). In developing countries, women constitute a significant portion of the rural population and assume diverse roles and responsibilities. Rural women are active both within the household and in outdoor activities such as agriculture, horticulture, animal husbandry, and handicrafts (Noori & Alimohammadi, 2009, cited in Mamsen, 1995). Compared to their male counterparts, women generally have lower levels of education, earn less income, possess fewer assets, and have less economic control. This disparity disrupts various aspects of their lives and subjects them to poor health, limited educational and occupational opportunities, and reduced autonomy over personal choices (Saluja et al., 2023). As a result, women often suffer from exclusion and marginalization, missing out on employment, education, healthcare, and justice, due in part to patriarchal socio-cultural norms that limit their access to development and empowerment opportunities (Isran & Isran, 2012).

Thus, gender norms and cultural barriers often constrain women's participation in decision-making processes and their access to resources, hindering both their empowerment and their involvement in rural development (Ali & Kamraju, 2023). Ignoring women's roles and perspectives restricts their participation in development programs (Jabeen et al., 2020). Active participation of women in rural affairs first requires their empowerment. Accordingly, in order for women to realize their capabilities and potential, they must engage with the various factors that affect their empowerment in line with relevant policies and programs (Gholami Avati et al., 2010, cited in Global Entrepreneurship Monitor, 2002). Once empowered, women are able to make independent decisions based on their full potential, thereby improving their family's quality of life and becoming productive members of society (Sabir & Majid, 2023).

Given the current circumstances and the abundance of studies conducted on the empowerment of rural women and its multiple dimensions—as well as the diversity of theories on this subject—there is a clear need for a comprehensive review of the literature on women's empowerment. Identifying the key factors affecting the empowerment of rural women can help recognize existing obstacles and propose practical solutions. Accordingly, the aim of this research is to identify the most influential factors contributing to the empowerment of rural women across different dimensions, through a review of studies conducted

in Iran from 2012 to 2024 and international studies from 2011 to 2024. For this purpose, researchers' viewpoints and findings have been reanalyzed using a qualitative meta-analysis method to extract the most significant factors influencing rural women's empowerment.

2. Theoretical Framework

Empowerment has been defined in a variety of ways. It is generally understood as a process through which individuals progress in overcoming barriers and engaging in activities that enable them to determine their own destiny (Hanaysha & Tahir, 2016). Women's empowerment, specifically, refers to gaining the ability to think and act freely, fostering a sense of self-worth, believing in the capacity to bring about desired changes, exercising the right to make choices and control one's life, realizing one's full potential, and achieving equality within society (Phala & Mukonza, 2021).

The American Oxford Dictionary defines women's empowerment as making women stronger and more confident in controlling their lives and asserting their rights—that is, giving them the power to confront the challenges of being women in society. For centuries, women were not equal to men in many respects. They were denied the right to vote, own property, or work in many professions. Having emerged from that dark era, women now possess greater agency to pursue any path they choose. This means they have the freedom to determine their future, choose a career, vote, and do anything a man can do. When we speak of women's empowerment today, we refer to women who assume leadership roles. Whereas in the past women were subordinate, empowerment now implies increased spiritual, political, social, and economic power (Waghmode & Kalyan, 2014).

Empowerment is therefore a multidimensional process comprising economic, psychological, political, social, and cultural aspects. Economic empowerment is defined as the ability of women to earn sufficient income to lead a decent life and meet their basic needs (Ebad-Allah et al., 2022). It encompasses access to credit, increased household asset ownership, control over financial affairs, and financial autonomy (Dalal et al., 2012). Women's access to credit and savings enhances their economic roles and decision-making power in matters related to finance (Marinova, 2010). Common indicators used to assess women's economic empowerment include income, savings, access to and control over markets, raw materials,

equipment, capital, credit, and facilities (Katsekpore et al., 2024).

Social empowerment helps women develop a sense of independence and self-confidence, enabling both individual and collective action toward their goals (Jose et al., 2021). It is a process that fosters autonomy, power, confidence, and other necessary tools for initiating change and paving the way for a better future. It occurs at both individual and collective levels and supports marginalized groups—including women—who lack access to basic needs, healthcare, education, and more. Social empowerment also involves transforming social relationships, institutions, and discourses that marginalize the poor and perpetuate poverty (Sen et al., 2023).

Psychological empowerment refers to enhancing women's self-belief in achieving their goals. It differs from actual power or decision-making and instead reflects how women internally evaluate their ability to reach their goals (Cattaneo & Chapman, 2010, p. 646). It is characterized by indicators such as intellectual independence, increased self-esteem, a sense of personal power, and enhanced self-efficacy (Kwaku Kyem, 2004). Through this process, women develop greater autonomy and self-confidence. As their confidence grows, they become more capable of defending their rights and gaining control over resources. They learn to recognize their internal desires and needs and develop the necessary skills to fulfill them (Fallsoleyman et al., 2023).

Political empowerment of women is defined as a process of increasing their capacity through expanded choices, agency, and participation in social decision-making processes. Political empowerment of women is considered a tool for economic development as it enhances institutional quality (Awoa et al., 2022). It is a process that enables women to increase their mobility, break social isolation, strengthen their self-confidence and societal roles, and establish a presence in public spaces (Israr et al., 2020).

Several theories have been proposed to conceptualize women's empowerment. One such theory is the Cultural and Social Differences Theory, which argues that in addition to addressing existing inequalities, women must simultaneously question and resist the underlying structures that perpetuate inequality across different levels (Tarasi et al., 2019). According to this theory, cultural norms—internalized through socialization—frame politics as a male domain, assigning women's

responsibilities solely to household and family roles. These expectations constitute significant barriers to women's empowerment in various spheres of society (Charmchian Langerodi & Alibaygi, 2013).

Given these persistent inequalities and barriers, gender equality has emerged as a strategic approach to integrating the concerns and experiences of both women and men into all political, economic, and social policies. This ensures that both genders benefit equally, preventing the continuation of inequality. Accordingly, the empowerment of women and the achievement of gender equality have become crucial issues (UN Women, 2020). Gender equality increases productivity, promotes innovation, and strengthens inclusive and sustainable development. It also improves health and education outcomes and boosts political and social participation. Recognizing its importance, many organizations and development-oriented governments have pursued policies and programs aimed at reducing gender disparities. These efforts seek to empower women, promote their rights, and create an enabling environment for their full and equal participation in all aspects of society (Jimmy & Olsson, 2023). At the same time, empowering women requires establishing necessary infrastructures to support their development across economic, social, cultural, political, and educational domains, enhancing their capacity for choice, self-reliance, and control over their own lives (Niaghi, 2019).

One such infrastructure is seen as a prerequisite for sustainable development, which emphasizes the real and active participation of women alongside men in development processes. Without question, women's full participation depends on their empowerment, which serves as the foundation for their involvement in development (Mozaffari, 2015).

Among the most influential frameworks is feminist theory, which attributes women's lower societal status to limited opportunities, family constraints, and lack of educational resources. Feminists argue that, since gender equality is a recognized right, women must be entitled to legal protections, employment, education, and asset ownership (Sadeghi et al., 2011, citing Valarie, 1999). They further advocate for equal opportunities in all domains, asserting that men must revise their attitudes and perceptions about traditional female roles (Sadeghi et al., 2011, citing Sargent, 1999). In this view, empowerment means enabling women to access resources and exert greater control over their lives—leading to enhanced independence, self-

confidence (Seifi, 2020), and self-esteem, which improves their self-image (Ugbomeh, 2001).

In the realm of psychological empowerment, Spreitzer's theory stands out. It conceptualizes psychological empowerment as a motivational construct comprising four core cognitive dimensions: Meaning – the extent to which individuals perceive their work as meaningful. Competence – the belief in one's capability, skills, and abilities to perform tasks, helping women trust in their own decision-making capacity (Monje-Amor et al., 2021). Self-determination – the autonomy to decide how to perform tasks, associated with freedom and independence. Impact – the perceived degree of influence one has on strategic, administrative, or operational outcomes (Oliveira et al., 2023). This theory highlights that women gain confidence, power, and knowledge to collaborate with others who share similar goals for societal change (Hibbs, 2022). Women come to believe that with confidence, competence, and self-efficacy, they can increase their motivation, personal well-being, and engagement in national programs such as education, politics, health, agriculture, and development (Manuere & Phiri, 2018). Another prominent model is Malhotra's framework, which identifies two key dimensions of women's empowerment: resources/capacities and agency. The first dimension, resources, can be intangible, human, or social, including education, wealth, employment, social connections, and access opportunities (Kabeer, 2001). These are considered prerequisites for empowerment and the first step toward expanding women's choices. Resources are thus foundational capital that facilitate the empowerment process and protect women against unexpected life challenges (Kalantari et al., 2010, citing Alderman, 1997; Agarwal, 1997).

Agency refers to the capacity to make strategic life choices and control over critical resources and decisions. Malhotra's model emphasizes that agency can be strengthened through reforms in: Social structures (e.g., access to higher education and improved literacy rates among women), Legal systems (e.g., rights to property, divorce, and legal protection), Economic frameworks (e.g., access to well-paying jobs and leadership positions), Political institutions (e.g., voting rights and female representation in government at local and national levels) (Malhotra et al., 2002).

To measure agency, assets are used as indicators. These include human, material, social, political, and psychological assets (Alsop & Heinsohn, 2005).

Material (financial) assets—such as capital, credit, and raw materials—can lead to bank loans, input acquisition, new business development, and increased income and savings. This fosters women's financial independence, decision-making power, and overall empowerment (Khalvati et al., 2007, citing Alsop & Heinsohn, 2005). Social (human) assets—such as education, awareness, and skill development—enhance women's knowledge and abilities, leading to increased psychological assets, including self-confidence, self-worth, and the elimination of traditional stigmas. This encourages participation in collective activities and the articulation of personal aspirations. Political assets—including voting rights, civil liberties, and participation in formal and informal groups—enable women's political empowerment (Khalvati et al., 2007). According to Kabeer (1999), resources and agency together form what Sen refers to as "capabilities"—the ability to live the life one values and achieve meaningful goals. Political assets, such as the right to vote, civil liberties, membership in formal and informal groups, political participation, and presence in political offices, play a crucial role in empowering women (Khalvati et al., 2007). Together, **resources** and agency form what Sen refers to as *capabilities*—that is, the ability of women to live the kind of life they value and to pursue meaningful ways of being and doing (Kabeer, 1999). In Alsop and Heinsohn's empowerment framework, in addition to agency, a third dimension known as the structure of opportunity is introduced. This structure is defined as the formal and informal institutional contexts in which individuals operate. These contextual factors interact with resources and agency to produce varying degrees of empowerment. Within this framework, women utilize their *choice opportunities* and subsequently evaluate the outcomes of these choices. The structure of opportunity is shaped by the presence and performance of formal and informal institutions and legal systems. It encompasses laws, regulatory frameworks, and prevailing social norms, all of which determine whether individuals or groups have access to assets and whether they are allowed to make use of them (Alsop & Heinsohn, 2005).

The structure of opportunity includes formal and informal institutions such as the state, society, and the labor market. According to the conceptual model proposed in this theory, increasing agency is made possible through the accumulation of various

types of assets: Social and human assets such as education, schooling, and skill development; Financial assets including income, employment, savings, and investment; Psychological assets such as self-confidence, self-belief, and a sense of self-worth; Political assets including voting rights, and holding positions in political and governmental institutions. These assets are developed and exercised within the opportunity structure—an arena in which formal and informal institutions interact and operate. Governments play a critical role in empowering women through mechanisms of justice, policymaking, and public service delivery. Under the justice dimension, governments empower women by providing access to institutional mechanisms—both formal and informal—for addressing problems, enhancing women's awareness of organizations that protect their rights, and ensuring fairness in how these organizations engage with women (Figure 1). In the domains of policy and service provision, governments play a significant role in empowering rural women by facilitating their participation in electoral activities, granting them the right to vote, and providing access to various essential services. These include healthcare, education, recreational opportunities, public utilities, and other community services, all of which contribute meaningfully to the empowerment process. At the family level, the head of the household—typically the father or husband—can enhance women's empowerment by granting them autonomy in decision-making and encouraging their participation in family and social matters. Providing women with freedom of movement to access healthcare centers, schools, workshops, and training courses, as well as supporting their involvement in diverse activities, can significantly contribute to their sense of agency and empowerment. Within the community, the degree of women's participation in social activities and their influence in community-level decision-making processes directly affects the empowerment of rural women. The market dimension also plays a crucial role and encompasses labor, financial, and goods markets: In the financial market, women's access to income, loans, and credit facilities—as well as their ability to save and invest across various sectors—enables them to purchase agricultural inputs, raw materials, and consumer goods. This purchasing power, referred to as the "goods dimension," fosters their autonomy and financial empowerment. In the goods market, rural

women's and girls' access to inheritance also plays a key role in enhancing their empowerment, offering them control over economic resources and property. In the labor market, the division of labor

and responsibilities, the extent and volume of household duties, and the pursuit of income-generating home-based or small-scale enterprises are all significant contributors to women's empowerment. (Figure 1).

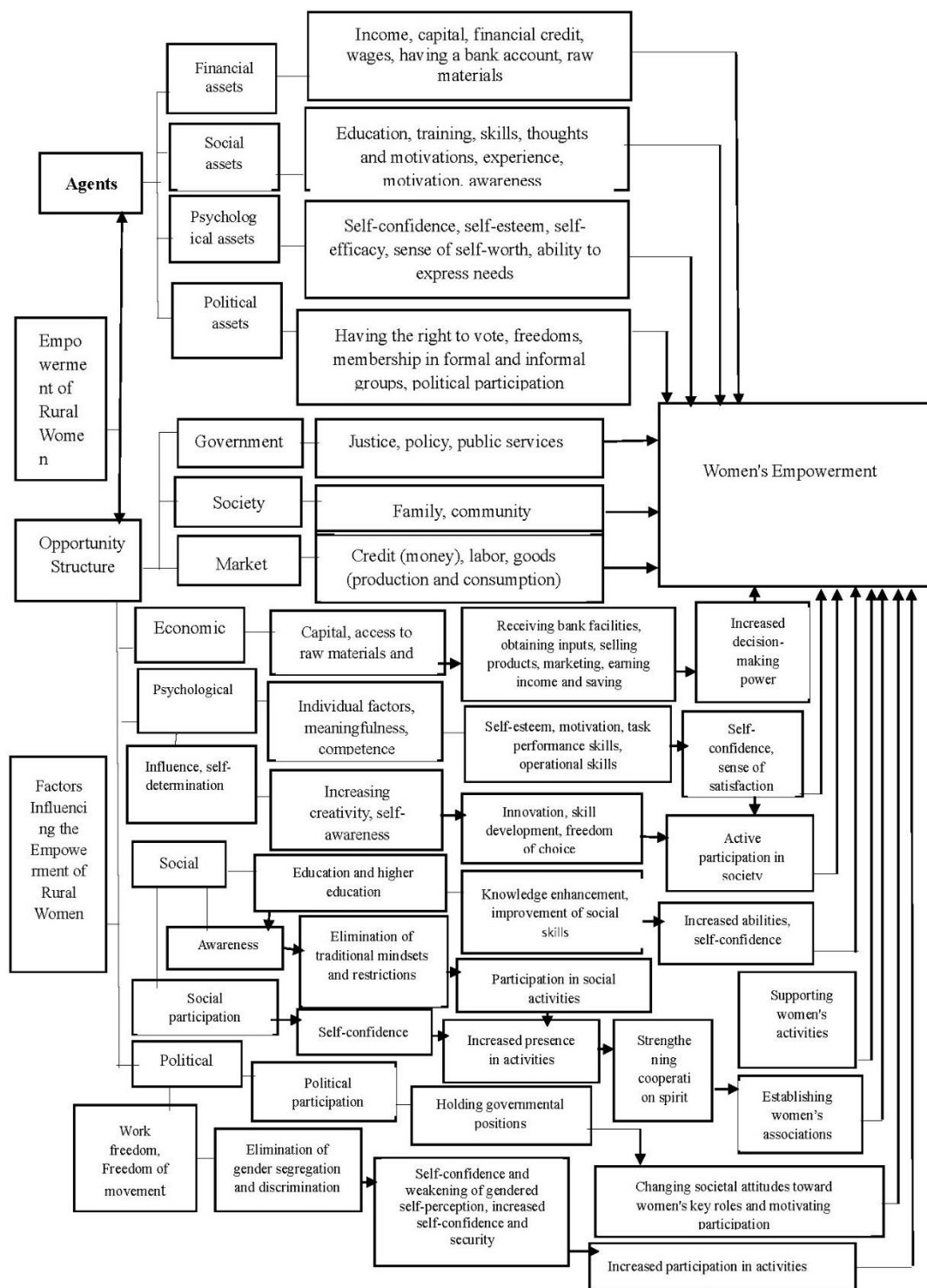


Figure 1. Conceptual Model of the Research

3. Methodology

This study employs a combination of library-based (documentary) research and qualitative meta-analysis. The documentary method was used to review the background, literature, theoretical foundations, and relevant conceptual frameworks. The qualitative meta-analysis method involves synthesizing the results of multiple studies to derive new, integrated findings (Shiyani & Zare, 2019, p. 79, citing Mohammadi, 2019). In other words, meta-analysis gathers previous research on a particular topic, analyzes, and classifies them accordingly. This approach converts the results of various studies into a common scale and then applies preliminary and limited data analysis techniques. In this method, the research problem is first identified and the objective of the study is clarified. Then, from the body of existing studies, those that align with the research criteria are selected as samples. The data extracted from these studies are collected, coded, and categorized based on the research objectives. Finally, the results are standardized to allow for meaningful comparisons

(Parhizkar et al., 2023, p. 904, citing the Statistical Analysis Academy of Iran, 2021). The study covers a time span from 2012 to 2022 (1391–1401 in the Iranian calendar) and 2011 to 2024 for international research. Data were gathered from various sources, including the Scientific Information Database (SID), the Comprehensive Humanities Portal, the Noor Specialized Journals Database (Noormags), and Google Scholar. Subsequently, studies on women's empowerment—particularly rural women's empowerment—were reviewed. The geographic scope of the selected research includes Iran as well as countries in Asia, Africa, the Middle East, and Latin America. The statistical population of this research consists of articles that address the empowerment of rural women and identify influencing factors. In total, 73 articles were initially reviewed. In the first stage, 10 articles were excluded due to lack of direct relevance. In the second stage, 15 articles were eliminated due to topic duplication. Ultimately, 48 articles were selected for final analysis (titles of the selected articles are listed in Table 1).

Table 1. List of studies utilized in the meta-analysis

Title of Study	Author(s)	Year
Qualitative analysis of factors influencing rural women's empowerment in Ilam province	Naseri & Asgari	2024
Identification and analysis of dimensions and components of rural women's empowerment using mixed methods	Zafarinasab, Golzari, Nourian, & Razavi	2023
Evaluation of empowerment level of rural women in Kermanshah	Azimi, Alibaygi & Papzan	2022
Political and social empowerment of women in South Caucasus in the post-Soviet era	Atai & Zangeneh	2021
Meta-synthesis of factors affecting rural women's empowerment	Zafarinasab, Golzari, Nourian, & Razavi	2021
Economic and social empowerment of rural women in Zanjan province	Moghaddas Farimani, Mirtorabi & Ghaemmaghami	2020
Role of rural women's empowerment in analyzing socio-economic-cultural factors	Falahati, Ghasemi, Badsar	2020
Internal and external factors influencing rural women's empowerment (Kermanshah & Hamedan)	Mohammadi, Avatefi-Akmal, Zamiri-Arasteh & Rahimian	2019
Drivers of rural women's empowerment: Case study of Zanjan	Tarasi, Karimzadeh & Aghayri Hir	2019
Strategic planning for psychological empowerment of rural women	Ghasemi, Alizadeh & Ghandehari	2018
Evaluation of factors influencing rural women's empowerment in Esfahan	Abolfathzadeh, Yousefi, MozaffarAmini	2016
Explaining factors influencing women's empowerment in rural settlement development	Shafiei Sabet & Yousefi	2016
Social and psychological factors affecting empowerment of women heads of households (Abas Abad)	Mojarradi & Badsar	2016
Identification of socio-economic factors affecting rural women's empowerment (Rostam)	Qanbari & Ansari	2015
Occupational empowerment factors of rural women (Ilam)	Seyedeh, Eshraqhi Samani & Poursaied	2015
Survey and analysis of components affecting rural women's empowerment (Esfahan)	Barghi & Qanbari	2014

Title of Study	Author(s)	Year
Economic empowerment of women and girls in Africa, Latin America and Caribbean	Safavi, Zamiran, Maarefvand & Arshi	2014
Psychological empowerment of rural women	Charmchian Langerodi & Alibaygi	2013
Assessing economic and social empowerment of rural women	Sadi, Shabanali Fami & Latifi	2012
Empowerment of women: Oku Forest Area, Cameroon	Foncha & Eforkwe	2024
Women's empowerment models in Indonesian villages: role of Quran recitation traditions	pakuna, Hunowu, Datamula, Sunarsi, Wahyini, Tamu & Daulay	2024
Bibliometric analysis of women empowerment studies after SDGs (2015–2022)	Adeleye, Olivo & Farkas	2024
Economic empowerment of rural women in Wolaita, Ethiopia	Kuma & Godana	2023
Women empowerment in India: A critical analysis	Singh & Singh	2023
Tribal women's empowerment: Challenges and prospects	Bukhari, Khushk, Khoso & Shah	2023
Measuring women empowerment in the Global South	Desai, Chen, Reddy & McLaughlin	2022
Gender federalism and political empowerment in Sindh, Pakistan	Ahmed, Maqsood & Nawaz	2021
A study on women's empowerment in India	Rani	2021
Measuring women's empowerment in developing countries: A systematic review	Nahar & Mengo	2021
Dimensions and drivers of rural women's empowerment in Nigeria	Obayelu & Chime	2020
Status of women's empowerment in Bangalore, India	Menon & Sharma, Rajintha	2020
Empowerment index of rural women in Mohmand, Pakistan	Israr, Rahman, Ahmad & Pervaiz	2020
Factors affecting women's empowerment in Bangladesh	Tabassum, Begum, Rana, Faruk & Miah	2019
Comparative study of urban and rural women's empowerment in Tamil Nadu	Saravanakumar & Elizabeth Varakumari	2019
Women's empowerment in East Africa	Miedema, Haardörfer, Webb Girard & Yount	2018
Women's empowerment drivers in Uganda	Sell & Minot	2018
Empirical evidence on rural women's empowerment in South Punjab, Pakistan	Abrar ul haq, Jali & Islam	2017
Empowerment index: A tool to measure rural women's empowerment in India	Roy, Chatterjee & Dutta Gupta	2017
Socio-economic and psychological factors of women's psychological empowerment	Batool, Ahmad, Qureshi	2016
Multidimensional approach to women's empowerment in rural Nigeria	Ayevbuomwan, Opoola & Adeoti	2016
Empowerment and social participation of Muslim women in South India	Cherayi & Justin	2016
Social and economic determinants of women's empowerment in Pakistan	Bushra & Wajiha	2015
Women's empowerment in rural local government in Bangladesh	Hossain	2015
Individual and social factors influencing women's empowerment in Egypt	Assad, Nazier & Ramadan	2014
Women empowerment in India: A study	Waghamode & Kalyan	2014
Concept and types of women's empowerment in India	Mandal	2013
Measuring rural women's empowerment in Bangladesh	Mahmud, Shah & Becker	2012
Women's empowerment in Oman: Based on empowerment index	Varghese	2011

4. Research Findings

The findings of the study are presented in two parts: descriptive findings and qualitative findings.

4.1. Descriptive Findings

The years in which the studies related to the research topic were conducted in this meta-analysis vary across domestic and international research: Among the 19 domestic articles analyzed:1 case

(5.2%) was conducted in 2024, 1 case (5.2%) in 2023, 1 case (5.2%) in 2022, 2 cases (10.5%) in 2021, 2 cases (10.5%) in 2020, 2 cases (10.5%) in 2019, 1 case (5.2%) in 2018, 3 cases (15.7%) in 2016, 2 cases (10.5%) in 2015, 2 cases (10.5%) in 2014, 1 case (5.2%) in 2013, and 1 case (5.2%) in 2012. (Figure 2).

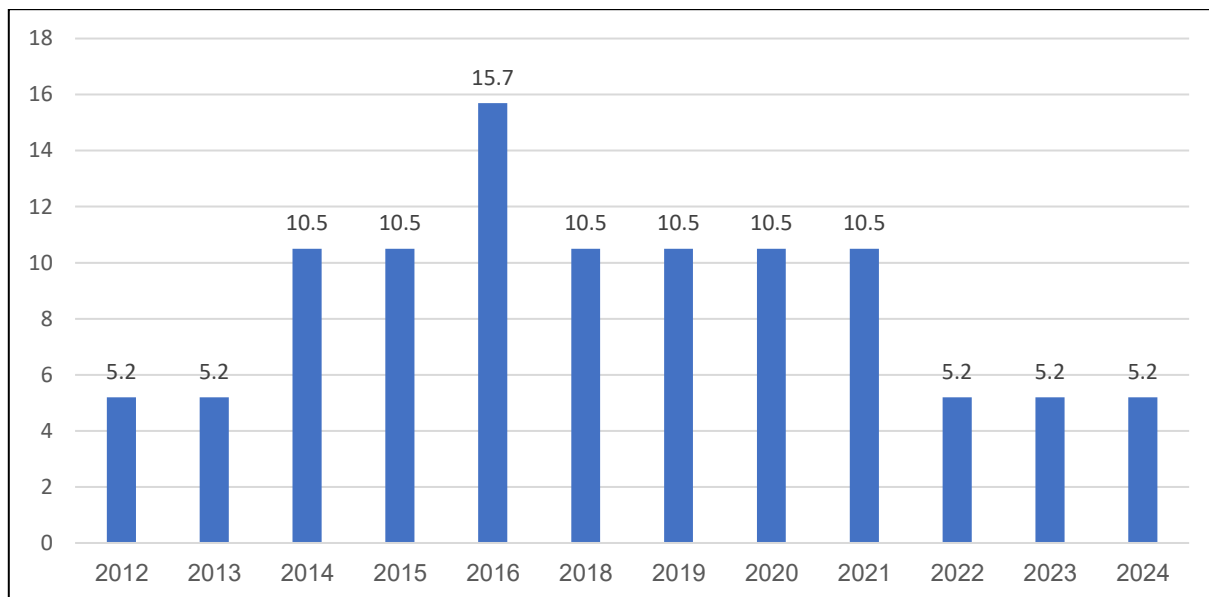


Figure 2. Frequency of domestic studies based on year of publication

In the international studies reviewed, out of a total of 29 articles: 3 cases (10.3%) were conducted in 2024, 2 cases (6.8%) in 2023, 1 case (3.4%) in 2022, 3 cases (10.3%) in 2021, 3 cases (10.3%) in

2020, 2 cases (6.8%) in 2019, 2 cases (6.8%) in 2018, 2 cases (6.8%) in 2017, 3 cases (10.3%) in 2016, 2 cases (6.8%) in 2015, 1 case (3.4%) in 2014, 1 case (3.4%) in 2012, and 1 case (3.4%) in 2011. (Figure 3).

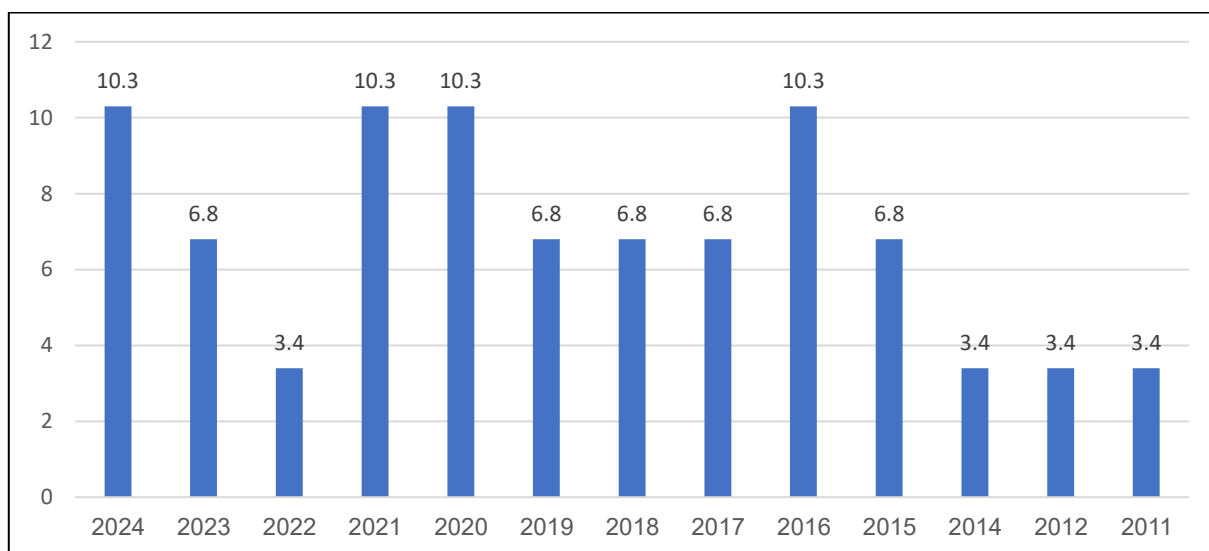


Figure 3. Frequency of international studies based on year of publication

An analysis of the number of co-authors in the reviewed studies reveals the following:
6 studies (12.5%) had one author, 16 studies (33.3%) had two authors, 17 studies (35.4%) had three authors, 8

studies (16.6%) had four authors, 1 study (2%) had five authors, and 1 study (2%) had six authors. (Table 2)

Table 2. Frequency of the number of co-authors

Number of Authors	1	2	3	4	5	6	Total
Frequency	6	16	17	8	1	1	48
Percentage (%)	12.5	33.3	35.4	16.6	2	2	100

In both domestic and international studies, the distribution of authors' academic positions among the 137 identified contributors was as follows: 60 individuals (43.7%) were university faculty

members, 36 individuals (26.2%) were researchers, 29 individuals (21.1%) were PhD students or graduates, and 12 individuals (8.7%) were Master's students or graduates. (Table 3).

Table 3. Frequency of authors' academic positions

Academic Position	Faculty	Researcher	PhD Students/Graduates	Master's Students/Graduates	Total
Frequency	60	36	29	12	137
Percentage (%)	43.7	26.2	21.1	8.7	100

Authors of the 48 reviewed articles came from 14 different academic disciplines: 12 articles (15.1%) in Agricultural Economics, 11 (13.9%) in Economics, 9 (11.3%) in Sociology, 8 (10.1%) in Agricultural Extension and Education, 8 (10.1%) in Rural Development, 6 (7.5%) in Women's Studies,

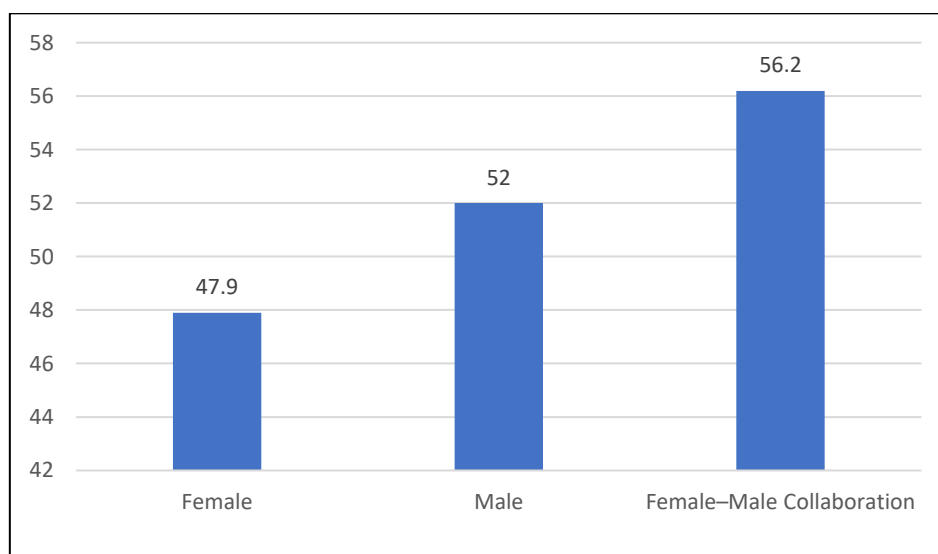
5 (6.3%) in Geography, 5 (6.3%) in Psychology, 3 (3.7%) in Health Sciences, 3 (3.7%) in Political Science, 3 (3.7%) in Law, 2 (2.5%) in Social Work, 2 (2.5%) in Educational Management, and 1 (1.2%) in Environmental Sciences. (Table 4).

Table 4. Frequency of researchers' academic disciplines

Discipline	Agr. Economics	Economics	Sociology	Agr. Extension	Rural Dev.	Women's Studies	Geography	Psychology	Health	Pol. Sci.	Law	Social Work	Ed. Management	Environment	Total
Frequency	12	11	9	8	8	6	5	5	3	3	3	2	2	1	79
Percentage (%)	15.1	13.9	11.3	10.1	10.1	7.5	6.3	6.3	3.7	3.7	3.7	2.5	2.5	1.2	100

Regarding gender distribution among researchers involved in studies on women's empowerment: 23 cases (47.9%) involved female authors, 25 cases

(52%) involved male authors, and 27 cases (56.2%) involved both female and male collaboration. (Figure 4).


Figure 4. Frequency of researchers by gender

Based on the reviewed studies on women's empowerment in this meta-analysis: 7 cases (11.6%) focused on economic topics, 11 cases (18.3%) on social topics, 16 cases (26.6%) on

combined economic and social topics, 7 cases (11.6%) on economic, social, and psychological topics, 8 cases (13.3%) on psychological topics, and 11 cases (18.3%) on political topics. (Table 5)

Table 5. Frequency of topics addressed in women's empowerment studies

Topic	Economic	Psychological	Social	Economic & Social	Economic, Social & Psychological	Political	Total
Frequency	7	8	11	16	7	11	60
Percentage (%)	11.6	13.3	18.3	26.6	11.6	18.3	100

Regarding the methodological approach: 5 cases (10.4%) used a descriptive approach, 14 cases (29.1%) descriptive-analytical, 9 cases (18.7%) survey-based, 1 case (2.1%) grounded theory, 1 case

(2.1%) exploratory, 1 case (2.1%) causal-comparative, 1 case (2.1%) descriptive-exploratory, 5 cases (10.4%) descriptive-correlational, and 11 cases (22.9%) literature review. (Table 6).

Table 6. Frequency of studies by research approach

Approach	Descriptive	Descriptive-Analytical	Survey	Grounded Theory	Exploratory	Causal-Comparative	Descriptive-Exploratory	Descriptive-Correlational	Literature Review	Total
Frequency	5	14	9	1	1	1	1	5	11	48
Percentage (%)	10.4	29.1	18.7	2.1	2.1	2.1	2.1	10.4	22.9	100

Based on research method: 33 cases (68.7%) were quantitative, 11 cases (22.9%) qualitative, 3 cases

(6.2%) mixed methods, and 1 case (2%) meta-synthesis. (Table 7).

Table 7. Frequency of studies by research method

Method	Quantitative	Qualitative	Mixed	Meta-synthesis	Total
Frequency	33	11	3	1	48
Percentage (%)	68.7	22.9	6.2	2	100

Research tools used in the studies: 18 cases (37.5%) used questionnaires, 14 cases (29.1%) used document analysis, 9 cases (18.7%) interviews, and

7 cases (14.5%) used combined tools (interview + questionnaire). (Table 8).

Table 8. Frequency of studies by research tool

Tool	Questionnaire	Interview	Combined (Questionnaire & Interview)	Document Analysis	Total
Frequency	18	9	7	14	48
Percentage (%)	37.5	18.7	14.5	29.1	100

Use of statistical techniques: 12 cases (23.5%) used Anova, 17 cases (33.3%) regression analysis, 1 case (1.9%) SWOT analysis, 1 case (1.9%) Kendall's Tau-b, 2 cases (3.9%) grounded theory analysis, 2

cases (3.9%) Spearman test, 5 cases (9.8%) correlation and Chi-square, and 11 cases (21.5%) did not include hypothesis testing. (Table 9).

Table 9. Frequency of studies by statistical analysis method

Method	ANOVA	Regression	SWOT	Kendall Tau-b	Grounded Theory	Spearman	Correlation & Chi-Square	No Hypothesis Test	Total
Frequency	12	17	1	1	2	2	5	11	51
Percentage (%)	23.5	33.3	1.9	1.9	3.9	3.9	9.8	21.5	100

Theories used in the reviewed studies: The study incorporates a diverse theoretical base to analyze women's empowerment. The following theories and their relative contributions were identified: 5 items (10.4%) from Sara Longwe's framework, 2 items (4.1%) from Alsop and Heinsohn's model, 8 items (16.6%) from Kabeer's theory, 3 items (6.2%) from Welfare theory, 2 items (3.8%) from gender and development theory, 6 item (12.5%) from gender equality theory, 6 items (12.5%) used Malhotra's theory, 2 items (4.1%) from Poverty alleviation theory, 1 item (2%) each from the following: Equality theory, Efficiency theory, Exploitation theory, Marginalization and integration theory,

Structural-functional theory, Class and state incapacity theory, Action theory, Feminization of poverty, Everyday life sociology, Ugboome's theory, Glass ceiling theory, Biological differences theory, Effectiveness theory. other theories, poverty alleviation, equality, efficiency, marginalization & integration, sustainable development, cultural and social difference, feminist theories, structural-functionalism, class/state incapacity, action theory, sociology of everyday life, Ugboomeh 's theory, glass ceiling, biological differences, effectiveness, Hashemi's theory, Lin Bennet's theory, and social exclusion. (Figure 5).

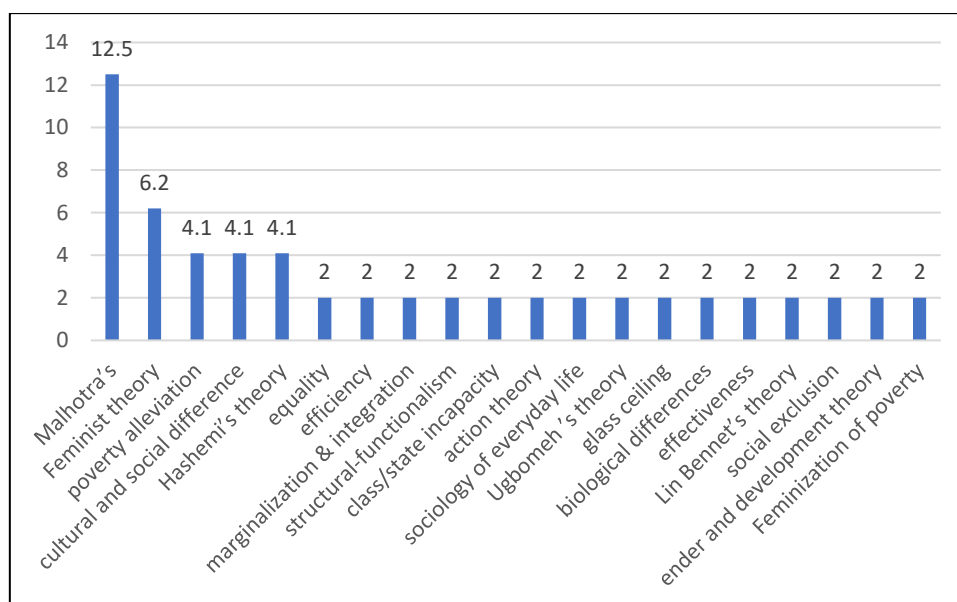


Figure 5. Frequency of theories used in the reviewed studies.

4.2 Qualitative Findings

Content Analysis of Articles on the Empowerment of Rural Women- The analysis of research findings on the empowerment of rural women revealed that the studies are categorized into four main dimensions: economic, socio-cultural, psychological, and political.

4.2.1 Economic Factors

According to Table 10, among the economic factors influencing rural women's empowerment, income generation holds the highest share with 17.1%. It is followed by employment (13.8%), and access to loans and banking facilities as well as land ownership (both with 9.2%). (Table 10).

Table 10. Economic Factors Influencing the Empowerment of Rural Women

Variable	Frequency	Percentage (%)	Variable	Frequency	Percentage (%)
Income generation	26	17.1	Marketing	6	3.9
Employment	21	13.8	Access to inputs and tools	5	3.3
Access to loans and banking facilities	14	9.2	Cooperative membership	5	3.3

Variable	Frequency	Percentage (%)	Variable	Frequency	Percentage (%)
Land ownership	14	9.2	Access to raw materials	4	2.6
Savings	10	6.5	Access to water resources	4	2.6
Market access	9	5.9	Livestock ownership	4	2.6
Sale of products	8	5.2	Access to suitable transportation	3	1.9
Access to financial institutions	8	5.2	Entrepreneurship and business creation	3	1.9
Business startup investment	6	3.9	Access to job-related and production skills	2	1.3
Total	152	100.0			

4.2.2 Socio-Cultural Factors

As presented in Table 11, among the socio-cultural factors, literacy and education (8.5%) was the most

cited, followed by restrictive cultural norms (7.6%), knowledge and skills (6.7%), and access to health services (6.5%). (Table 11).

Table 11. Socio-Cultural Factors Influencing the Empowerment of Rural Women

Variable	Frequency	Percentage (%)	Variable	Frequency	Percentage (%)
Literacy and education	38	8.5	Age	12	2.7
Restrictive cultural norms	34	7.6	Spouse's occupation	11	2.4
Knowledge and skills	30	6.7	Participation in religious ceremonies	10	2.2
Health and medical services	29	6.5	Participation in women's conferences	10	2.2
Gender	27	6.0	Membership in women's associations	9	2.0
Marital status	25	5.6	Membership in governmental or non-governmental NGOs	9	2.0
Patriarchal and male-dominated culture	22	4.9	Awareness of market conditions	7	1.5
Housework and child-rearing	19	4.2	Awareness of citizenship rights	7	1.5
Participation in technical and vocational training	19	4.2	Collaboration with officials and authorities	5	1.1
Attending educational and extension programs	19	4.05	Support from spouse and family	5	1.1
Use of mass media (radio, television, newspapers, etc.)	16	3.6	Engagement in charitable and public service activities	3	0.67
Access to and usage of the internet	16	3.6	Legal and economic rights such as mahr	1	0.22

Variable	Frequency	Percentage (%)	Variable	Frequency	Percentage (%)
Participation in exhibitions and festivals	15	3.3	dowry	2	0.45
Awareness of emerging technologies	13	2.9			
inheritance	13	2.9			
insurance coverage	13	2.9			
Total	444	100.0			

4.2.3 Psychological Factors

According to Table 12, the psychological factor with the highest impact on women's empowerment is self-confidence (14.4%), followed by the ability

to act upon personal desires (9.8%) and self-esteem (8.5%). (Table 12).

Table 12. Psychological Factors Influencing the Empowerment of Rural Women

Variable	Frequency	Percentage (%)	Variable	Frequency	Percentage (%)
Self-confidence	22	14.4	Initiative	4	2.6
Autonomy in acting on personal will	15	9.8	Group work	4	2.6
Self-esteem	13	8.5	Perseverance and seriousness	3	1.9
Positive mindset	9	5.9	Women's leadership	3	1.9
Motivation	8	5.2	Self-reliance in challenges	3	1.9
Use of others' opinions in decision-making	6	3.9	Value placed on women's opinions	3	1.9
Belief in one's own abilities	6	3.9	Trust of men in women	3	1.9
Intellectual Independence	5	3.2	Trust in Experts	4	2.6
Responsibility	5	3.2	Problem-solving for novel challenges	3	1.9
Risk-Taking Behavior	5	3.2	Government attention and support for women	3	1.9
Future Planning	5	3.2	Openness to adopting innovative and modern methods	2	1.3
Self-Efficacy	4	2.6	Continuous learning	2	1.3
Ability to mentor others	4	2.6	Voluntarily engaging in tasks and activities	1	0.65
Autonomy	4	2.6	Women's trust in each other	3	1.9
Total	152	100.0			

4.2.4 Political Factors

According to Table 13, the most influential political factor in empowering rural women is freedom of

mobility (26.1%), followed by restrictive laws and regulations (19.1%) and women's presence in

leadership and governmental positions (14.2%).
(Table 13).

Table 13. Political Factors Influencing the Empowerment of Rural Women

Variable	Frequency	Percentage (%)	Variable	Frequency	Percentage (%)
Freedom of movement (mobility)	11	26.1	Participation in elections	5	11.9
Women in leadership and governmental positions	8	19.1	Laws supporting women	3	7.1
Restrictive governmental laws and regulations	6	14.2	Participation in rallies	2	4.7
Political representation of women	5	11.9	Presence in judicial bodies	2	4.7
Total	42	100.0			

5. Discussion and Conclusion

Women's empowerment is defined as a process that brings about change in women's lives and enables them to lead a complete human life. This process encompasses both external dimensions (such as health, education, awareness, mobility, participation in decision-making, etc.) and internal dimensions (such as self-awareness, self-confidence, self-belief, etc.), ultimately leading to an improved quality of life for women. Therefore, enhancing women's empowerment necessitates identifying and analyzing the contributing factors. Given the significance of the topic, this study aimed to identify the key factors influencing the empowerment of rural women and to categorize these factors through a qualitative meta-analysis. Based on the reviewed literature, the influential factors were classified into four categories: economic, socio-cultural, psychological, and political. According to the findings, among the economic factors, income generation was the most prominent variable, accounting for 16.7% of the total. Therefore, providing income-generating opportunities for women through support for agricultural activities, horticulture, handicrafts, tourism, entrepreneurship, access to financial resources and credit institutions, and promoting women's participation in economic activities and market access can significantly contribute to their empowerment. Moreover, women's membership in savings cooperatives, access to low-interest loans, ownership of land and water resources, and the presence of formal cooperatives in villages can enhance their ability to launch businesses and

increase their income. The second most influential economic factor was employment (13.8%). Confining women to unpaid and exhausting household tasks, along with limited access to adequate training and financial services, hinders empowerment. Therefore, enabling women to participate in technical and vocational training, providing financial support such as low-interest loans, easing loan conditions, and improving access to raw materials and agricultural inputs can improve employment prospects and ultimately contribute to rural women's empowerment. In the socio-cultural dimension, access to employment, income generation, land ownership, water resources, and participation in training workshops were found to significantly enhance women's self-confidence. In the political dimension, the most influential factor was freedom of mobility, accounting for 26.1%. The ability of rural women to move freely—such as attending schools, hospitals, markets, or making personal choices without the interference of a spouse or male relatives—plays a critical role in their empowerment. Additionally, social participation—such as attending social events, helping neighbors during emergencies, volunteering in organizations like the Red Crescent, taking part in village meetings, organizing cultural programs, and voting—also contributes to empowerment. The second major political factor was women's presence in governmental and managerial positions (19.1%). Increasing women's participation in national and local elections without external interference and lifting legal restrictions—such as

the need for a husband's permission to travel—are extensions of freedom of mobility. Women's leadership in governmental positions enables the design and implementation of policies that respond to their needs, including access to healthcare, education, and social services. Moreover, female representation in institutions fosters broader political participation, enhances recognition by men and political groups, and expands job opportunities. Formal and informal education, exposure to media, and spatial mobility were also among the most impactful factors on women's empowerment. Educational institutions must implement more effective training programs for rural women. Agricultural organizations can also provide income-generation training with financial support in fields such as home gardening, childcare, livestock fattening, aquaculture, and handicraft production. Gender awareness through media is essential to raise consciousness among men and women. Key issues include tackling gender inequality in education, income, health, inheritance, early marriage, property rights, and divorce. Launching campaigns—such as awareness marches or public gatherings around International Women's Day, Human Rights Day, and Mother's Day—using posters and banners can serve as effective tools for spreading gender awareness. Moreover, cultural programs such as plays and folk music can highlight the importance of women and their empowerment. The government can establish legal counseling offices in family courts or rural areas to provide free legal advice to women on matters such as marriage, self-

esteem, protection from violence, and more. Creating women's self-help groups is essential for empowering women in rural areas. NGOs can support the formation of these groups, which offer both economic (e.g., microcredit) and social (e.g., legal support) assistance to their members. To promote effective economic empowerment, stakeholders should prioritize projects that combine financial literacy with access to services—such as gender-sensitive educational resources, enhanced technological infrastructure, and collaboration between financial institutions and training centers. By equipping women with skills and resources (e.g., access to loans and reduced collateral requirements), their economic independence can be strengthened. Governments and NGOs can foster knowledge-sharing networks and cooperatives in sectors like agriculture, horticulture, and industry, providing mentorship opportunities and boosting women's bargaining power in the market—ultimately reinforcing solidarity, teamwork, and collaboration.

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Authors contributions

The authors equally contributed to the preparation of this article.

Conflict of interest

The authors declare no conflict of interest.

References:

1. Abrar ul haq, M., Jali, M.R., & Islam, G. (2016). Empowering rural women in Pakistan: empirical evidence from Southern Punjab. *International Journal of Methodology*, 51, 1777–1787. <https://doi.org/10.1007/s11135-016-0365-7>
2. Abolfathzadeh, Z., Yousefi, A., & MozaffarAmini, A. (2016). Evaluation of Factors Affecting Rural Women Empowerment in Isfahan City. *Women Studies*, 7(15), 1-27. [In Persian]. https://womenstudy.ihcs.ac.ir/article_1942.html
3. Adeleye, O. R., Olivo, M. L. O., & Farkas, T. (2024). A Bibliometric Analysis of Women's Empowerment Studies Post Sustainable Development Goal Adoption Periods (2015–2022). *Sustainability*, 16(4), 14-99. <http://dx.doi.org/10.3390/su16041499>
4. Ahmadi, M., & Fakour, V. (2020). The impact of micro credit on empowerment of female heads of rural households covered by Imam Khomeini Relief Committee (Case study: Central district of Zanjan county). *Journal of Research and Rural Planning*, 9(1), 17-33. [In Persian]. <https://doi.org/10.22067/jrrp.v9i1.77704>
5. Ahmed, J., Maqsood, N., & Nawaz, S. (2021). Gendered Federalism: Issues and Challenges to Women's Political Participation in Sindh, Pakistan. *Journal of Arts & Social Sciences*, 8(2), 133-140. <https://ojs.jass.pk/ojs/index.php/jass/article/view/256>
6. Ali, M.A., & Kamraju, M. (2023). The Role of Women in Rural Development Programs. *Asean Journal of Community Service and Education*, 2(1), 67-84. https://www.researchgate.net/publication/371412982_The_Role_of_Women_in_Rural_Development_Programs

7. Alsop, R., & Heinsohn, N. (2005). *Measuring empowerment in practice: Structuring analysis and framing indicators*. World Bank Publications. <https://ideas.repec.org/p/wbk/wbrwps/3510.html>
8. Assad, R. A., Nazier, H., & Ramadan, R. (2014). Individual and Households Determinants of Women Empowerment: Application to the Case of Egypt. *Economic Research Forum*, 867, 1-36. <https://dx.doi.org/10.2139/ssrn.3058289>
9. Atai, F. & Zangeneh, S. (2021). Socio-Political Empowerment of Women in the South Caucasus. *Central Eurasia Studies*, 14(1), 203-228. [In Persian]. <https://doi.org/10.22059/jcep.2021.315642.449967>
10. Awoa, P. A., Ondoa, H. A., & Tabi, H. N. (2022). Women's political empowerment and natural resource curse in developing countries. *Resources Policy*, 75, 102-442. <https://doi.org/10.1016/j.resourpol.2021.102442>
11. Ayevbomwan, O. S., Opoola, O. A., & Adeoti, A. I. (2016). Analysis of Women Empowerment in Rural Nigeria: A Multidimensional Approach. *Global Journal of Human Social Science*, 16(6), 1-15. https://globaljournals.org/GJHSS_Volume16/4-Analysis-of-Women-Empowerment.pdf
12. Azimi, N., Alibaygi, A., & Papzan, A. (2023). Assessing rural women's empowerment in Kermanshah Township. *Human Geography Research*, 55(2), 119-134. [In Persian]. <https://doi.org/10.22059/jhgr.2022.326304.1008332>
13. Barghi, H., & Qanbari, Y. (2014). A Review and Survey on Components of Empowering the Rural Women and Explanation of Their Effective Factors: A Case Study of Isfahan County. *Village and Development*, 17(1), 37-53. [In Persian]. <https://doi.org/10.30490/rvt.2018.59387>
14. Batool, S. A., Ahmed, H. K., & Qureshi, S. N. (2016). Economic and Psycho-social Determinants of Psychological Empowerment in Women. *Pakistan Journal of Social and Clinical Psychology*, 14(1), 21-29. https://www.researchgate.net/publication/Empowerment_in_Women
15. Bushra, A., & Wajih, N. (2015). Assessing the Socio-Economic Determinants of Women Empowerment in Pakistan. *Procedia - Social and Behavioral Sciences*, 177(1), 3-8. <https://doi.org/10.1016/j.sbspro.2015.02.321>
16. Bukhari, M., Khushk, G. M., Khoso, K., & Shah, S. (2023). Empowerment level among rural women of Sindh: A sociological analysis. *Pakistan Journal of Agriculture, Agricultural Engineering and Veterinary Sciences*, 39(2), 133-140. <https://doi.org/10.47432/2023.39.2.8>
17. Cattaneo, L. B., & Chapman, A. R. (2010). The process of empowerment: A model for use in research and practice. *American Psychologist*, 65(7), 646-659. <https://psycnet.apa.org/doi/10.1037/a0018854>
18. Charmchian Langerodi, M., & Alibaygi, A. H. (2013). An Investigation of Effective Factors on Rural Women's Psychological Empowerment in Sari. *Quarterly Journal of Woman and Society*, 4(13), 165-192. [In Persian]. https://jzvj.marvdasht.iau.ir/article_40.html?lang=en
19. Cherayi, Sh., & Justin, J. P. (2016). Empowerment and Social inclusion of Muslim Women: Towards a new conceptual model. *Journal of Rural Studies*, 45, 243-251. <https://dx.doi.org/10.1016/j.jrurstud.2016.04.003>
20. Dalal, K., Shabnam, J., Andrews-Chavez, J., Mortenson, L. B., & Timpka, T. (2012). Economic empowerment of women and utilization of maternal delivery care in Bangladesh. *International Journal of Preventive Medicine*, 3(9), 628-636. <https://pubmed.ncbi.nlm.nih.gov/23024852/>
21. Desai, S., Chen, F., Reddy, Sh., & McLaughlin, A. (2022). Measuring Women's Empowerment in the Global South. *Annual Review of Sociology*, 48(1), 507-527. <https://doi.org/10.1146/annurev-soc-030420-015018>
22. Ebad-Allah, M., El-deep, H. A., Moussa El-Shaib, A., & Mansour, S. A. (2022). Impact Assessment of Economic Empowerment Program on Breadwinner Rural Woman in Some Villages in Gharbia Governorate. *Alexandria Science Exchange Journal*, 43(1), 463-498. <https://dx.doi.org/10.21608/asejaqjsae.2022.226610>
23. Falahati, L., Ghasemi, M., & Badsar, M. (2020). Investigating the Role of Rural Women's Empowerment in Analyzing Economic, Social and Cultural Factors Influencing Local Communities Development. *Women's Studies*, 11(34), 115-138. [In Persian]. <https://doi.org/10.30465/ws.2020.26504.2729>
24. Fallsoleyman, M., Mikaniki, J., Hajipour, M., & Rafiei, S. F. (2023). Studying the Effects of Women empowerment on the Evolution of Human Settlements (Case study: RFLDL Project Settlements in Sarayan County). *Journal of Research and Rural Planning*, 12(2), 37-54. [In Persian]. <https://doi.org/10.22067/jrrp.v12i2.2208-1058>
25. Foncha, J. N., & Eforkwe, T. H. (2024). Empowering Rural Women through Agroforestry Practices; The Case of the Mount Oku Forest Region, Cameroon. *East African Journal of Forestry and Agroforestry*, 7(1), 227-239. <https://doi.org/10.37284/eajfa.7.1.1971>
26. Ghasemi, M., Alizadeh, L., & Ghandehari, E. (2018). Editing the Strategies for Psychological Empowerment of Women in Rural Areas using Strategic Management Tools (SWOT-QSPM). *Woman in Development & Politics*, 16(1), 79-109. [In Persian]. <https://doi.org/10.22059/jwdp.2018.245090.1007300>
27. Gholami Avati, R., Nazok Tabar, H. & Namdar, A. (2010). Women Business Institutions and their Role in Constant Development in Mazandaran Province. *Women Studies*, 1(1), 133-156. https://womenstudy.ihcs.ac.ir/article_100.html?lang=en
28. Hanaysha, J., & Tahir, P. R. (2016). Examining the effects of employee empowerment, teamwork, and employee training on job satisfaction. *Procedia - Social and Behavioral Sciences*, 219, 272-282. <https://doi.org/10.1016/j.sbspro.2016.05.016>

29. Hossain, A. Z. (2015). Women Empowerment in Rural Local Government of Bangladesh. *International Journal of Innovation and Applied Studies*, 10(2), 584-593. <https://www.researchgate.net/publication/273128003>
30. Hibbs, L. (2022). I could do that! –The role of a women's non-governmental organisation in increasing women's psychological empowerment and civic participation in Wales. *Women's Studies International Forum*, 90, 1-10. <https://doi.org/10.1016/j.wsif.2021.102557>
31. Isran, S., & Isran, M. A. (2012). Status of women in Pakistan: A critical analysis. *JISR management and social sciences & economics*, 10(2), 85–99. <https://doi.org/10.31384/jisrmsse/2012.10.2.8>
32. Israr, M., Rahman, F., Ahmad, N., & Pervaiz, U. (2020). Measuring Rural Women Empowerment through Index Construction in Mohmand District of Khyber Pakhtunkhwa. *Journal of Finance and Economics*, 8(3), 107-115. <http://dx.doi.org/10.12691/jfe-8-3-3>
33. Jabeen, S., Huq, S., Jameel, A., Hussain, A., Asif, M., Hwang, J., & Jabeen, A. (2020). Impacts of Rural Women's Traditional Economic Activities on Household Economy: Changing Economic Contributions through Empowered Women in Rural Pakistan. *Sustainability*, 12(7), 27-31. <https://doi.org/10.3390/su12072731>
34. Jimmy, I. O., & Olsson, I. (2023). Women's Empowerment and Sustainable Development: A Quantitative Case Study of Ibesikpo Austan Community, Akwa Ibom State, Nigeria. *Journal of Social Science Studies*, 10(2), 1-19. <http://dx.doi.org/10.5296/jsss.v10i2.21230>
35. Jose, R., Prathiba, N., & Ranjit, L. (2021). Study on Women Empowerment through Kudumbashree with reference to Kottayam District, Kerala. *Natural Volatiles & Essential Oils*, 8(5), 2205-2213. <https://www.nveo.org/index.php/journal/article/view/770>
36. Kabeer, N. (1999). *The conditions and consequences of choice: reflections on the measurement of women's empowerment*. Geneva: Unrisd. <https://www.files.ethz.ch/isn/28994/dp108.pdf>
37. Kabeer, N. (2001). *Reflections on the Measurement of women's Empowerment: In N. Kabeer (ed): Discussing women's empowerment: theory and practice*. Sida stockhold. <https://cdn.sida.se/publications/files/sida984en-discussing-womens-empowerment---theory-and-practice.pdf>
38. Kalantari, K., Shabanali Fami, H., & Soroushmehr, H. (2010). Facilitating and Impeding Factors in Rural Women Economic Enablement (Case study: Hamedan County). *The Journal of Community Development (Rural-Urban)*, 2(1), 107-124. [In Persian]. https://jrd.ut.ac.ir/article_21280.html?lang=en
39. Khalvati, M. (2007). *Investigating the level of empowerment of housewives and the factors affecting it in Shiraz city 1386*, Master's thesis published, Tehran University of Welfare and Rehabilitation Sciences, Tehran, Iran. [In Persia].
40. Katsekor, J. T., Adom-asamoah, G., & Morgan, A. K. (2024). Economic empowerment among female shea actors: the case of Savelugu District, Ghana. *Cogent Social Sciences*, 10(1), 1-20. <http://dx.doi.org/10.1080/23311886.2023.2299105>
41. Kuma, B., & Godana, A. (2023). Factors affecting rural women economic empowerment in Wolaita Ethiopia. *Cogent Economics & Finance*, 11(2), 1-18. <https://doi.org/10.1080/23322039.2023.2235823>
42. Kwaku Kyem, P. A. (2004). Power, Participation, and Inflexible Institutions: An Examination of the Challenges to Community Empowerment in Participatory GIS Applications. *Cartographica The International Journal for Geographic Information and Geovisualization*, 38(3-4), 5-17. <http://dx.doi.org/10.3138/2J31-4648-6P62-6P78>
43. Manuere, F., & Phiri, N. (2018). A Literature Review of Women Empowerment and Development in Zimbabwe: A look at New Insights and Perspectives. *Journal of Public Administration and Governance*, 8(4), 57-65. <http://dx.doi.org/10.5296/jpag.v8i4.13818>
44. Marinova, J. (2010). Empowerment of Women in Bulgaria. *Development*, 53(2), 193–195. DOI:10.1057/dev.2010.10 <https://ideas.repec.org/a/pal/develop/v53y2010i2p193-195.html>
45. Malhotra, A., Schuler, S. R., & Boender, C. (2002). *Measuring women's empowerment as a variable in international development*. In background paper prepared for the World Bank Workshop on Poverty and Gender: New Perspectives. Washington, DC: The World Bank. <https://doi.org/10.1037/e597202012-004>
46. Mazaheri, Z. (2015). *The relationship between time management and employees' job self-efficacy with the empowerment of Shiraz Alavi school employees*. Published master's thesis, Mohaghegh Ardabili University, Ardabil, Iran. [In Persian].
47. Mandal, K. C. (2013). Concept and Types of Women Empowerment. *In International Forum of Teaching and Studies*, 9(2), 17-31. <https://www.proquest.com/docview/1491284114?sourcetype=Scholarly%20Journals>
48. Menon, S., & Sharma, S. (2020). A Study on the Status of Women's Empowerment in urban Bangalore, India Bangalore India. *Journal of International Women's Studies*, 21(5), 54-64. <https://vc.bridgew.edu/jiws/vol21/iss5/6>
49. Mahmud, S., Shah, N. M., & Becker, S. (2012). Measurement of Women's Empowerment in Rural Bangladesh. *World Development*, 40(3), 610-619. <https://doi.org/10.1016/j.worlddev.2011.08.003>
50. Mohammadi, Y., Avatefi-Akmal, F., Zamiri-Arasteh, M., & Rahimian, M. (2019). Analysis of Internal and External Factors Affecting Empowerment of Rural Women Receiving Microcredits (The Case of Kermanshah and Hamedan Provinces). *Iranian Agricultural Extension and Education Journal*, 15(2), 65-79. [In Persian]. https://www.iaeej.ir/article_94101.html?lang=en

51. Mohajeri Amiri, Sh., Mojarradi, Gh., & Badsar, M. (2016). Investigating the role of social and psychological factors on empowerment of rural Female-headed Households, Supported by the Imam Khomeini Relief Foundation (Case study: Abas Abad Township). *Iranian Journal of Agricultural Economics and Development Research*, 47(1), 211-225. [In Persian]. <https://doi.org/10.22059/ijaedr.2016.58844>
52. Moghaddas Farimani, S., Mirtorabi, M. S., & Ghaemmaghami, S. S. (2020). Social - Economic Empowerment of Rural Women and Effective Factors on It (Case Study: Members of Rural Women's Microfinance Funds in the Zanjan Province). *Rural Development Strategies*, 7(3), 347-363. [In Persian]. <https://doi.org/10.22048/rdsj.2021.250336.1877>
53. Monje-Amor, A., Xanthopoulou, D., Calvo, N., & Vazquez, J. P. A. (2021). Structural Empowerment, Psychological Empowerment and Work Engagement: A Cross-Country Study. *European Management Journal*, 39(6), 779-789. <https://doi.org/10.1016/j.emj.2021.01.005>
54. Mozaffari, A. (2015). The role of Mass Media in Sustainable Development with Empowering Women Approach. *Journal of Iranian Social Development Studies*, 7(3), 123-137. [In Persian]. <https://sanad.iau.ir/en/Journal/jisds/Article/821775>
55. Miedema, S. S., Haardörfer, R., Webb Girard, A., & Yount, K. M. (2018). Women's empowerment in East Africa: Development of a cross-country comparable measure. *World Development*, 110, 453-464. <https://doi.org/10.1016/j.worlddev.2018.05.031>
56. Nahar, S., & Mengo, C. W. (2021). Measuring women's empowerment in developing countries: A systematic review. *Journal of International Development*, 34(2), 322-333. <http://dx.doi.org/10.1002/jid.3594>
57. Naseri, S., & Asgari, E. (2024). Qualitative analysis of factors affecting employment-oriented empowerment of rural women heads of households in Ilam province using MAXQDA Software. *Empowerment and Deprivation-elimination Journal*, 1(4), 75-101. [In Persian]. <https://doi.org/10.22034/edj.2024.713366>
58. Niaghi, O. (2019). The role of women and their empowerment in environmentally sustainable development. *Journal of Environmental Science Studies*, 4(2), 1328-1339. [In Persian]. https://www.jess.ir/article_92337.html?lang=en
59. Noori, S., & Ali Mohamadi, N. (2009). An analysis of rural women economical activities (Case Study: Baraan region_ Isfahan city). *Geography and Environmental Planning*, 20(2), 87-104. [In Persian]. <https://dorl.net/dor/20.1001.1.20085362.1388.20.2.5.4>
60. Obayelu, O. A., & Chime, A. C. (2020). Dimensions and drivers of women's empowerment in rural Nigeria. *International Journal of Social Economics*, 47(3), 315-333. <http://dx.doi.org/10.1108/IJSE-07-2019-0455>
61. Oliveira, M., Andrade, J. R., Ratten, V., & Santos, E. (2023). Psychological empowerment for the future of work: Evidence from Portugal. *Global Business and Organizational Excellence*, 42(5), 65-78. <http://dx.doi.org/10.1002/joe.22194>
62. pakuna, H. B., Hunowu, M. A., Datamula, S., Sunarsi, D., Wahyni, Tamu, Y., & Daulay, P. (2024). Patterns of Women Empowerment in rural Indonesia: the role of quran completion tradition. *Cogent Social Sciences*, 10(1), 1-16. <http://dx.doi.org/10.1080/23311886.2024.2356915>
63. Parhizkar, H., Alimohammadi, A., Tahereh Asadzadeh, S., & Hashempour Sadeghian, M. (2023). A Qualitative Meta-Analysis of Scholarly Articles Concerning Poor-Supported Women in Iran. *Woman in Development & Politics*, 21(4), 895-921. [In Persian]. <https://doi.org/10.22059/jwdp.2023.351551.1008280>
64. Phala, M. D., & Mukonza, R. M. (2021). The effectiveness of vocational training and access to finance in alleviating poverty among women in rural South Africa., *African Journal of Gender, Society and Development* .10(3), 177–197. <http://dx.doi.org/10.31920/2634-3622/2021/v10n3a9>
65. Qanbari, Y., & Ansari, R. (2015). Identify and Explaining the Social and Economic Factors Affecting Rural Women Empowerment (Case Study: Rostam County). *Journal of Research and Rural Planning*, 4(3), 1-10. [In Persian]. <https://doi.org/10.22067/jrrp.v4i3.22858>
66. Roy, C., Chatterjee, S., & Dutta Gupta, S. (2017). *Women empowerment index: Construction of a tool to measure rural women empowerment level in India*. Available at SSRN 3357543. <http://dx.doi.org/10.2139/ssrn.3357543>
67. Rani, K. S. (2021). A Study on Women Empowerment in India. *Nternational Journal for Modern Trends in Science and Technology*, 7(11), 120-124. <http://dx.doi.org/10.46501/IJMTST0711021>
68. Saravanakumar, P., & Elizabeth Varakumari, J. (2019). A comparative study on women empowerment in urban and rural setting in Tamil Nadu. *International Journal of Community Medicine and Public Health*, 6(3), 1108–1111. <http://dx.doi.org/10.18203/2394-6040.ijcmph20190594>
69. Sadeghi, S. (2011). *The role of women in the social and economic development of the country in the last decade*. Master's thesis, Published master's thesis, Islamic Azad University, Central Tehran Branch, Tehran, Iran. [In Persian].
70. Sadi, H., Shabanali Fami, H., & Latifi, S. (2012). An Assessment of the Economic and Social Ability of Female Rural Rug Makers (Case study: Hamedan Province). *Woman in Development & Politics*, 10(2), 107-126. [In Persian]. <https://doi.org/10.22059/jwdp.2012.28690>
71. Safavi, I., Zamiran, B., Maarefvand, M., & Arshi, M. (2015). Economic Empowerment of Young and Girls in Africa and Latin America and Caribbean. *Quarterly Journal of Social Work*, 3(4), 3-12. [In Persian]. <https://socialworkmag.ir/article-1-46-en.html>

72. Saluja, O.B., Singh, P., & Kumar, H. (2023). Barriers and interventions on the way to empower women through financial inclusion: a 2 decades' systematic review (2000–2020). *Humanities and Social Sciences Communications*, 10(1), 1-14. <http://dx.doi.org/10.1057/s41599-023-01640-y>
73. Sabir, R. I., & Majid, M. B. (2023). Factors affecting women empowerment: a micro financing perspective. *Journal of Entrepreneurship and Business Venturing*, 3(1), 177-191. <https://doi.org/10.56536/jebv.v3i1.19>
74. Sell, M., & Minot, N. (2018, November). What factors explain women's empowerment? decision-making among small-scale farmers in Uganda. In *Women's Studies International Forum* Pergamon.71, 46-55. <http://dx.doi.org/10.1016/j.wsif.2018.09.005>
75. Seyedeh, T., Eshraqhi Samani, R., & Poursaied, A. (2015). Factors is Fluencing the Occupational Capability of Rural Women (case study: Ilam county). *Journal of Entrepreneurial Strategies in Agriculture*, 2(4), 11-21. [In Persian]. <http://dx.doi.org/10.18869/acadpub.jea.2.4.21>
76. Sen, S. K., Karmakar, P., & Adhikari, S. (2023). Empowerment and Women's Empowerment – A Theoretical Basis. *International Journal for Multidisciplinary Research (IJFMR)*, 5(3), 1-6. <https://doi.org/10.36948/ijfmr.2023.v05i03.4111>
77. Singh, S., & Singh, A. (2023). Women Empowerment in India: A critical Analysis. *Tathapi*, 19(44), 227-253. <https://urr.shodhsagar.com/index.php/j/article/view/1065>
78. Seifi, A. (2020). The role of united nation development in women empowering. *Journal of Social Work Research*, 6(20), 193-233. [In Persian]. <https://doi.org/10.22054/rjsw.2021.49197.370>
79. Soharwardi, M. A., & Ahmad, T.I. (2020). Dimensions and Determinants of Women Empowerment in Developing Countries. *International Journal of Sustainable Development and Planning*, 15(6), 957-964. <http://dx.doi.org/10.18280/ijstdp.150620>
80. Shiyani, M., & Zare, H. (2019). A meta-analysis of female-headed household studies in Iran. *Sociological Review*, 26(2), 67-97. [In Persian]. <https://doi.org/10.22059/jsr.2020.75859>
81. Shafiei Sabet, N., & Yousefi, S. (2016). Explanation of factors affecting women's empowerment in the process of development of rural settlements in Gilvan and Abbar Tarom City. *Researches in Earth Science*, 7(1), 44-61. [In Persian]. <https://dor.isc.ac/dor/20.1001.1.20088299.1395.7.1.4.5>
82. Tabassum, M., Begum, N., Rana, M. S., Faruk, M. O., & Miah, M. M. (2019). Factors Influencing Women's Empowerment in Bangladesh. *Science, Technology & Public Policy*, 3(1), 1-7. <http://dx.doi.org/10.11648/j.stpp.20190301.11>
83. Tarasi, Z., Karimzadeh, H., & Aghayri Hir, M. (2019). Investigating factors and Stimuli affecting the empowerment of rural women (Case study: Zanjan city), *Journal of Applied Research in Geographical Sciences*, 19(54), 237-257. [In Persian]. <https://doi.org/10.29252/jgs.19.54.237>
84. Ugbomeh, G. M. (2001). Women Empowerment in Agriculture Education, for Sustainable Rural Development. *Community Development Journal*, 36(4), 289-302. <http://dx.doi.org/10.1093/cdj/36.4>
85. Varghese, T. (2011). Women Empowerment in Oman: A study based on Women Empowerment Index. *Far East Journal of Psychology and Business*, 2(2), 37-53. <https://ideas.repec.org/a/fej/articl/v2by2011i3p37-53.html>
86. Waghmode, R. H., & Kalyan, J. L. (2014). Women Empowerment in India: A Study. *Reviews of Literature*, 1(7), 1-18. https://www.semanticscholar.org/paper/074f5b992a?utm_source=direct_link
87. Women, U. N. (2020). *Gender mainstreaming: A global strategy for achieving gender equality and the empowerment of women and girls*. United Nations. 1-8. <https://www.unwomen.org/en/digital-library/publications/2020/04/brochure-gender-mainstreaming-str-women-girls>
88. Zafarinasab, M., Golzari, Z., Nourian, M., & Razavi, S. H. (2022). Meta-Synthesis Factors Affecting the Empowerment of Rural Women. *Village and Development*, 24(4), 47-70. [In Persian]. <https://doi.org/10.30490/rvt.2021.351827.1274>
89. Zafarinasab, M., Golzari, Z., Nourian, M., & Razavi, S. (2023). Identification and Explanation of the Dimensions and Components of Rural Women's Empowerment in Lorestan Province Using Mixed Methods Research. *Village and Development*, 26(2), 227-254. [In Persian]. <https://doi.org/10.30490/rvt.2023.359143.1467>



فرا تحلیل کیفی عوامل موثر بر توانمندسازی زنان روستایی

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چکیده مبسوط

۱. مقدمه

در کشورهای در حال توسعه زنان بخش زیادی از جمعیت جامعه روستایی را تشکیل می‌دهند و دارای نقشها و وظایف مختلف و متنوعی می‌باشند. زنان روستایی هم در فعالیتهای درون خانه و هم در فعالیتهای بیرون از خانه نقش بسزایی دارند. زنان در مقایسه با هم‌تایان مرد خود تحصیلات کمتر، دستمزد کمتر، مالکیت کمتر و کنترل اقتصادی بسیار کمتری دارند. این تبعیض در ابعاد مختلف زندگی آنها را مختل می‌کند و باعث می‌شود تا زنان از اشتغال، تحصیل، بهداشت و عدالت محروم شوند و با گوشه‌گیری و طرد شدن مواجه شده‌اند و با نادیده گرفته شدن زنان، امکان توانمندی آنان و مشارکت آنها در طرح‌ها و برنامه‌های توسعه وجود ندارد. مشارکت زنان در امور روستا، قبل از هر چیز نیاز به توانمند سازی زنان دارد، پس زنان باید برای دستیابی به تواناییها و پتانسیل های خود مطابق با برنامه‌ها و سیاست‌هایی به عوامل مختلفی که برای توانمندی هایشان وجود دارد، بپردازند. اگر زنان توانمند شوند، می‌توانند آزادانه با پتانسیل کامل تصمیم‌گیری کنند و کیفیت زندگی خود را بهبود بخشند. با توجه شرایط موجود و با توجه به تعدد مطالعات انجام شده درباره توانمندسازی زنان روستایی و ابعاد مختلف آن و وجود نظریات متعدد در زمینه توانمندسازی زنان، نیاز به مروری جامع بر آثار حوزه توانمندسازی زنان می‌باشد. شناسایی عوامل مؤثر در توانمندسازی زنان روستایی می‌تواند موانع و مشکلاتی را که بر سر راه توانمندسازی زنان روستایی وجود دارد شناسایی و راهکارهایی را نیز پیشنهاد دهد.

۲. روش تحقیق

هدف این پژوهش شناسایی مهمترین عوامل مؤثر بر توانمندسازی زنان روستایی در ابعاد مختلف، با مرور و مطالعه تحقیقات انجام شده بوده است. دیدگاههای محققان و یافته‌های آنها به روش فرا تحلیل کیفی مورد بازبینی قرار گرفت تا مهمترین عوامل مؤثر بر توانمندسازی زنان

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روستایی شناسایی شوند. در این تحقیق که در بازه زمانی ۱۳۹۱-۱۴۰۳ و ۲۰۱۱-۲۰۲۴ انجام شده است داده‌ها از بانک اطلاعات علمی جهاد دانشگاهی، پورتال جامع علوم انسانی، پایگاه مجلات تخصصی نورمگز، گوگل اسکولار جمع آوری شدند. قلمرو مکانی مطالعات، ایران و کشورهای آسیایی، آفریقایی، خاورمیانه و آمریکای لاتین بوده است. جامعه آماری پژوهش شامل مقالاتی است که به توانمندسازی زنان روستایی پرداخته‌اند و عوامل مؤثر بر توانمندسازی زنان روستایی را ذکر کرده‌اند. در این پژوهش ۷۳ مقاله مورد بررسی قرار گرفته است. در مرحله اول ۱۰ مقاله که با موضوع پژوهش ارتباط مستقیم نداشتند حذف شدند و در مرحله دوم ۱۵ مقاله به دلیل تکراری بودن موضوع حذف شدند و در نهایت ۴۸ مقاله جهت مطالعه انتخاب شد.

۳. یافته‌های تحقیق

در بررسی یافته‌های مطالعات مربوط به توانمندسازی زنان روستایی، مطالعات در ابعاد اقتصادی، اجتماعی- فرهنگی، روانشناختی و سیاسی صورت گرفته است. در بعد اقتصادی مهمترین عوامل مؤثر بر توانمندسازی زنان روستایی کسب درآمد با ۱۷/۱ درصد و در مرتبه بعدی به ترتیب متغیرهای اشتغال با ۱۳/۸ درصد، دسترسی به وام و تسهیلات بانکی و مالکیت زمین با ۹/۲ درصد قرار دارند. مهمترین عوامل توانمندسازی زنان در بعد اجتماعی و فرهنگی شامل سواد و تحصیلات با ۸/۵ درصد، هنجارهای فرهنگی با ۷/۶ درصد، دانش و مهارت با ۶/۷ درصد و خدمات بهداشتی و درمانی با ۶/۵ درصد می‌شوند. در بعد روانشناختی نیز مهمترین عوامل توانمندسازی زنان شامل عامل اعتماد به نفس با ۱۴/۴ درصد، توانایی انجام خواسته‌ها با میل خود ۹/۸ درصد، عزت نفس ۸/۵ درصد می‌شوند. در بعد سیاسی عواملی مانند آزادی تحرک (رفت و آمد) با ۲۶/۱ درصد، قوانین و مقررات دست و پاگیر دولتی با ۱۹/۱ درصد و حضور زنان در پست

آگاهانه در مورد سلامت باروری و زندگی به طور کلی کمک می‌کند و منجر به افزایش اعتماد به نفس در آنان می‌شود. همچنین آموزش منجر به تغییر نگاه و فرهنگ مرد سالاری در جامعه می‌شود و شکاف های جنسیتی در درآمد را کاهش داده و می‌تواند نقش مهمی در کاهش نابرابری درآمد در بازار کار ایفا کند. در بعد سیاسی نیز گسترش حضور زنان و تصویر زنانه در ادارات منجر به افزایش مشارکت سیاسی زنان، به رسمیت شناخته شدن آنان توسط مردان و گروه های سیاسی، ایجاد فرصت های شغلی، افزایش قابلیت اشتغال می‌شود و همچنین باعث طراحی سیاست ها و سرمایه گذاری هایی می‌شود که به نیازها و نگرانی های زنان پاسخ دهد.

کلیدواژه ها: توانمندسازی، زنان روستایی، شاخص ها، فراتحلیل کیفی.

تشکر و قدردانی

پژوهش حاضر برگرفته از رساله دکترای سعیده رشیدی، گروه جغرافیا و برنامه ریزی روستایی، دانشکده ادبیات و علوم انسانی، دانشگاه گیلان، رشت، ایران است.

های مدیریتی و دولتی با ۱۴/۲ درصد در توانمندسازی زنان نقش بالایی دارند.

۴. بحث و نتیجه گیری

توانمندسازی زنان به عنوان فرآیندی تعریف می‌شود که موجب تغییر در بافت زندگی زنان می‌شود و ظرفیت زنان را برای رهبری یک زندگی انسانی کامل فراهم می‌کند. این فرآیند منجر به افزایش کیفیت زندگی زنان در ابعاد اقتصادی، اجتماعی-فرهنگی، روانشناختی و سیاسی خواهد شد. در ابعاد اقتصادی می‌توان فرصت های تولید درآمد را برای زنان از طریق حمایت از فعالیتهای کشاورزی، باغداری، صنایع دستی و گردشگری، کارآفرینی گسترش دسترسی به منابع مالی و مؤسسات اعتباری و ترویج مشارکت زنان در فعالیتهای اقتصادی، دسترسی به بازارها انجام داد. در بعد اجتماعی و فرهنگی آموزش و تحصیلات زنان را با نگر داشتن در مدرسه توانمند می‌سازد و به آنان کمک می‌کند که مهارت هایی را برای توسعه اقتصادی و شخصی در آینده کسب کنند، همچنین داشتن سواد و تحصیلات نیز شانس اشتغال رسمی را برای زنان افزایش داده و به رفاه جسمی، روانی و توانایی آنان در انتخاب

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The Shadow of Centralization: Exploring Rural Mismanagement and Governance Challenges in Iran

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Abstract

Purpose- This study elucidates the profound impact of power struggles on rural management and the multifaceted challenges confronting rural municipalities (RMs) in Iran. The concept of rural mismanagement, initially proposed to decentralize power and reduce government control, has been a pivotal theme in Iranian rural development literature. Over the past 23 years, tensions between mismanagement and the government have intensified, culminating in an escalation of power struggles among rural stakeholders. This research enriches the existing literature by offering novel insights into the common obstacles faced by rural mismanagement in developing countries.

Design/methodology/approach- The study employed qualitative thematic analysis to examine the challenges faced by RMs. Snowball sampling was utilized to identify informed respondents. Through qualitative interviews with 60 local administrators, rural management experts, government officials, and residents, we identified that villages with fewer than 20 households are not recognized as villages and lack RMs, resulting in adverse social and economic consequences. For thematic analysis, interview data were analyzed using the immersion technique and the MAXQDA text analysis program to uncover underlying meanings, structures, themes, and patterns.

Findings- This research underscores the challenges facing rural management in Iran and the necessity to expand its functional areas and activities beyond rural boundaries. The findings reveal that RMs are constrained in their responsibilities, limiting their capacity to effectively address organizational concerns. Moreover, distrust in the government undermines the ability of RMs to address community issues, despite their expectations. The research highlights the difficulties RMs encounter in countries with centralized and hierarchical governance structures. The application of the research results underscores the importance of empowering local management, facilitating participation, and institutionalizing processes to address fragmented policymaking and conflicts of interest in rural management. This approach aligns with broader challenges in Iranian rural development, including weak management structures and lack of coordinated programs, which hinder sustainable development.

Keywords: local management, Government, Hierarchical structure, RM, Iran.

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1. Introduction

Urbanization, rural areas in many countries re-main the cornerstone of livelihoods and food security. Nevertheless, the development of these areas is often impeded by persistent governance gaps. Scholars have observed that top-down planning models frequently neglect local circumstances. [Ge and Lu \(2021\)](#), for instance, stress that effective rural spatial governance requires the integration of both top-down and bottom-up approaches and the active involvement of multiple stakeholders. Without such integration, centralized plans risk overlooking the genuine needs of communities. Similarly, [Sakketa \(2023\)](#) finds that successful rural development depends more on robust institutional frameworks and strong political commitment than on the mere availability of resources. His research in sub-Saharan Africa demonstrates that, in the absence of adequate infrastructure, legal protections, and inclusive participation, rural areas are unable to benefit from broader economic transformations.

Numerous empirical studies have documented the detrimental effects of rural mismanagement. In China, for example, [Ruan and Wang \(2023\)](#) reveal how village-level elites circumvent formal regulations: local officials employ bribery and patronage to control communal land, manipulate village elections, and suppress dissent. Evidence further suggests that even well-intentioned reforms—such as new rural revitalization initiatives—can inadvertently trigger a series of negative outcomes, including the consolidation of power by individual officials, elite capture, and widespread corruption. In Ethiopia, [Bekele et al. \(2022\)](#) demonstrate that state-led land policies have intensified conflict. Their study shows that large-scale agricultural investments have encroached upon communal pastures, resulting in land-use disputes driven by pasture scarcity and insecure land tenure. The centralized allocation of rural resources, without safeguarding customary rights, has led to increased resistance and social friction. These cases, spanning both authoritarian single-party systems and more pluralistic, reveal a common pattern: when local voices and rights are disregarded, centralized planning often leads to corruption, conflict, and a decline in trust in government. Overall, the literature indicates that

weaknesses in local institutions—such as insufficient accountability, limited participation, and inadequate resources—perpetuate mismanagement. These systemic deficiencies are fundamental to many of the failures observed in rural governance under centralized planning systems.

Managing rural areas in Iran has been a significant challenge due to the chronic disintegration of development management ([Badri et al., 2021](#)). In recent decades, various independent organizations with different approaches have taken charge of rural development, resulting in a lack of coordination and a fragmented approach to rural affairs ([Afsharipour et al., 2021](#); [Kosec & Wantchekon, 2020](#)). As a result, weaknesses and gaps in rural management have emerged, and there is an urgent need for a proper structure to advance rural affairs with a multi-dimensional and coordinated approach ([Andrews, 2003](#); [Copus et al., 2017](#)). One of the institutions responsible for rural management in Iran is the RM, which provides rural services and manages at the village level ([Badri et al., 2013](#); [Zohouri et al., 2017](#)). However, more needs to be done to address the shortcomings and weaknesses of rural people in achieving sustainable development in rural areas ([Rezvani, 2011](#)). The literature on RMs stresses the importance of preserving resources, promoting development, and empowering different groups to participate in decision-making processes ([Afsharipour et al., 2021](#)). Effective RMs should encourage thinking about the environment and become a factor in analyzing and solving economic, social, and environmental problems in rural areas ([Badri et al., 2021](#); [Salehi et al., 2014](#)).

Iran's rural management system is deeply embedded in a highly centralized legal and administrative framework, which has resulted in the concentration of power within national-level decision-making bodies. This centralization has significantly undermined local autonomy, transparency, and the accountability of local executive institutions. The legal foundations of rural management in Iran suffer from multiple deficiencies that impede the development of effective and participatory local governance. One prominent issue lies in the structural legal weaknesses that characterize Iran's rural governance. Although the establishment of rural councils is legally mandated under Article 100 of the Constitution, the actual implementation of robust legal mechanisms to support these councils

remains inadequate. Ambiguities and inconsistencies across key legal documents—such as the Law on the Establishment of Islamic Councils (1996) and the Law on the Management of Rural Affairs—have led to overlapping jurisdictions, restricted financial autonomy, and persistent administrative subordination to central ministries (Hashemi & Ghaffary, 2017).

A critical legal deficiency is the absence of a comprehensive legal framework delineating the powers and functions of village councils. While these councils are formally recognized, they often function merely as executors of central government directives rather than as autonomous, sovereign entities. The legislative and financial decision-making powers of these councils remain vague, rendering them subordinate to provincial and county officials appointed by the Ministry of Interior. This structural dependence erodes the foundations of local governance and democratic accountability, which are essential for effective rural administration (Badri et al., 2021). Furthermore, Iran's legal system lacks coherent and context-specific land ownership regulations suitable for rural areas. Land management in rural regions is governed by a disjointed set of outdated laws—including the Land Reform Law (1962), the Public Lands Law (1975), and the Rangeland Management Law—none of which have been sufficiently revised to reflect the contemporary realities of rural life or to recognize customary land rights. This fragmented legal landscape contributes to tenure insecurity, particularly in tribal and semi-nomadic communities where informal land claims frequently conflict with formal state ownership, resulting in land disputes and inefficient land utilization (Hosseini et al., 2015). Another significant shortcoming is the absence of legal mechanisms for accountability and anti-corruption at the rural level. Although national oversight institutions such as the General Inspectorate of the State and the Supreme Court of Accounts are mandated to monitor public sector performance, their oversight is primarily restricted to higher tiers of government. There is a notable lack of statutory provisions for the establishment of regional or local bodies capable of ensuring financial transparency and ethical governance at the village level. This institutional vacuum facilitates lobbying and manipulation during council elections and curtails meaningful public participation (Tajbakhsh, 2022).

A theoretical gap in RMs that needs to be addressed is the lack of a proper structure to advance rural affairs with a multi-dimensional and coordinated approach (Afsharipour et al., 2021; Bagheri et al., 2013; Copus et al., 2017). In developing countries like Iran, the division of power between the local administration and the governing body can hinder the progress of RMs (Crosta et al., 2006; Niedomysl, 2007). Centralized countries may resist power transfer to public institutions, making it difficult to achieve effective RMs (Salehi et al., 2014; Zohouri et al., 2017). Global experiences have shown that good governance, based on democratic and egalitarian development, can influence all interested forces in the administration of rural affairs and respond to the needs of these groups (Reis, 2016). Effective RMs should facilitate participation, institutionalization, and planning in the affairs of villagers (Niedomysl, 2007). RMs should focus on empowering different groups and promoting participation, planning for the future, investing in opportunities, striving for happiness, increasing well-being, and ultimately improving the quality of life in rural areas (Afsharipour et al., 2021; Bagheri et al., 2013).

This study aims to investigate the challenges RMs face in Iran. The establishment of RMs in Iran was intended to decentralize power and reduce government control. Yet, over the past 23 years, tensions between RMs and the government have escalated, leading to power struggles. This Research contributes to the current literature on RMs by offering fresh insights into the common obstacles encountered by RMs in developing nations. Furthermore, it highlights how power dynamics in centralized and hierarchical countries can hinder the efficacy and productivity of RMs.

2. Research Theoretical Literature

As a local institution in Iran, the RM manages and administers villages (Badri & Badri et al., 2013). The RM, managed by the Village head, is recognized as the primary institution for rural management in Iran (Salehi et al., 2014). These municipalities serve as crucial references for providing local community services and executing assigned tasks. In Iran's administrative and management system, the RM is considered a non-governmental public institution that receives financial resources to perform its duties (Afsharipour et al., 2021). Following the Islamic Revolution, Islamic councils were entrusted with managing rural areas. However, in

1996, the law on determining the duties and powers of RMs increased the role and importance of RMs in local administration (Zohouri et al., 2017). In 1998, RMs officially entered Iran's rural management arena with a stronger role after approving the "Law on the Establishment of Self-sufficient RMs in the Country's Villages." According to this law, the Village head, nominated by the council and elected for a four-year term with the District administration's approval, holds executive responsibility for rural management (Afsharipour et al., 2021).

Due to their proximity to the people, understanding of societal problems and needs, and close relationships with relevant departments and organizations, RMs hold a crucial position in Iran's administrative system (Zohouri et al., 2017). They

can serve as an effective intermediary between the people and the government to address local problems and needs (Badri et al., 2021). The Law on Definitions and Rules of Duties of RMs defines the RM as a rural executive unit with the rank of administrative supervisor (Salehi et al., 2014). Today, RMs are responsible for managing financial and tax affairs, implementing local laws and regulations, maintaining security and public order, monitoring and controlling economic activities, managing and providing rural services, meeting the needs of villages, controlling the process of development and migration of villagers to cities, etc. (Afsharipour et al., 2021). Figure 1 shows the position of RMs in the administrative system. (Figure 1).

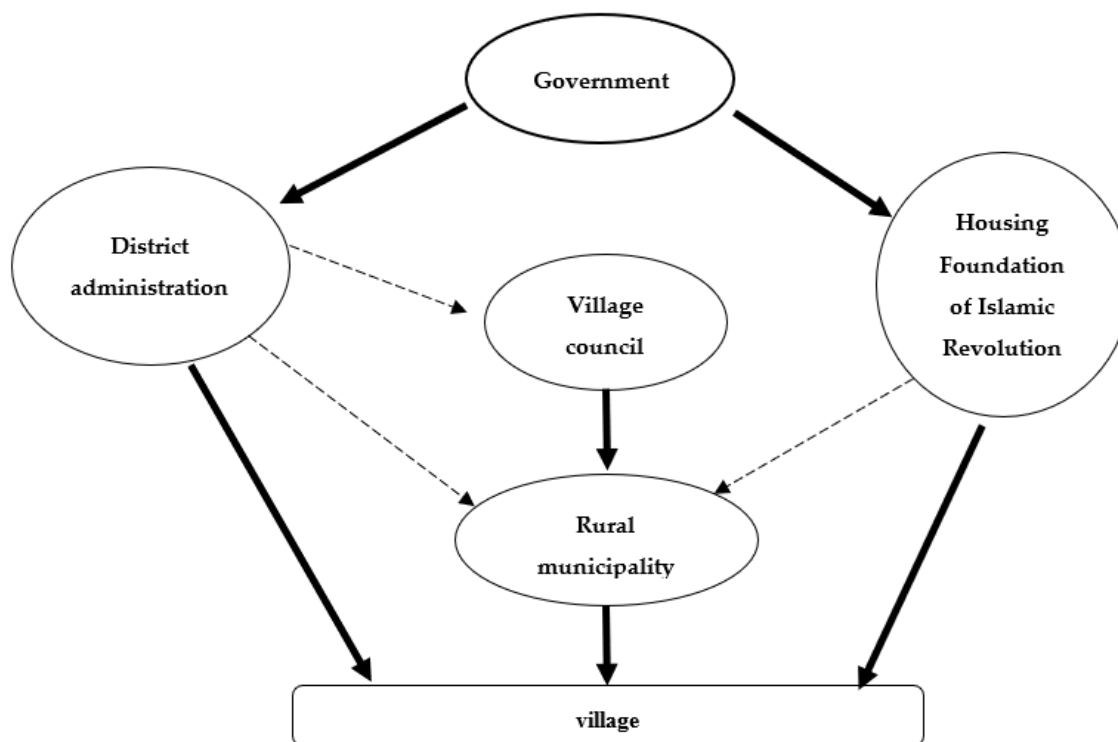


Figure 1. The position of the RM in the rural management system in Iran

2.1. Literature Review

Rural municipalities are local governments responsible for governing and providing services to rural areas. The concept of rural municipalities is grounded in the principle of local governance, which is based on the idea that local authorities are best placed to understand and address their communities' unique needs and challenges (Mokhtari Karchegani, Tavakoli, et al., 2024). This

approach originates from the decentralization theories advanced by Jean-Paul Faguet, Rondinelli et al. (1983). It emphasizes the transfer of authority and resources from central governments to local institutions (Andersson et al., 2009). According to this theory, local governments are more effective and accountable when decision-making powers are devolved, particularly in rural areas where localized knowledge plays a critical role (Karchegani et al.,

2025; Vargas-Hernandez et al., 2025). Successful experiences of Rural municipalities can be found in various countries, including Canada (Douglas, 2023), Australia (Brunet-Jailly & Martin, 2020), and Norway (Šūpule & Søholt, 2019). In Canada, rural municipalities are typically responsible for road maintenance, waste management, and emergency services. In Australia, rural municipalities are responsible for various services, including water supply, waste management, and community development (Brunet-Jailly & Martin, 2020). The specific responsibilities and powers of rural municipalities can vary widely depending on the country and its system of government.

In the literature on decentralized governance, institutional perspectives—particularly in Faguet (2014) studies—highlight a strong correlation between the level of development and the institutional policies of decentralization. These perspectives assert that when local governments possess sufficient capacity and autonomy, governance outcomes are significantly improved. Allowing local authorities to make decisions in rural areas can result in more effective and responsive service delivery (Popoola et al., 2022). This is because they are better equipped to understand their community's unique needs and challenges, which leads to tailor-made policies and services (Islam, 2025). As a result, resources can be used efficiently and residents can experience better outcomes. However, rural municipalities can face challenges due to a lack of financial and human resources. The smaller populations and limited tax bases in rural areas make it difficult to provide high-quality services (Biljohn & Lues, 2020). Additionally, a shortage of skilled professionals, such as engineers and planners, can limit the ability of rural areas to implement complex policies and projects (Lessing, 2021).

Despite these challenges, evidence suggests that rural municipalities can effectively address the needs of rural communities. For example, a study conducted in Norway found that rural municipalities could provide high-quality services despite facing significant resource constraints (Gjerstad et al., 2015). The study also found that rural municipalities could collaborate effectively with other local authorities and community organizations, which helped enhance service delivery and promote economic development. Rural municipalities are an essential form of local

governance that can provide responsive and effective services to rural communities (Mokhtari Karchegani, Tavakoli, & Portahari, 2024). While they face challenges such as a lack of resources and skilled professionals, evidence suggests that they can effectively address rural areas' needs (Saputra & Havlíček, 2024). As such, there is a need for further Research and policy development in this area to support the development and Sustainability of rural municipalities.

3. Methodology

This study utilized qualitative thematic analysis to explore the challenges facing RMs. To identify knowledgeable respondents, we employed snowball sampling, a widely used qualitative research method that involves selecting future sample members through previous sample members, resulting in the sample size growing like a snowball (Torabi et al., 2021). This method is particularly useful when access to the study population is complex, often due to small numbers and subject sensitivity. Given the sensitivity of our research topic, we anticipated that potential respondents, especially government experts, might be reluctant to participate unless they trusted the researchers. Our assumption proved to be correct, resulting in a six-month interview period. Despite conflicts with some individuals and government managers, we gained many stakeholders' trusts and encouraged some to cooperate.

Before conducting the interviews, we established cordial relationships with the stakeholders during the winter of 2022. Most of the interviews were conducted in person, while local authorities were contacted to facilitate referral chains. After approaching 67 potential participants, we ultimately secured interviews with 60 respondents (Table 1). To ensure robust results and avoid potential bias, respondents were selected from all categories of stakeholders who impact or are impacted by RMs. Interviews were conducted at participants' homes, workplaces, or by phone, using a semi-structured interview guide consisting of three general questions focused on the challenges facing the RMs under study. As shown in Table 1, the majority of respondents were affiliated with local managers (30%) and in terms of gender, 56.4% were male and 43.6% were female. Held at least a master's degree (45%). Over half had more than 10 years of executive experience in rural governance.

Table 1. Respondents' profile

Variable	Sector	Frequency (n)	Percent (%)
Institutional Affiliation	local managers	18	30%
	rural management experts	17	28.3%
	government officials	12	20%
	Residents	13	21.7%
Gender	Male	34	56.40%
	Female	26	43.60%
Education Level	Bachelor's degree	22	36.7%
	Master's degree	27	45.0%
	PhD	11	18.3%
Years of Executive Experience	Less than 5 years	8	13.3%
	5–10 years	21	35.0%
	11–20 years	19	31.7%
	More than 20 years	12	20.0%

3.1. Data collection

The study employed pre-arranged appointments, conducting semi-structured interviews either in person or by phone based on participants' preferences. Prospective respondents were invited to participate via telephone. Our interview questions were selected after conducting a comprehensive literature review and consulting experts in the field, focusing on eliciting detailed and comprehensive responses that would allow us to explore a range of related topics and issues. Our interview guide consisted of three primary questions:

What are the primary challenges facing RMs?

What are the expectations of local communities about RMs?

How would you assess the relationship between RMs and the Government?

The researchers asked additional questions as needed to account for the various factors affecting the challenges faced by RMs, such as political, cultural, social, and economic factors. While all interviews were recorded, seven participants chose not to be recorded and instead, notes were taken. The interviews were translated from Farsi to English, and confidentiality was assured to the participants prior to the interview. Data collection continued until the point of theoretical saturation, with a total of 60 inter-views conducted. The length and number of questions varied based on the topic and the participant's response, with the average inter-view lasting 45-60 minutes and consisting of 10-15 questions.

3.2. Data analysis

Using thematic analysis, we examined interview data by reviewing transcriptions and notes mul-tiple

times to ensure transcription reliability. We utilized the immersion technique and MAXQDA textual analysis program to uncover the data's underlying meanings, constructs, themes, and patterns. Our approach involved both logical and intuitive thinking, utilizing open coding and charting to visualize data and group codes based on semantic and conceptual relationships. We selected central themes for each code network and linked sub-codes/sub-themes to understand the relationships between concepts. We returned transcribed interviews to respondents for review to ensure research validity, but only one-third provided additional feedback. We analyzed keywords and categories developed from the research question and emerged themes. Our findings were presented clearly, organizing interview texts according to themes and categories and using quotes and examples to illustrate results. Our emergent thematic structure and codes reflected the subjectivities of respondents' experiences and captured the social distribution of issues raised.

4. Research Findings

4.1. The position of RMs in Iran's administrative system

The present Research sheds light on the challenges that RM in Iran faces, primarily related to their focus on physical issues. This narrow scope has left them ill-equipped to address rural residents' social and economic challenges, especially given the absence of government institutions in rural areas.

RMs, the executive organization of rural management, and municipality managers must possess the legal and customary authority to carry out their duties effectively. Currently, the law

defines 48 duties for village officials, of which 35%, 17%, 10%, and 37% are executive, supervisory, information, and communication tasks with government organizations, respectively. However, these tasks are often unclear and general, leaving no instructions for how the villagers' activities are carried out. Although the law requires RMs to cooperate with government organizations, there is

no written law mandating cooperation with RMs, despite its crucial role in mediating between people and government organizations. Therefore, it is crucial to recognize RMs' role in these organizations' laws to improve their efficiency. The executive body can coordinate or cooperate with the RMs to perform their activities.

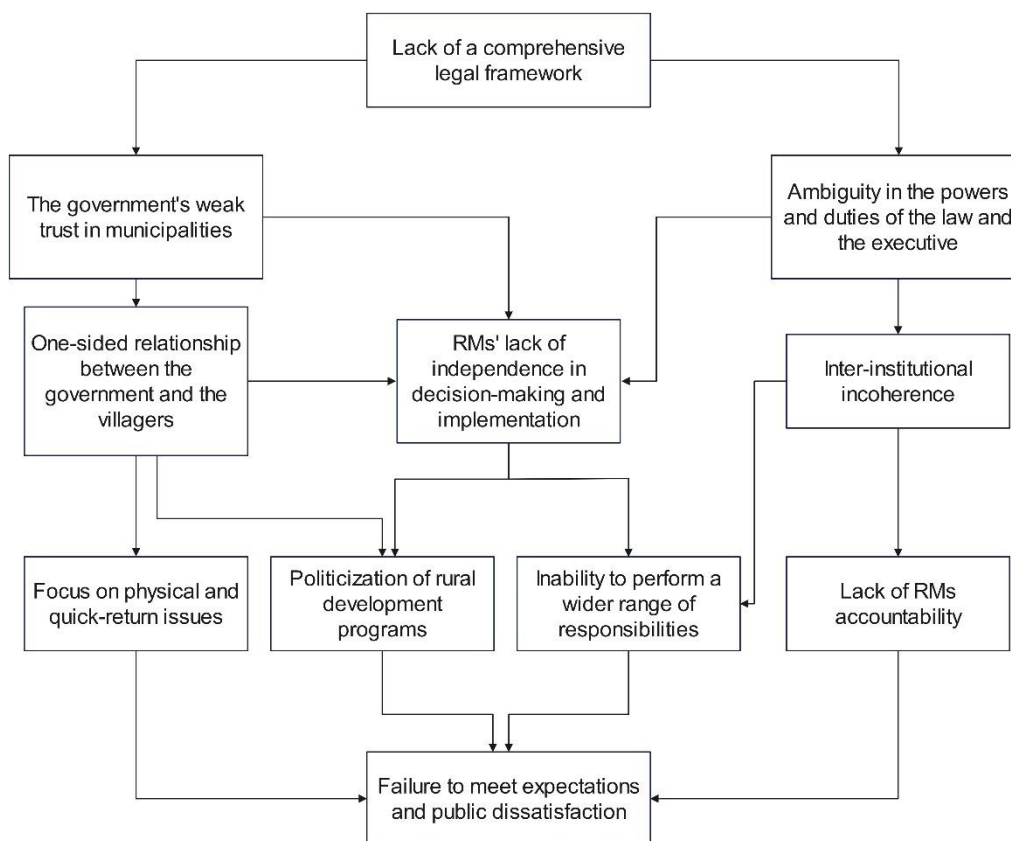


Figure 2. Low government trust and insufficient powers of RMs

The challenges RMs face in Iran are not unique, as developing countries worldwide face similar issues. RMs are often expected to carry out various tasks beyond their capabilities, such as managing infrastructure, providing basic services, and promoting economic development (Czudec & Zajac, 2021; Mashau et al., 2022; Miceikienė et al., 2021). This situation results in RMs being unable to adequately address the needs of rural residents, leading to social, economic, and environmental problems. To address this issue, the literature suggests that RMs should adopt a wider scope of responsibilities similar to that of local government in urban areas. This would require a decentralization of power, with local institutions assuming greater

responsibility for managing their affairs. However, decentralization alone is insufficient to address the challenges RMs face. The research findings highlight that the lack of trust in local administration by the governing body is a significant obstacle to carrying out activities outside the physical structure of the village. A broader cultural shift is necessary, in which government officials view RMs as a partner rather than a rival. Such a shift would require a fundamental change in how government officials view rural areas and their residents, and would necessitate a concerted effort to promote greater understanding and collaboration between rural and urban areas. The present Research highlights the challenges RMs face in Iran regarding

their focus on physical issues. To address these challenges, RMs should adopt a broader scope of responsibilities, akin to that of local government in urban areas. However, this will re-quire a broader cultural shift in which government officials view RMs as a partner rather than a rival (Niedomysl, 2007). This shift will facilitate greater collaboration and understanding between rural and urban areas, leading to greater social, economic, and environmental Sustainability in rural areas. Figure 2 shows the insufficiency of RMs' powers due to the government's low trust.

Also, the findings of this Research highlight the need for multi-level and joint governance in rural areas, which can be operationalized through a more efficient coordination mechanism among different stakeholders. Iran's current administrative

hierarchy structure is considered inappropriate for implementing such policies, and experiences from other countries have shown that inter-sectoral coordination is crucial for sustainable rural development. The literature on rural governance also emphasizes the importance of coordination mechanisms among different stakeholders, both horizontally and vertically. Studies have shown that horizontal coordination among local stakeholders is essential for successful rural development, and it depends on various factors such as democratic processes, social, human, institutional, and symbolic capital, and the legal and regulatory structure. On the other hand, vertical coordination among local institutions and higher political hierarchies is crucial for effectively implementing rural policies and programs.

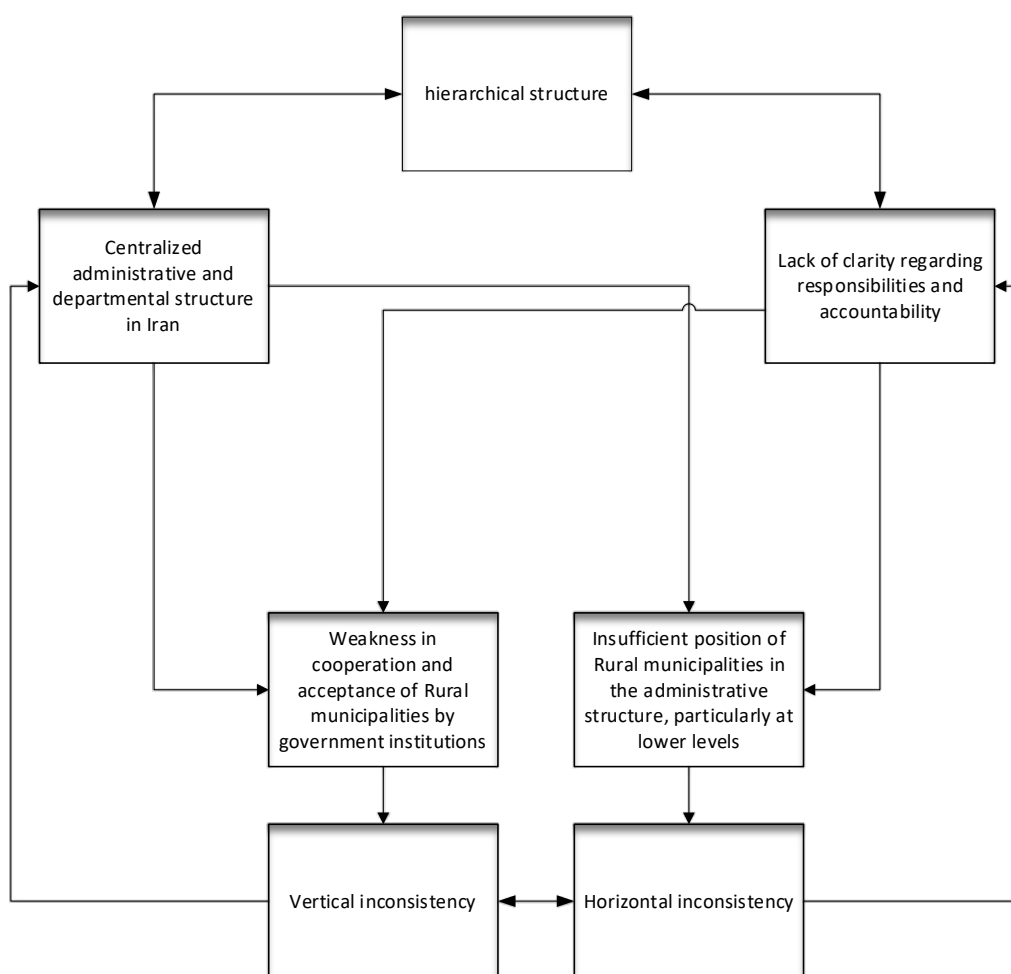


Figure 3: Hierarchical structure and horizontal and vertical inconsistencies

Moreover, the literature suggests that the success of rural governance depends on the type and level of

coordination at different levels. For instance, in Finland, the government formed a large

interdepartmental committee of different ministries to remove obstacles to rural development. In Canada, the federal government created a rural secretariat in the Ministry of Agriculture and Food to manage rural development policies in a coordinated way. Similarly, in Mexico, the inter-administrative coordination plan for rural development is an organizational agreement to resolve inter-departmental conflicts and ensure the effective implementation of rural policies and programs.

In Iran, the centralized administrative and departmental structure has hindered the efficient coordination of activities related to rural development among executive bodies. The lack of clarity regarding responsibilities and accountability has also been identified as a significant challenge. To address these issues, the Research suggests that expert work should be carried out to determine the method of coordination, everyone should follow the same policy, and the division of duties should be done naturally. The study also highlights the weakness in cooperation and acceptance of RMs by government institutions, both horizontally and vertically. This can be attributed to the insufficient position of the RMs in the administrative structure, particularly at the lower levels. Therefore, there is a need to strengthen the position of the RMs and increase their power and influence in the administrative structure to ensure the effective implementation of rural policies and programs. This Research contributes to the existing literature on rural governance by highlighting the importance of multi-level and joint governance and the need for efficient coordination mechanisms among different stakeholders. The findings suggest that Iran's current administrative hierarchy structure is inappropriate for implementing such policies, and experiences from other countries provide valuable insights into effective coordination mechanisms (Badri et al., 2021). Finally, the study underscores the need to strengthen the position of RMs in the administrative structure to ensure the successful implementation of rural policies and programs. Figure 3 shows the hierarchical structure and horizontal and vertical inconsistencies.

4.2. RMs incomes

The findings of this study shed light on the challenges rural communities face in terms of income generation and the limitations of the current institutional framework in addressing these

challenges. The Financial Regulations of RMs provide seven sources of income for the institution. However, the low incomes in rural areas, particularly in villages with low and marginal populations, mean that village assistants receive minimal income, and rural farmers' income is primarily dependent on the construction sector, which is an unstable source of income due to its high fluctuations. While criticizing the low income of RMs in sparsely populated villages, one of the Village heads stated that *"it is stipulated by law that RMs should be self-sufficient in income."* Also, in this regard, another participant said that *"despite the formal transfer of administrative responsibilities to the dehyars since the early 2000s, their financial autonomy has remained severely limited."* It is further noted that *"However, these approaches are either poorly implemented or inherently unsustainable, which requires in-depth academic study. In Iran, most of the income of RMs also comes from construction taxes. However, small villages with very little building construction cannot generate sufficient income to cover the infrastructure cost, despite the provision of equipment"*.

The findings indicate that legal regulations constitute another exacerbating factor in the financial challenges faced by rural areas, rooted in broader institutional frameworks. Specifically, revenue generation by rural management institutions in Iran is deeply entangled in legal obstacles, bureaucratic red tape, and macro-level economic fluctuations. At the micro level, these issues are further compounded by the absence of formal oversight mechanisms, speculative behaviors of key actors, and weak community participation. According to Article 5 of the relevant law, village administrators (dehyars) are required to achieve financial self-sufficiency. However, they lack access to key fiscal instruments such as progressive taxation, land value registration, or local commercial levies-tools commonly available in de-centralized systems worldwide (Shucksmith, 2018). As one participant noted, *"The minis-tries-especially the Ministry of Interior and the Planning and Budget Organization-keep a tight grip on financial transfers. They don't give us much room to adjust budgets to fit local needs, and village administrations are basically left on their own."*

Moreover, the findings suggest that the inability to attract investors and build partnerships with other

development stakeholders constitutes another major financial barrier for rural areas. Legal deficiencies and the centralized political-economic structure have hindered rural councils from formalizing relationships with external actors. In contrast, urban municipalities in Iran often succeed in negotiating financial arrangements through strategic alliances with higher authorities or private sector entities. As another participant put it,

"There's no law that officially recognizes village councils and dehyars as financially competent agents. That's what keeps them from taking part in public-private partnerships or joint regional development investments." As a result, rather than positioning rural economies along broader development trajectories, this institutional and legal isolation has effectively pushed them further to the margins.

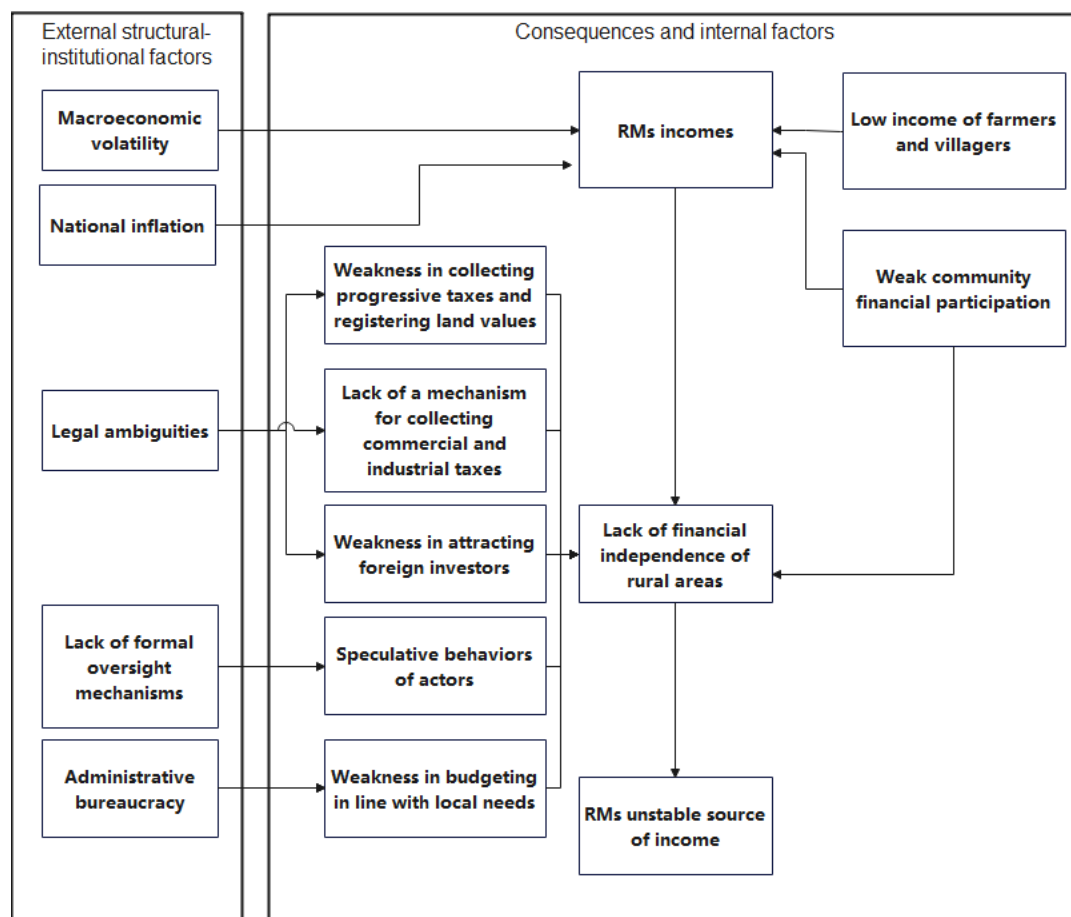


Figure 3: Factors that make RMs' income sources unstable

The study suggests that empowering village assistants and supervisory bodies and delegating authority to them can help overcome these challenges. This aligns with the global trend of local governments worldwide aiming to solve rural problems and reduce communication with higher centres by creating mechanisms within villages. Decentralization of power and resources can lead to better management and diversification of income based on an all-around plan in the village. Incentives for economic activities should be allocated to those who participate, increasing creativity in the RMs and encouraging them to

participate more in the local community. Regarding the use of village heads' creativity to generate income for the village, an expert in RMs stated that "the main activity of villagers in Iran is agriculture, but they cannot benefit from this job as agriculture is exempt from taxes." Furthermore, the law presents a significant obstacle to creating new ways to increase the income of rural farmers. Therefore, if the law and regulations permit rural farmers to generate income according to their rural talents, their financial problems can be reduced to some extent".

The literature supports the idea that decentralization can improve rural communities' outcomes. For example, scholars have argued that decentralization can lead to better service delivery, more effective governance, and greater community participation in decision-making processes (Salehi et al., 2014; Singh & Shishodia, 2016; Zohouri et al., 2017). Similarly, researchers have highlighted the importance of empowering local institutions and communities to address rural communities' challenges (Humlerová, 2017; Torabi et al., 2025; Torabi et al., 2021). The study also suggests that communication with entrepreneurs and sharing successful experiences can motivate villagers, and custodian institutions should facilitate communication. This is consistent with the literature, which suggests that networking and collaboration among stakeholders can lead to better outcomes for rural communities (Afsharipour et al., 2021; Villanueva, 2021).

4.3. Management of villages under 20 households

According to the definition of a village in Iran, a village is a homogeneous settlement in terms of its environment (natural, social, cultural, and economic conditions) and has a specific independent registered or customary domain and territory. At least 20 households or one hundred people live there, whether concentrated or scattered. According to this law, places and farms with fewer than 20 households and fewer than 100 people are deprived of the blessing of having a rural management institution due to not meeting the conditions for establishing RMs. Therefore, these places and farms lack coherent and systematic management, like villages with over twenty households. For example, one of the beneficiaries criticized the current approach and claimed, "Unfortunately, we do not have a management structure for the villages below the population's household level. Although these settlements are not included in the definition of a village in this country... but if it were not a city place! Alternatively, it was not a village! Shouldn't they be served? Does that mean they should be forgotten? Is this justice?"

The lack of management structures for villages with less than 20 households in Iran highlights a gap in the governance system, policy-making, and community development. Good governance, effective policy-making, and community development are essential for rural development. In the case of Iran, the applicability of the definition of

a village and the lack of attention to the management issue in micro and middle-level plans suggests a need for policy reforms. Community-based approaches to RMs could be a potential solution to address the needs of local communities and ensure effective and sustainable management structures (López-Penabad et al., 2022; Nunes et al., 2022). Further Research is needed to explore the potential of community-based approaches to RMs and their implications for rural development in Iran. In the Population and housing census 2014, there were 22,819 villages with less than 20 households. According to the information of the Iranian Statistics Center, villages with less than 20 households suffer from high migration of young people, low literacy levels, low employment, and severe poverty compared to other rural areas of the country due to a lack of services. On the other hand, due to social-geographical isolation and a lack of guardians in these places, access to services for this type of citizen is low. Therefore, considering the population and the relatively high number of places and farms, a new structure for management at these levels seems necessary. To solve this problem, governments sometimes start the policy of consolidating small and scattered settlements. However, it should be noted that applying this policy sometimes leads to the loss of resources and weakness in the country's humanitarian and defence capabilities. One of the beneficiaries from the group of academics claimed: "Some of these places and fields have a suitable location; we should not allow these places to wither and disappear little by little. Because many of these places and farms have significant production, some of them used to be villages that lost their population over time and now face this RM vacuum... instead of solving the problem, we should solve the problem by destroying these places and erasing their identity. However, we must design a mechanism that allows easy access to services for this type of citizen, not uneconomically."

Good governance is essential for effective rural development. According to Agrawal and Tripathy et al. (2021), good governance is a set of processes that promote accountability, transparency, and the rule of law. In rural areas, effective governance can help ensure equitable resource distribution, sustainable development, and increased access to services (Addink, 2019). Rural governance structures can be complex and include local,

regional, and national levels of government. In the case of Iran, the lack of management structures for villages with less than 20 households highlights a gap in the governance system, which could be addressed through policy-making. Another beneficiary, criticizing the non-implementation of some legal provisions of the Fifth Development Plan in Iran, stated, "In the fifth development plan, the concern of these points was taken into consideration, but in the micro and middle-level plans, practically no attention was paid to it... as if the program has assigned that these points should be organized in some way..." in fact, Policy-making is an essential tool for rural development. Policies can

help address rural areas' challenges, including poverty, unemployment, and limited access to services. In the case of Iran, the non-implementation of some legal provisions of the Fifth Development Plan highlights a challenge in policy-making. The Fifth Development Plan aims to promote rural development, providing services and infrastructure in rural areas. However, the lack of attention to the management issue in villages with less than 20 households in micro and middle-level plans suggests a policy gap. Figure 4 shows the challenges of villages with less than 20 households that do not have a village municipality.

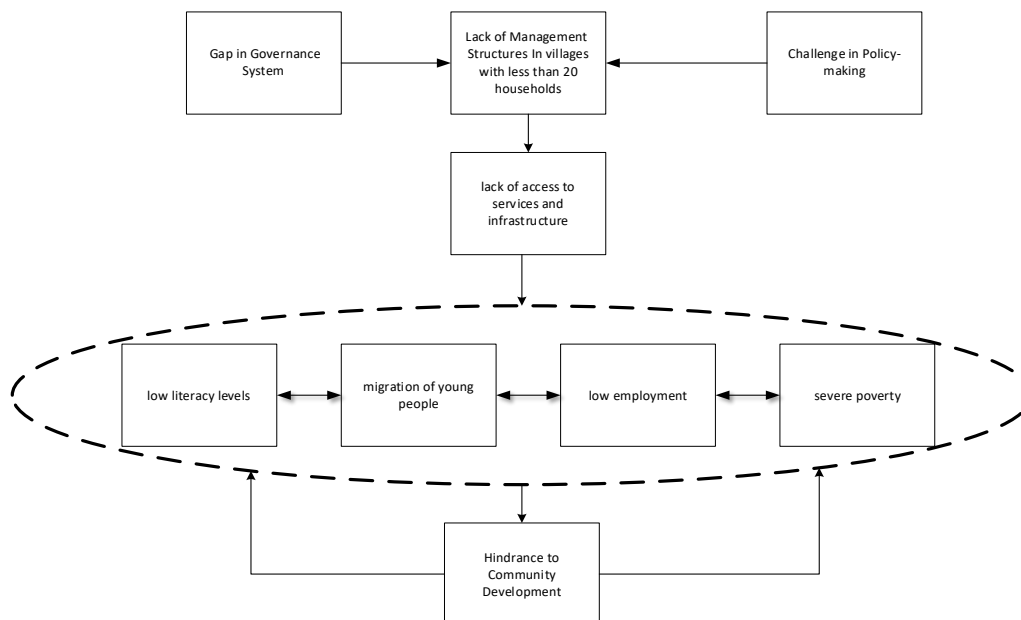


Figure 4: the challenges of villages with less than 20 households that do not have a village municipality

5. Discussion and Conclusion

This study explores the challenges encountered by RMs in Iran and provides insights into the need to expand their functional area and duties beyond village boundaries. It highlights the significance of a new management structure for small communities, which can inform further studies on RMs in Iran and other countries facing similar challenges. While previous Re-search has focused on community-oriented capacities in RMs in developed countries (Badri et al., 2013; Copus et al., 2017; Douglas, 2005), this study provides a new perspective on the specific challenges faced by countries with centralized institutional structures. The weak institutionalization of local management in developing countries impedes sustainable rural

development (Kato et al., 2022), and this study critically examines prevailing approaches to local management, emphasizing the role of villagers in the local development process (Zohouri et al., 2017).

This Research contributes to rural management literature by providing unique insights into RMs' general challenges in developing countries. It highlights how power relations in centralized and hierarchical countries can reduce the efficiency and effectiveness of RMs, leading to struggles for power between RMs and the Government and hindering effective rural management (Castro-Arce & Vancley, 2020). The centralization of power in Iran has led to a hierarchical structure resistant to the

transfer of power to public institutions, making it difficult to achieve effective rural management. Additionally, this study highlights how power struggles have led to a fragmented approach to rural management, resulting in weaknesses and gaps (Clark et al., 2007). A lack of coordination and a fragmented approach to rural affairs have emerged due to various independent organizations with different approaches taking charge of rural development (Badri et al., 2021). The Research emphasizes the need for a coordinated and multi-dimensional approach to advance rural affairs. To improve rural management, the study recommends empowering RMs (Torre & Traversac, 2011), facilitating participation (Müller et al., 2020), institutionalizing planning (Kato et al., 2022; Kim & Lim, 2016), and focusing on promoting development and pre-serving resources (Shortall, 2008). It also recommends distinguishing between city and village administrative mechanisms in planning and management systems, delegating a wide range of duties and functions to local administration, and expanding the area of influence of RMs from point management to territorial management. The study highlights the negative consequences of neglecting the holistic approach in local management (Mokhtari karchegani et al., 2020) and recommends moving from governance to good governance to lead to multi-level and collaborative action (Horlings & Marsden, 2014). Institutionalizing the rural management system is crucial to address challenges in the diverse nature of villages in countries such as Iran. The National Rural Area Management Organization could assist in integrating RMs, while horizontal and vertical coordination could strengthen the effectiveness of the planning and rural management system.

5.1. Theoretical Implications

The study recommends granting extensive powers to the local government to diversify the local government's income (Olmedo & O'Shaughnessy, 2022), managing lands within the legal boundaries of villages, and consolidating service delivery and allocation of financial credits by the Central Government (McAreavey, 2009). Regional management could facilitate service delivery to small places while considering local capacities. Precise and efficient laws could prevent arbitrary behaviour of local and extra-local managers (Van Assche, 2015), and incentives for social innovation could encourage the active involvement of local

communities and private investors to increase the efficiency and competitiveness of local management (Satola et al., 2019). The central governments should allocate special credit to marginal and less fortunate villages based on their territorial duty (Miceikienė et al., 2021).

5.2. Limitations and Suggestions for Future Research

This study is not without limitations, which should be acknowledged. First, some potential participants refused to be interviewed due to the focus of the study on the challenges of public administration in rural areas. This limitation may affect the generalizability of the results, and thus, caution should be exercised when interpreting them. Second, since this Research was conducted in a centralized political structure with an oil economy, the findings may not be generalizable to other government structures, such as welfare and socialist governments. Therefore, further Research is necessary to determine whether these results hold in different political and economic contexts. Additionally, future studies should explore the relationship between the structure of the planning and management system and the effectiveness of RMs.

Despite its limitations, this research lays a valuable foundation for future investigations. In the political sphere, subsequent studies could explore how varying planning systems and the institutionalization of local governments influence rural governance. To address fiscal mismanagement rooted in institutional shortcomings, future research should explore the potential of participatory governance and decentralization to local governments. Engaging rural stakeholders in planning processes—through inclusive communication, capacity-building initiatives, and shared decision-making frameworks—can foster more coherent and equitable governance structures. For instance, reinforcing local and regional institutions by promoting accountability, empowering local actors, and encouraging effective participation is vital to overcoming rural mismanagement. In the social dimension, future studies could investigate the contributions of social capital, grassroots innovation, and community-driven initiatives to sustainable rural management. Economically, the impact of small village consolidation on rural income diversification and improved market connectivity warrants further

examination. Mapping the networks of local and trans-local stakeholders and investors can help develop context-sensitive strategies that address inefficiencies and align with local priorities. Additionally, measures such as securing land tenure rights -including the formal recognition of customary claims- and ensuring transparency in implementation are widely recognized as effective practices for enhancing the financial management of rural municipalities. Finally, future research should assess how local management practices affect environmental sustainability and the conservation of natural and human resources. These

research directions are essential for advancing knowledge and formulating effective rural resource management strategies.

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Authors contributions

The authors equally contributed to the preparation of this article.

Conflict of interest

The authors declare no conflict of interest.

References:

- Addink, H. (2019). *Good governance: Concept and context*. Oxford University Press.
- Afsharipour, A., Barghi, H., & Ghanbari, Y. (2021). Appropriate policy-making for rural regions management in Iran. *Land Use Policy*, 109, 105669. <https://doi.org/10.1016/j.landusepol.2021.105669>
- Andersson, K., Gordillo, G., & Van Laerhoven, F. (2009). *Local governments and rural development: Comparing lessons from Brazil, Chile, Mexico, and Peru*. University of Arizona Press.
- Andrews, M. (2003). New public management and democratic participation: Complementary or competing reforms? A South African study. *International Journal of Public Administration*, 26(8-9), 991-1015. <https://doi.org/10.1081/PAD-120019357>
- Badri, S. A., Akbarian, S. R., & Ghassabi, M. J. (2013). The Role of Local Management in Physical Development of Rural Settlements (Case Study: Rural Areas of Aran-Bidgool City). *Journal of Rural Research*, 4(2), 249-276. https://jrur.ut.ac.ir/article_35645_en.html?lang=en
- Badri, S. A., Kazemi, N., Khodadadi, P., & Mohammadnejad, A. (2021). Why rural development policies have not contributed to rural development in Iran. *Rural Society*, 30(2-3), 84-100. <https://doi.org/10.1080/10371656.2021.1997423>
- Bagheri, A., Molaie, N., & Shirkia, T. A. (2013). "The rural management's role in sample cases village development": (Behshahr County) [Article]. *Life Science Journal*, 10(SUPPL.3), 308-316. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84874901917&partnerID=40&md5=f67cbd797ccc8890ca5f4d99ef1ca4a3>
- Bekele, A. E., Drabik, D., Dries, L., & Heijman, W. (2022). Large-scale land investments and land-use conflicts in the agro-pastoral areas of Ethiopia. *Land Use Policy*, 119, 106166. <https://doi.org/10.1016/j.landusepol.2022.106166>
- Biljohn, M. I. M., & Lues, L. (2020). Citizen participation, social innovation, and the governance of local government service delivery: Findings from South Africa. *International journal of public administration*, 43(3), 229-241. <https://doi.org/10.1080/01900692.2019.1628052>
- Brunet-Jailly, E., & Martin, J. (2020). *Local government in a global world: Australia and Canada in comparative perspective*. University of Toronto Press.
- Castro-Arce, K., & Vanclay, F. (2020). Transformative social innovation for sustainable rural development: An analytical framework to assist community-based initiatives. *Journal of Rural Studies*, 74, 45-54. <https://doi.org/10.1016/j.jrurstud.2019.11.010>
- Clark, D., Southern, R., & Beer, J. (2007). Rural governance, community empowerment and the new institutionalism: A case study of the Isle of Wight. *Journal of Rural Studies*, 23(2), 254-266. <https://doi.org/10.1016/j.jrurstud.2006.10.004>
- Copus, C., Roberts, M., & Wall, R. (2017). *Local government in England: Centralisation, autonomy and control*. Springer.
- Crosta, N., Davies, A., & Maguire, K. (2006). *The new rural paradigm: policies and governance*. Paris: OECD publishing.
- Czudec, A., & Zajac, D. (2021). Economic effects of public investment activity in rural municipalities of Eastern Poland [Review]. *Economy of Regions*, 17(2), 644-657. <https://doi.org/10.17059/ekon.reg.2021-2-21>
- Douglas, D. J. (2005). The restructuring of local government in rural regions: A rural development perspective. *Journal of Rural Studies*, 21(2), 231-246. <https://doi.org/10.1016/j.jrurstud.2005.01.003>

17. Douglas, D. J. (2023). The rural municipality in Canada: A critical overview of recent research and some perspectives on the development agenda. *Canadian Geographer*, 67(1). <https://doi.org/10.1111/cag.12829>
18. Faguet, J.-P. (2014). Decentralization and governance. *World Development*, 53, 2-13. <https://doi.org/10.1016/j.worlddev.2013.01.002>
19. Ge, D., & Lu, Y. (2021). A strategy of the rural governance for territorial spatial planning in China. *Journal of Geographical Sciences*, 31, 1349-1364. <https://link.springer.com/article/10.1007/s11442-021-1900-6>
20. Gjerstad, B., Johannessen, Ø. L., NØDIAND, S. I., Skeie, G., & Vedøy, G. (2015). Policies in Municipal public services and migration to Norway. *Politeja*(31/2), 159-184. <https://www.ceeol.com/search/article-detail?id=343718>
21. Hashemi, N., & Ghaffary, G. (2017). A proposed sustainable rural development index (SRDI): lessons from Hajji village, Iran. *Tourism Management*, 59, 130-138. <https://doi.org/10.1016/j.tourman.2016.07.021>
22. Horlings, L. G., & Marsden, T. K. (2014). Exploring the 'New Rural Paradigm' in Europe: Eco-economic strategies as a counterforce to the global competitiveness agenda. *European Urban and Regional Studies*, 21(1), 4-20. <https://doi.org/10.1177/0969776412441934>
23. Hosseini, S., Faizi, M., Norouzian-Maleki, S., & Karimi Azari, A. (2015). Impact evaluation of rural development plans for renovating and retrofitting of rural settlements: Case Study: Rural Districts of Tafresh in Iran. *Environmental Earth Sciences*, 73, 3033-3042. <https://link.springer.com/article/10.1007/s12665-011-1403-3>
24. Humlerová, V. (2017). Rural municipalities in the context of local economic development in the Czech Republic. Proceedings of the 29th International Business Information Management Association Conference - Education Excellence and Innovation Management through Vision 2020: From Regional Development Sustainability to Global Economic Growth,
25. Islam, S. (2025). Public Finance and Policy Effectiveness A Review Of Participatory Budgeting In Local Governance Systems. Available at SSRN 5287147. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5287147
26. Karchegani, A. M., Tavakoli, M., Pourtaheri, M., & Valverde, F. A. N. (2025). Navigating Paradigmatic Boundaries: A Critical Analysis of Rural Development Models in Iran's Spatial Planning Projects. <https://www.preprints.org/manuscript/202502.2297>
27. Kato, K. Y. M., Delgado, N. G., & Romano, J. O. (2022). Territorial Approach and Rural Development Challenges: Governance, State and Territorial Markets. *Sustainability*, 14(12), 7105. <https://doi.org/10.3390/su14127105>
28. Kim, T., & Lim, J. (2016). Regional policy in the Republic of Korea: Principles and experiences. *Santiago: Rimisp Working Paper*, 189.
29. Kosec, K., & Wantchekon, L. (2020). Can information improve rural governance and service delivery? *World Development*, 125, 104376. <https://doi.org/https://doi.org/10.1016/j.worlddev.2018.07.017>
30. Lessing, B. (2021). Conceptualizing criminal governance. *Perspectives on politics*, 19(3), 854-873. <https://doi.org/10.1017/S1537592720001243>
31. López-Penabad, M. C., Iglesias-Casal, A., & Rey-Ares, L. (2022). Proposal for a sustainable development index for rural municipalities [Article]. *Journal of Cleaner Production*, 357, Article 131876. <https://doi.org/10.1016/j.jclepro.2022.131876>
32. Mashau, N. L., Kroeze, J. H., & Howard, G. R. (2022). Key Factors for Assessing Small and Rural Municipalities' Readiness for Smart City Implementation [Article]. *Smart Cities*, 5(4), 1742-1751. <https://doi.org/10.3390/smartcities5040087>
33. McAreavey, R. (2009). *Rural development theory and practice*. Routledge.
34. Miceikienė, A., Skauronė, L., & Krikštolaitis, R. (2021). Assessment of the financial autonomy of rural municipalities [Article]. *Economies*, 9(3), Article 105. <https://doi.org/10.3390/economies9030105>
35. Mokhtari karchegani, A., Tavakoli, M., & Ahmadipour, Z. (2020). Comparison of Epistemological system's with Methodological Benchmarks in Spatial Planning. *Geography and Development*, 18(59), 185-210. https://gdij.usb.ac.ir/article_5470_en.html
36. Mokhtari Karchegani, A., Tavakoli, M., & Portahari, M. (2024). The New Paradigm of Neo_Endogenous Rural Development: A Thematic Analysis. *Journal of Rural Research*, 15(2), 208-225. https://jrur.ut.ac.ir/article_96158.html?lang=en
37. Mokhtari Karchegani, A., Tavakoli, M., Pourtaheri, M., & Navarro Valverde, F. A. (2024). Rethinking Rural Development: Analyzing Paradigmatic Intersections in Iran's Spatial Planning Projects. *Journal of Research and Rural Planning*. https://jrrp.um.ac.ir/article_46115.html
38. Müller, O., Sutter, O., & Wohlgemuth, S. (2020). Learning to LEADER. Ritualised performances of 'participation' in local arenas of participatory rural governance. *Sociologia Ruralis*, 60(1), 222-242. <https://doi.org/10.1111/soru.12287>
39. Niedomysl, T. (2007). Promoting rural municipalities to attract new residents: an evaluation of the effects. *Geoforum*, 38(4), 698-709. <https://doi.org/10.1016/j.geoforum.2006.11.024>

40. Nunes, F. G. S., Santos, A. M., Carneiro, Â. O., Fausto, M. C. R., Cabral, L. M. S., & Almeida, P. F. (2022). Challenges to the provision of specialized care in remote rural municipalities in Brazil [Article]. *BMC Health Services Research*, 22(1), Article 1386. <https://doi.org/10.1186/s12913-022-08805-6>
41. Olmedo, L., & O'Shaughnessy, M. (2022). A Substantive View of Social Enterprises as Neo-endogenous Rural Development Actors. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 1-13. <https://link.springer.com/article/10.1007/s11266-021-00442-7>
42. Popoola, A., Magidimisha-Chipungu, H., & Chipungu, L. (2022). Towards rural inclusion: improving the governance of service delivery in Nigeria. *Cogent Social Sciences*, 8(1), 2118793. <https://doi.org/10.1080/23311886.2022.2118793>
43. Reis, N. (2016). Good governance as managerialism: rationalisation and international donors in Vietnam's rural water supply and sanitation sector. *Development Policy Review*, 34(1), 29-54. <https://doi.org/10.1111/dpr.12144>
44. Rezvani, M. R. (2011). *Rural development planning in Iran*. Tehran: Qomes Publications.[in Persian].
45. Rondinelli, D. A., Nellis, J. R., & Cheema, G. S. (1983). Decentralization in developing countries. *World Bank staff working paper*, 581, 13-28. <https://documents1.worldbank.org/curated/en/868391468740679709/pdf/multi0page.pdf>
46. Ruan, J., & Wang, P. (2023). Elite capture and corruption: the influence of elite collusion on village elections and rural land development in China. *The China Quarterly*, 253, 107-122. <https://doi.org/10.1017/S0305741022001217>
47. Sakketa, T. G. (2023). Urbanisation and rural development in sub-Saharan Africa: A review of pathways and impacts. *Research in Globalization*, 6, 100133. <https://doi.org/10.1016/j.resglo.2023.100133>
48. Salehi, K. H., Arzjani, Z., & Fathali, M. (2014). Assessment of rural district council's performance in rural management (case study, suleghan rural district, Tehran City) [Article]. *Advances in Environmental Biology*, 8(10), 598-602. <https://www.scopus.com/inward/record.uri?eid=2-s2.0.005f07ce54e965cb5be22ca0d3443>
49. Saputra, R., & Havlíček, T. (2024). Strengthening Rural Governance for Rural Development Through Collaborative Strategy: The Application of Soft System Methodology and Textual Network Analysis. *Systemic Practice and Action Research*, 37(6), 1175-1193. <https://link.springer.com/article/10.1007/s11213-024-09696-w>
50. Satoła, Ł., Standar, A., & Kozera, A. (2019). Financial autonomy of local government units: Evidence from polish rural municipalities [Article]. *Lex Localis*, 17(2), 321-342. [https://doi.org/10.4335/17.2.321-342\(2019\)](https://doi.org/10.4335/17.2.321-342(2019))
51. Shortall, S. (2008). Are rural development programmes socially inclusive? Social inclusion, civic engagement, participation, and social capital: Exploring the differences. *Journal of Rural Studies*, 24(4), 450-457. <https://doi.org/10.1016/j.jrurstud.2008.01.001>
52. Singh, K., & Shishodia, A. (2016). *Rural development: Principles, policies, and management*. SAGE Publishing India.
53. Šūpule, I., & Søholt, S. (2019). Rural municipalities and change in local school structure: Comparing room for manoeuvre among rural municipalities in Latvia and Norway. *Scandinavian journal of educational research*, 63(7), 1070-1085. <https://doi.org/10.1080/00313831.2018.1476916>
54. Tajbakhsh, K. (2022). *Creating local democracy in Iran: State building and the politics of decentralization*. Cambridge University Press.
55. Torabi, Z.-A., Hall, C. M., Mokhtari Karchegani, A., & Hassani Jalilian, P. (2025). The dark side of land commodification: exploring the multidimensional conflicts in second home development in Ziarat Village, Iran. *Journal of Policy Research in Tourism, Leisure and Events*, 1-29. <https://doi.org/10.1080/19407963.2025.2489412>
56. Torabi, Z.A., Rezvani, M. R., & Badri, S. A. (2021). Tourism, poverty reduction and rentier state in Iran: a perspective from rural areas of Turan National Park. *Journal of Policy Research in Tourism, Leisure and Events*, 13(2), 188-203. <https://doi.org/10.1080/19407963.2020.1759081>
57. Torre, A., & Traversac, J.-B. (2011). *Territorial governance: local development, rural areas and agrofood systems*. Springer Science & Business Media.
58. Tripathy, K., Paliwal, M., & Nistala, N. (2021). Good governance practices and competitiveness in cooperatives: An analytical study of Kerala Primary Agricultural Credit Societies. *International Journal of Global Business and Competitiveness*, 16(2), 153-161. <https://link.springer.com/article/10.1007/S42943-021-00020-0>
59. Van Assche, K. (2015). *Rural development: Knowledge and expertise in governance*. Wageningen Academic Publishers.
60. Vargas-Hernandez, J. G., Avila, F. J. G., & Vargas-González, O. C. (2025). Governance of Organizational Sustainability Management. In *Integrating Organizational Theories With Sustainable Development* (pp. 273-294). IGI Global Scientific Publishing.
61. Villanueva, L. A. S. (2021). Budget deliberation as communicative practice: The case of a rural municipality in the philippines [Article]. *International Journal of Asia-Pacific Studies*, 17(2), 283-319. <https://doi.org/10.21315/IJAPS2021.17.2.11>
62. Zohouri, R. G., Jafari, H., & Alizadeh, K. (2017). Evaluation of performance of rural municipalities in the context of sustainable rural management (case study: Shemiranat province, Iran) [Article]. *Ecology, Environment and Conservation*, 23 (September), S93-S95. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85036607523&partnerID=40&md5=13d186a37ae1fbcaff4100772888ada3>



سایه تمرکزگرایی: بررسی چالش‌های سوءمدیریت و حکمرانی روستایی در ایران

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چکیده مبسوط

۱. مقدمه

حکمرانی روستایی در کشورهای در حال توسعه، و به‌ویژه در ایران، با مجموعه‌ای پیچیده از چالش‌ها و شکاف‌های نهادی مواجه است. اگرچه روستاها همواره یکی از پایه‌های اصلی امنیت غذایی، پایداری اجتماعی و توسعه سرزمینی بوده‌اند، اما ضعف در ساختارهای مدیریتی، تمرکز قدرت در سطوح ملی و ناهماهنگی نهادی میان دستگاه‌ها باعث شده است که بسیاری از برنامه‌های توسعه‌ای به نتایج مطلوب نرسند. ادبیات پژوهش نشان می‌دهد که مدل‌های برنامه‌ریزی بالاب‌پایین، بدون شناخت دقیق زمینه‌های محلی، قادر به تأمین نیازهای واقعی جوامع روستایی نیستند و حتی در برخی موارد پیامدهای منفی همچون کاهش اعتماد عمومی، فساد، انحصار قدرت و نابرابری فضایی به همراه داشته‌اند. با وجود اهمیت تدوین سازوکارهای حکمرانی چندسطحی، ساختار مدیریتی ایران همچنان در چارچوبی سلسله‌مراتبی عمل می‌کند که در آن اختیارات تصمیم‌گیری و منابع عمدتاً در سطح ملی متمرکز است.

در چنین ساختاری، دهیاری‌ها (RMs) که قرار بود ابزارهای اصلی مردمی‌سازی مدیریت محلی باشند، با محدودیت‌های گوناگون مواجه شده‌اند. از زمان تأسیس این نهادها در سال ۱۹۹۸، هدف اصلی کاهش مداخله دولت و انتقال بخشی از مدیریت روستاها به بدنه محلی بوده است. با این حال، طی ۲۳ سال اخیر تنش میان دولت و RMs افزایش یافته و تضادهای قدرت باعث کاهش کارآمدی این نهادها شده است. این مطالعه با هدف تحلیل عمیق این چالش‌ها از طریق روش تحلیل

تماتیک و انجام ۶۰ مصاحبه کیفی با مدیران محلی، کارشناسان، مسئولان دولتی و روستاییان انجام شده است.

۲. مبانی نظری تحقیق

نظام مدیریت روستایی در ایران مبتنی بر مجموعه‌ای از قوانین و مقررات است که اگرچه به ظاهر بر تفویض اختیار تأکید دارند، اما در عمل با ابهام‌های قانونی و محدودیت‌های مالی و اداری مواجه‌اند. ضعف در تعیین حدود وظایف شوراهای، نبود سازوکارهای نظارتی محلی، نداشتن استقلال مالی و عدم شفافیت در نحوه تخصیص منابع، موجب شده است که دهیاری‌ها نتوانند نقش واقعی خود را ایفا کنند. در نتیجه، مدیریت روستایی بیشتر به انجام کارهای اجرایی محدود شده و ظرفیت این نهادها برای ایفای نقش راهبردی در توسعه محلی کاهش یافته است. در ادبیات جهانی، تقویت حکمرانی محلی و تمرکززدایی، شرط اساسی برای دستیابی به توسعه پایدار شناخته می‌شود. کشورهایمانند کانادا و نروژ نشان داده‌اند که با ایجاد نهادهای محلی مستقل و برخورداری از منابع و اختیارات کافی، امکان برنامه‌ریزی مشارکتی و ارائه خدمات مطلوب در روستاها فراهم می‌شود. در مقابل، در کشورهایی با ساختارهای متمرکز، چالش‌هایی چون شکاف میان جامعه و دولت، مقاومت در برابر انتقال قدرت و ضعف سازوکارهای مشارکتی مشاهده می‌شود؛ وضعیتی که مشابه ایران است.

۳. روش تحقیق

پژوهش حاضر به روش کیفی و تحلیل تماتیک انجام شده است. با استفاده از نمونه‌گیری گلوله‌برفی، ۶۰ نفر از مدیران محلی، کارشناسان مدیریت روستایی، مسئولان دولتی و ساکنان

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ه/ پیامدهای اجتماعی و اقتصادی- ضعف ساختار مدیریت محلی موجب نارضایتی، کاهش اعتماد به نهادهای دولتی، عدم تحقق مشارکت اجتماعی، تضعیف توسعه اقتصادی و کاهش بهره‌وری در سکونتگاه‌های روستایی شده است.

۵. بحث و نتیجه‌گیری

پژوهش حاضر نشان می‌دهد که ساختار متمرکز حکمرانی در ایران، اصلی‌ترین مانع توسعه روستایی و کارآمدی دهیاری‌هاست. ضعف قوانین، وابستگی مالی، محدودیت اختیارات، نبود سازوکارهای مشارکت‌محور، کمبود هماهنگی نهادی و نادیده گرفتن روستاهای کوچک، موجب شده است که نهادهای محلی نتوانند نقش خود را در توسعه پایدار ایفا کنند. بر این اساس، راهکارهایی همچون توانمندسازی نهادی دهیاری‌ها، تفویض اختیار واقعی، بازنگری در قوانین، تقویت نظارت محلی، تنوع‌بخشی به منابع درآمدی، ایجاد ساختار مدیریت برای روستاهای کوچک، و توسعه حکمرانی چندسطحی ضروری است. تحقق این اصلاحات می‌تواند ضمن افزایش اعتماد عمومی، زمینه بهبود کیفیت زندگی، پایداری اقتصادی و تقویت انسجام اجتماعی در روستاهای ایران را فراهم کند.

کلیدواژه‌ها: مدیریت محلی، حکمرانی روستایی، ساختار سلسله‌مراتبی، دهیاری، توسعه روستایی، تمرکزگرایی.

تشکر و قدرانی

پژوهش حاضر حامی مالی نداشته و حاصل فعالیت علمی نویسندگان است. بنابراین، از اساتید و کارشناسان ارجمند که با حمایت و همکاری خود در به سرانجام رساندن این پژوهش نقش بسزایی داشتند، صمیمانه تشکر و قدرانی می‌کنیم.

روستایی انتخاب و طی مصاحبه‌های نیمه‌ساختاریافته مورد پرسش قرار گرفتند. تحلیل داده‌ها با روش غوطه‌وری، کدگذاری باز، ترسیم شبکه مفهومی و تحلیل محتوای عمیق (MAXQDA) انجام شد. برای افزایش روایی، متن مصاحبه‌ها برای تأیید به مشارکت‌کنندگان بازگردانده شد.

۴. یافته‌های تحقیق

الف/ جایگاه نهادی و ضعف اختیارات دهیاری‌ها- دهیاری‌ها با وجود آنکه ۴۸ وظیفه قانونی بر عهده دارند، به دلیل ابهام در قوانین، عدم هماهنگی با دستگاه‌های اجرایی و نبود ضمانت‌های قانونی در همکاری بین‌بخشی، از ایفای نقش مؤثر بازمی‌مانند. تمرکز قدرت در سطوح ملی و عدم اعتماد نهادهای دولتی به مدیریت محلی، دامنه عملکرد دهیاری‌ها را محدود کرده است. ب/ چالش‌های درآمدی و ناپایداری منابع مالی- منابع درآمدی دهیاری‌ها بسیار محدود بوده و عمدتاً بر عوارض ساخت‌وساز تکیه دارند. در روستاهای کم‌جمعیت این منبع عملاً ناکارآمد است. نبود اختیارات مالی، موانع قانونی در جذب سرمایه‌گذار، و وابستگی شدید به دولت، پایداری مالی را تهدید می‌کند.

ج/ نبود نظام مدیریت برای روستاهای کمتر از ۲۰ خانوار- بیش از ۲۲ هزار نقطه روستایی در ایران فاقد شرایط قانونی تشکیل دهیاری هستند. این امر موجب محرومیت خدماتی، ضعف برنامه‌ریزی، افزایش مهاجرت، فقر و کاهش کیفیت زندگی در این نقاط شده است. سیاست‌های ادغام روستاهای کوچک نیز در مواردی سبب حذف هویت مکانی و تضعیف ظرفیت‌های بومی شده است.

د/ ناهماهنگی افقی و عمودی در حکمرانی- ساختار اداری ایران دارای شکاف جدی میان بخش‌ها و سطوح مختلف (ملی- استانی- شهرستانی- روستایی) است. این عدم انسجام منجر به تداخل وظایف، پاسخگویی نامشخص، و ضعف اجرای سیاست‌های توسعه روستایی می‌شود.

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Original Article

Sustainable Ecotourism Assessment in the Southern Foothills of the Alborz (Kan to Darabad River Valleys) Using the DPSIR Framework

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Abstract

Purpose- During the 21st century, ecotourism has become a mainstream alternative for tourists. It is a critical approach to integrating economic growth with the protection of the environment, ensuring sustainable tourism while at the same time transforming modalities of tourism. The aim of the research is to evaluate the impacts of ecotourism in the southern slopes of the Alborz region by utilizing the DPSIR approach.

Design/methodology/approach- The research location is the old settlements from Kan to Darabad that enjoy a large tourism potential with various attractions (natural, human, infrastructural, and physical). The sites enjoy a combination of tourism activities (ecotourism, cultural, sportive, food, and religious). The research is applied research in objective and descriptive-analytical in method. The data has been collected through library research (statistical and documentary) and field research (survey and interviews).

Findings- The research population in this study included 30 experts, including experts in field of tourism, professors from universities, officials from the Cultural Heritage, Handicrafts, and Tourism Organization of Tehran, and officials from various related organizations, selected with the Delphi method. The research tried to evaluate the effects of ecotourism in the southern slopes of Alborz by utilizing the DPSIR approach, which showed that environmental effects at the five-element level -Driving Force, Pressure, State, Impact, and Response- make it possible to undertake a cause-and-effect analysis of environmental pressures from ecotourism. The results of the research identified 10 driving forces, 7 pressure elements, 9 state indicators, and 9 effects. The main response favored policy-making, strategic planning, and management in utilizing natural and human opportunities, capabilities, and resources of the southern slopes of Alborz. The goal is to achieve sustainable development of tourism and the region through nature-based integrated sustainable tourism by converting current challenges and weaknesses into strengths and windows of opportunities.

Research limitations/implications- The vast geographical region that is encompassed by the research from Kan to Darabad was prone to numerous limitations, including the non-availability of official data pertaining to the volume of tourists and tourism-based attributes of the research region, non-response of certain tourists to certain questions that were asked during the survey, and time limitations for the completion of the questionnaire.

Originality/value- The research employed the use of past research to promote theoretical research discussion and to seek alternative research indicators through the use of scoring with the DPSIR methodology.

Keywords: Impact Assessment, Ecotourism, Southern Alborz Foothills Environment, DPSIR Framework.

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1. Introduction

Today, tourism, as an inseparable part of the human experience, has always played a significant role in the discovery of new places and cultures. This activity has become the most important source of income, employment, and the development of infrastructure and facilities in many countries. However, its uncontrolled and excessive growth, and the increase in the number of tourists without proper planning, have become a threat to the environment. Among the types of tourism that affect the economic income of countries, ecotourism is of great importance, as it emphasizes the preservation of natural values and local communities. This new form of tourism, which supports and protects the environment, is dependent on nature and its resources (Trisic et.al, 2023).

Global reports indicate that with new and technological developments, tourism has also undergone changes. The strong inclination towards nature-based and ecocentric tourism is one such change. 74% of travelers prefer to use environmentally friendly accommodations (Benamer et.al, 2024, p.823). Despite the importance of ecotourism, an analysis of the global environmental situation in recent decades shows the destructive effects of humans on the environment, leading to severe issues such as deforestation, increased wastewater, reduced water quality, drastic climate change, and many other effects. Therefore, an ecosystemic approach and paying attention to human actions within the ecosystem structure are crucial for better biosphere management.

The DPSIR framework (Driving Force, Pressure, State, Impact, Response), developed by the European Environment Agency (EEA), is a suitable analytical tool for identifying causal relationships between humans and the environment. It has been used in this study to assess ecotourism in the studied area.

Many regions in Iran have high and suitable potentials for tourism, especially ecotourism. Each, according to its natural features and due to the country's climatic and geographical diversity, has played a role in attracting domestic and foreign tourists since ancient times. The villages located in the southern foothills of the Central Alborz, which have now become part of the urban fabric, are one of the country's important tourist-attracting regions, with their environmental capacities and specific activity characteristics. This area includes pristine

areas, natural landscapes, rivers, valleys, peaks, and diverse plant and animal species, and is known as the air corridor of Tehran, playing a crucial role in purifying the capital's polluted air. Alongside the environmental capacities of the Tehran foothills, there are challenges and problems such as environmental, economic, socio-cultural, managerial-institutional, and infrastructural issues facing the urban environment, which make an investigation inevitable with the focus on achieving sustainability and improving environmental quality. The main challenge of this research is the lack of a systematic framework for a comprehensive analysis of ecotourism in the southern foothills of Alborz (from Kan to Darabad); a framework that can identify the driving forces and environmental pressures, explain the existing state and impacts, and finally, provide appropriate managerial responses.

Therefore, based on the DPSIR framework, what are the driving forces, pressures, existing state, impacts, and managerial responses related to ecotourism for achieving sustainability in the southern foothills of Alborz (from Kan to Darabad)? Based on the stated question, the objective of this research is to identify the causal chains and perform an environmental analysis of ecotourism to provide solutions for reducing the harmful effects of nature-based tourism on the environment of the southern foothills of Alborz.

2. Research Theoretical Literature

2.1. Tourism

In terms of terminology, the word "tourism" is derived from the word "tour," meaning a journey from one point to another. In French, it means traveling around, and in Persian, it is used to mean traveling a lot (Mahallati, 2003).

According to the World Tourism Organization (WTO) definition, tourism refers to the activities of a person traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, and other purposes (Reichman, 1995; Gunn & Var, 2002). Many experts, researchers, and international academic and research communities have accepted and officially recognized the World Tourism Organization's definition.

2.2. Ecotourism

Although many researchers and scholars have expressed their views on this term, the first person to use it was Hector Ceballos-Lascurain while he

was working on a nature conservation project. Others trace the word's use back to an earlier period and to Hetzer (Alia, 2011). Hetzer believed that ecotourism emerged in response to negative and inappropriate development practices and the disregard for environmental considerations, based on the following criteria:

1. It protects the environment and has the least negative impact on the natural environment (Nazari, 2009: p. 2).
2. It promotes the culture of local communities and has the least negative impact on culture, maximizing responsibility towards the host community and reducing threats to biotic communities (Drumm & Moore, 2002; Blamey, 2001).
3. It ensures increased economic benefits for the host community.
4. It increases the satisfaction of tourists to attract their participation (Niazmand, 2004).
5. It educates and raises awareness about the environment for both tourists and the host community (McKinney, 2016).
6. It defines new markets and attractions (Fleischer & Tchetchik, 2005).
7. It educates and promotes the culture of citizens (TIES, 2002).

Therefore, ecotourism is a commitment to achieving conservation goals, improving the welfare of local communities, increasing participation, and creating new businesses (Jin et al., 2020). It is a platform for creating partnerships and a shared guide for tourists who are seeking to experience and learn about natural areas and diverse cultures (Drumm & Moore, 2002). For this reason, ecotourism has the potential to contribute to sustainable tourism development, revitalize forgotten rural areas, and reduce their poverty (Wondirad, 2020). Since ecotourism is an environmentally friendly activity that occurs in naturally rich areas and is a type of sustainable tourism (Imani et.al, 2022: p. 74), it provides better connections, job creation, and development (Cheia, 2013).

2.3. Sustainability Theory and Socio-Ecological Systems

DPSIR is variously determined by numerous inter-/multi-disciplinary theories, yet it has much stronger correspondence to the theory of sustainability and to the theory of social-ecological systems (SES).

Since the early 1990s, the field of tourism has undergone a serious reappraisal through the prism of sustainability principles, to the point of bringing cultural, natural, and historic resources, as well as indigenous communities' heritage, into sharper focus. From all the different concepts that tried to combine sustainable principles with those of tourism, by far the most common and favorably received has been that of ecotourism. In particular, from 1994 to 1996, among the most complete of the definitions of the field of ecotourism were expressed by academics. Those definitions had aimed at augmenting precision and clarity by emphasizing the role of conservation, of education, of ethics, of sustainability, and of the respective effects and local benefits that accrue (Boroumand et al., 2021).

Sustainable ecotourism has several linkages to various United Nations-established Sustainable Development Goals (SDGs) (Healy et al., 2023) such as:

Goal 6: Clean Water and Sanitation

SDG 8: Decent work and economic growth

SDG 12: Responsible Consume and Production

SDG 13: Climate Action

Sustainable Development Goal 15: Land Ecosystem Conservation and Biodiversity.

To comprehend environmental sustainability is to discern the interaction of anthropogenic drivers, pressures, and responses. The DPSIR is employed as an analytic method for measuring these processes. The social-ecological systems theory also contends that society and the environment are a combined, continuous whole in which humankind's drivers impose pressures upon the environmental framework. These pressures provoke state changes in the environment to invoke correspondingly proper managerial responses based upon the resulting effects. Such a theoretical methodology reveals the complex and dynamic interactions of humankind within an open-ended system of dependency by way of feedback. DPSIR framework establishes the causal linkages that bind human activities, the resulting direct ecological impacts, and after-effects and effects. It is thus considered to be an influential instrument for sustainability analysis and for tracking natural resource management (Binder et al., 2013: p. 26).

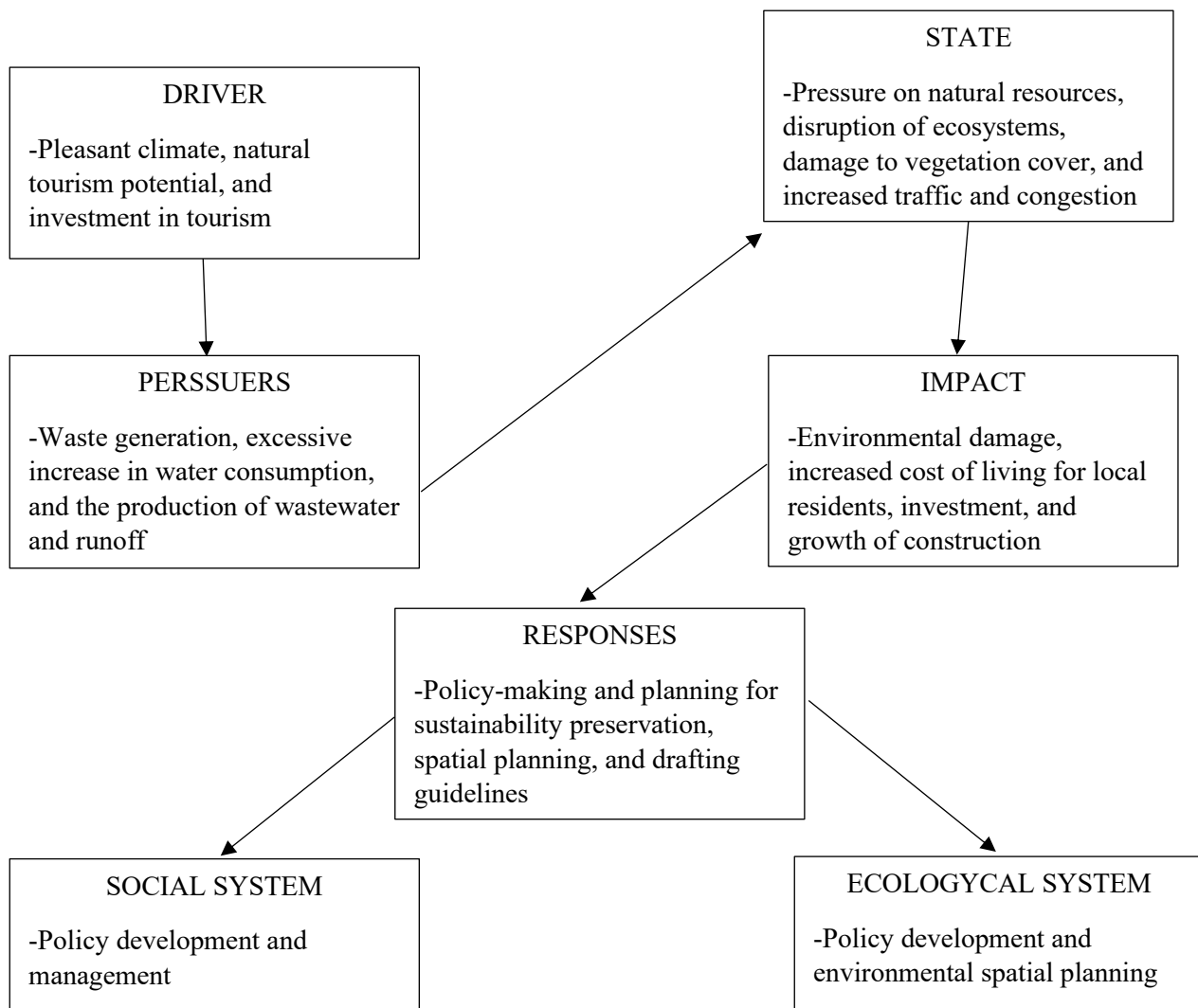


Figure 1: Conceptual Model of the Research

2.4. Research Literature Review

In recent decades, the **DPSIR model** has been used in various studies to assess sustainability. Furthermore, numerous studies have been conducted on **ecotourism**. While each of these two concepts individually has an extensive history, there

have been limited studies on the impact of ecotourism using the DPSIR assessment model. Table No. ... provides a limited overview of the research conducted in the two fields of study (ecotourism, the DPSIR framework, and the connection between the two).

Table 1. Research Background

Row	Article Title (In the field of ecotourism)	Author	Research Method	Outcome
1	A Study of the Role of Dubai's Ras Al Khor Wetland in Guiding Urban Tourists Towards Environmentally-Friendly Ecotourism (In the field of ecotourism)	Deci and Ryan (2012)	Questioning tourists	Most visitors prefer watching flamingos over strolling through markets and hotels (highlighting the importance of ecotourism)
2	A Study on the Role of Ecotourism in the Sustainable Development of Malaysia's East Coast Economic Region (ECER) by Assessing the Region's Ecotourism Potential (In the field of ecotourism)	Bhuiyan (2011)	Strategic study method	The study examined the strengths and weaknesses of this region in terms of sustainable development and the ecotourism industry, and proposed appropriate strategies to

Row	Article Title (In the field of ecotourism)	Author	Research Method	Outcome
				reduce weaknesses and further enhance strengths.
3	Ecotourism Site Selection in Thailand's National Parks Using GIS and AHP (In the field of ecotourism)	Bunruamkaew and Murayam (2011)	Site selection methods	They examined six indicators and eight criteria and identified the best location for ecotourism development.
4	A Study on Nature Tourism in India (Sikkim State) (In the field of ecotourism)	Kumari et al. (2010)	Analytic Hierarchy Process (AHP)	Emphasis on the importance of ecotourism
5	Application of the DPSIR Framework in the Integrated Environmental Assessment of Climate Change in Tehran City	Salehi (2018)	DPSIR framework	The environmental consequences of population growth and the unplanned expansion of Tehran have led to increased temperatures and greater vulnerability.
6	The DPSIR framework and its applicability in environmental decision-making	Khatibi (2015)	DPSIR framework	The DPSIR framework can classify and simplify diverse information about the environmental system and provide its outputs to policymakers.
7	An empirical analysis of the environmental efficiency of tourism in environmentally prioritized areas based on the DPSIR-SBM framework: A case study of the Yellow River Basin, China	Yang (2022)	DPSIR -SBM	The overall efficiency of tourism in the Yellow Sea Basin has shown a fluctuating upward trend over time, and the initial environmental value of tourism, economic and technological development capacity, ecological pressure, and government intervention have influenced the convergence of the river basin and its three sub-basins.
8	Rapid development and its challenges (Ecology of Iran)	Irani et al. (2022)	DPSIR framework	Supporting the local community is essential to address existing challenges.
9	Environmental impact assessment of tourism development on the Lute Desert using the DPSIR-TOPSIS framework	Mohammadpour (2021)	DPSIR framework and ecotourism	There has been a decline in cultural values and customs, socio-cultural dualities, land-use changes, and ultimately the development of tourism in the lute Desert.
10	Assessment of ecotourism impacts in the Rudbar and Qasran region	Tavakolinia et al. (2017)	DPSIR framework and ecotourism	Increased construction and the expansion of secondary homes have caused harmful impacts on the environment of the Rudbar, Qasran, and Lavasanat regions.
11	How can the DPSIR framework be used to structure problems and facilitate empirical research in coastal systems?	Lewison (2016)	DPSIR framework and ecotourism	Quantitative analyses and interdisciplinary applications of environmental factors, with a focus on social and cultural dimensions.

A review of prior research indicates that most studies have either addressed ecotourism independently or merely employed the DPSIR framework for analyzing environmental issues, while investigations combining these two domains remain limited. For instance, Deci & Ryan (2012) examined the role of the Ras Al Khor wetland in Dubai in directing tourists toward ecotourism,

Bhuiyan (2011) explored the role of ecotourism in the sustainable development of Malaysia's coastal areas, and Bunruamkaew & Murayam (2011) conducted ecotourism site selection in Thailand's national parks using GIS and AHP. In Iran, studies such as Tavakolinia et al. (2017) investigated the impacts of ecotourism in Roudbar-e Qasran using the DPSIR model, while Mohammadpour (2021)

analyzed the effects of tourism in the lute Desert through the DPSIR–TOPSIS approach. In the present research, previous studies have been utilized to enrich the theoretical foundations of the study and to help determine part of the research indicators. The distinctive contribution of this study lies in the fact that, for the first time, it assesses the impacts of ecotourism in the southern foothills of the Alborz Mountains (from Kan to Darabad) within the DPSIR framework, applying a scoring-based approach. This method not only identifies driving forces, pressures, states, and impacts, but also enables the formulation of managerial and policy responses.

3. Research Methodology

3.1. Geographical Scope of the Study

The southern foothills of the Alborz Mountains, particularly the section overlooking the Tehran metropolitan area, represent one of the key ecotourism destinations. Due to the presence of historic villages with diverse natural, cultural, and infrastructural attractions, this region holds substantial potential for tourism development. In mountainous areas, including the young folds of the Alborz, some parts are characterized by steep slopes and highly challenging accessibility, making them naturally impassable. Based on local experience, the most effective routes and communication paths in such terrains are those aligned with valleys (Sojasi et al., 2014, p.15). Within this region, a wide range of tourism activities—including ecotourism, cultural tourism, sports, gastronomy, and religious tourism—take place, attracting large numbers of visitors during different seasons of the year (Ali

Akbari, 2016). The study area encompasses a portion of Shemiran County, centered around the urban point of Tajrish, including District 1 and parts of Districts 2 and 5 of Tehran Municipality. In terms of urban services, it falls under the jurisdiction of Tehran Municipality, while politically and administratively it is governed by the Shemiranat County Administration. The southern foothills of the Alborz Mountains, extending from Kan to Darabad, form part of the southern slopes of the Alborz range, bounded to the west by the Kan Valley and to the east by the Darabad Valley.

This region, recognized as one of the most important and sensitive piedmont ecosystems of Iran, is characterized by historic rural settlements situated in close proximity to the Tehran metropolis. It possesses remarkable biodiversity and unique natural landscapes—including natural parks, river valleys, waterfalls, and native vegetation—as well as religious, historical, and cultural attractions. The elevation and topographic diversity of the area create climatic contrasts with the Tehran plain, such that as one ascends from the lowlands to higher altitudes, temperatures decrease while precipitation levels rise. This climatic gradient contributes significantly to the region's pleasant and favorable weather conditions (Mahmoudian et al., 2009).

However, despite its climatic advantages and strategic natural location, the area faces numerous challenges. Human activities and excessive pressure on natural resources have resulted in various environmental problems, most notably pollution and the degradation of natural resources, including vegetation cover (Tehran Environmental Studies Office, 2021).

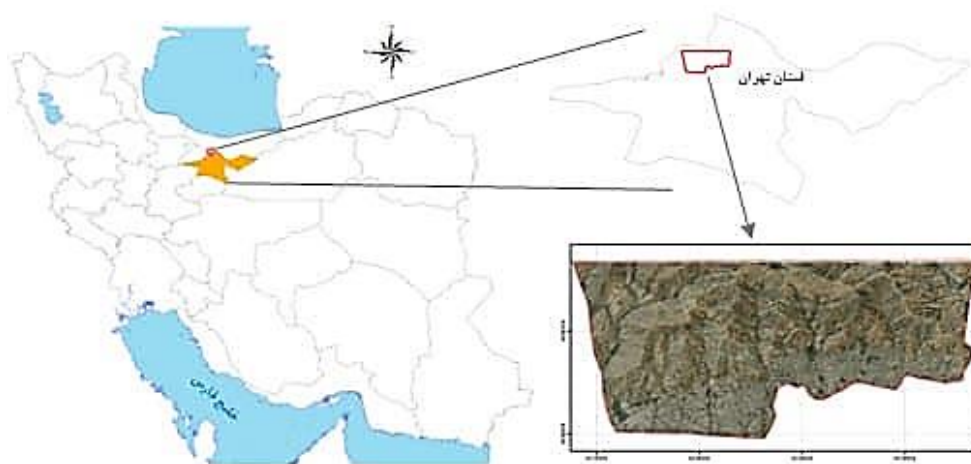


Figure 2. Geographical Location of the Study Area

3.2. Research Method

From a methodological perspective, this study adopts a descriptive–analytical approach with an emphasis on causal relationships. Data were initially collected in qualitative form and subsequently transformed into quantitative measures for analysis. In terms of research purpose, the study is classified as applied research. A library-based method was employed to develop the theoretical foundations and review the research background, as well as to gain an understanding of the study area. For data collection, field methods were utilized, including a researcher-designed questionnaire and semi-structured interviews. The statistical population of the research comprised 30 specialists, including academics and key experts in the field of tourism, selected using the Delphi method. For data analysis, descriptive statistics and the scoring method were applied. The ranking of variables was based on weighted averages, impact intensity, effect scale, and reversibility. Data categorization was conducted according to the five dimensions of the DPSIR model and presented in the form of tables and detailed analyses.

Data collection was carried out by consulting official documents and reports from relevant research centers, as well as through expert questionnaires and interviews. The researcher-designed questionnaire was developed to assess the impacts of ecotourism (nature-based tourism) on the region within the DPSIR framework, using the driving force, pressure, state, and impact criteria. The questionnaire was constructed based on expert consultations through the Delphi method. This process was implemented in two stages: in the first stage, experts identified the main factors affecting the environment, and in the second stage, they assigned scores to these factors.

3.3. The DPSIR Framework

The DPSIR framework is an acronym derived from the terms **Driving forces, Pressures, State, Impact, and Response**, which together define the causal chain of factors influencing the environment. It provides a means to identify and interrelate these determinants while also seeking to establish a logical linkage among them (Zakaei, 2011).

This concept was first introduced by the OECD in 1994 and was later adopted by the European Environment Agency (EEA) in 1994 and 2007 as a

strategic framework for environmental assessment and policy development. Within this framework, the categories of driving forces, pressures, states, impacts, and responses are distinguished from one another (Kristensen, 2004).

Based on this framework, which begins with **Driving Forces (D)**—including economic sectors and human activities—and extends through **Pressures (P)** (such as leakage, emissions, and waste), **State (S)** (physical, biological, and chemical conditions), and **Impacts (I)** on ecosystems, human health, and functions, finally leading to **Responses (R)** in the form of political or policy actions (such as prioritization, goal-setting, and indicators) (Tavakolinia et al., 2017).

Using this framework, the factors related to the study area were extracted, and the results were presented across **five dimensions**—environmental, economic, socio-cultural, physical, and managerial—institutional—encompassing **20 variables and 40 indicators**.

4. Research Findings

According to the DPSIR framework, which is applied to describe the relationships between the sources of problems and their outcomes, the present study sought to identify drivers and pressures and to establish causal relationships between human activities and the environment. The current status of the region was analyzed within the stages of the DPSIR model using the **scoring method**. In this approach, each indicator was assigned a score ranging from 1 to 5:

5 = Very good / Positive

3 = Moderate

1 = Very weak / Negative

Intermediate scores represent values ranging from *very weak* to *very good*. The scores were derived from field-based sources, expert observations, and specialist opinions, aggregated through averaging methods. The **tables** related to **driving forces, pressures, states, impacts, and responses** were scored according to three key criteria: **intensity of impact, scale of impact, and reversibility**, and the final composite scores were subsequently calculated.

4.1. Driving Forces

In the southern foothills of the Alborz Mountains, **ten major driving forces** were identified, the most significant of which are as follows:

Table 2. Major Driving Forces and Their Ranking in the Study Area

No.	Driving Force	Impact Intensity	Impact Scale	Reversibility	Total Score	Rank
1	Pleasant climate	4.6	4	5	13.6	1
2	Potential and natural tourism attractions	4.8	4.5	4	13.3	2
3	Investment in local tourism (e.g., nature-based, cultural-historical, and experiential tourism)	4	5	4	13	3
4	Growth of tourist population due to lifestyle changes	4.3	5	2.7	12	4
5	Strength of local institutions (e.g., neighborhood councils, community management, environmental NGOs)	3	3.9	5	11.9	5
6	Tourism revenues through the expansion of restaurants, cafés, and food outlets	3.9	3.6	4	11.5	6
7	Climate change (reduced precipitation and rising temperatures)	5	5	1	11	7
8	Religious tourism attractions	3.25	3	4	10.25	8
9	Growth of seasonal population	3	4	2.7	9.7	9
10	Expansion of transportation, especially road construction in mountainous areas	4	3.66	2	9.66	10

Climate as a Driving Force- The findings indicate that one of the key driving forces attracting tourists to the study area is its pleasant temperature compared to other parts of Tehran. Within the study boundaries, summer is the warmest season of the year with an average temperature of **27.37°C**, while the months of December, January, February, and March are the coldest, with an average of **5.3°C**. The months of April (**16.4°C**), November (**11°C**), and October (**18.8°C**) are characterized by more moderate and pleasant temperatures relative to other months, thus accounting for the highest tourist inflow during these periods ([Meteorological Organization, 2021](#)).

In terms of precipitation, the area experiences very little rainfall during the summer months, while the majority of precipitation occurs between November and May. A significant portion of this precipitation falls as snow, which in itself serves as a catalyst for tourism development in the region. Snowfall, particularly in late autumn, attracts visitors for activities such as hiking, sports competitions, and nature-based recreation.

Despite its favorable climate, this part of Tehran has not been immune to micro-level climate change.

Over the past 30 years, the precipitation regime based on the **SPI index** has shifted from **1.20 (relatively wet)** to **-0.046 (near normal)**. Accordingly, based on SPI¹ standards, Tehran is approaching drought conditions. This climatic change has directly affected tourism activities, particularly winter recreation such as skiing, due to the reduction in snowfall (Driving Force ranked 7). According to [Figure 2](#), which illustrates the moving average of temperature from 1993 to 2020, the average increased from 15.8°C in the first decade to 16.1°C in the second decade, and 16.9°C in the third decade. Therefore, over the 30-year statistical period, the temperature rose by 1.1°C, which has had a notable impact on tourism activities.

Population as a Driving Force- The share of Tehran's population relative to the national population increased from 8 percent in 1956 to 12 percent in 2024. Similarly, the population of the study area has followed an upward trend, rising from 216,467 persons in 1986 to 591,375 persons in 2022 ([Tehran Municipality, 2024](#)).

1 The SPI was calculated by the authors based on meteorological data provided by the Meteorological Organization over a 30-year period from 1993 to 2023.

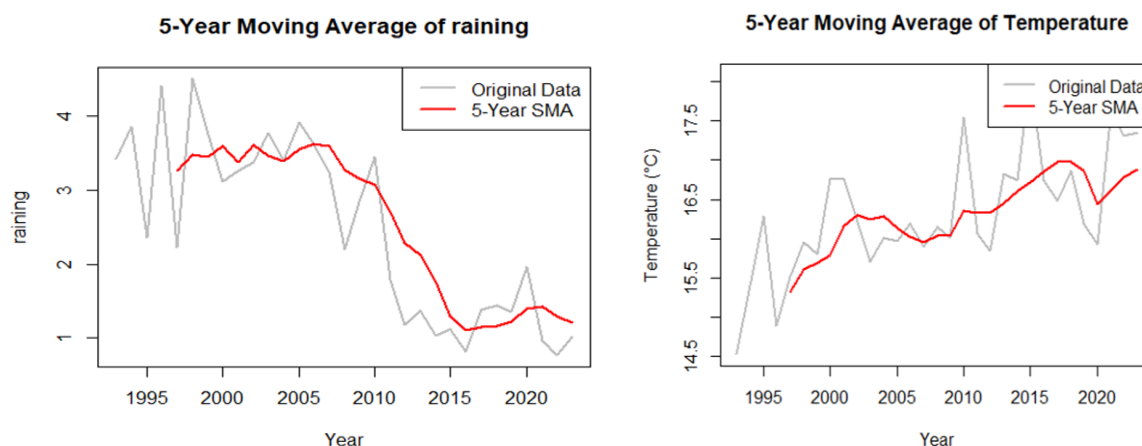


Figure 3. Moving Average of Temperature and Precipitation

(Source: Representation of temperature and precipitation moving averages using R software)

Based on expert opinions and survey results, the growth of seasonal population (**ranked 9**) and overall population increase have acted as driving forces impacting environmental resources, demographic characteristics, economic conditions, physical transformations, and management-related challenges.

The growing population during weekends and holidays, the temporary settlement of Tehran residents in second homes, congestion along hiking trails, the expansion of accommodation facilities, the increase in restaurants, cafés, and recreational centers (ranked 6)—which in turn generate seasonal employment opportunities—along with the organization of seasonal parking facilities, the strengthening of urban water and sewage systems, the establishment of comprehensive seasonal service centers, the implementation of tourism projects by local institutions, and periodic environmental clean-up initiatives conducted by voluntary environmental groups (ranked 5), as well as investment in local tourism (ranked 3) that has enhanced regional income, all constitute significant driving forces influencing tourism activities in the region.

Natural and Religious Attractions as Driving Forces-

The region possesses a wide range of natural and religious tourism potentials and attractions (ranked 2 and 8). The significance of natural attractions lies in the presence of river valleys, mineral springs, waterfalls, and wildlife habitats, all of which contribute to the ecological and recreational value of the area. Easy access to mountainous zones and

ski resorts serves as an important driving force for attracting seasonal tourists and weekend visitors.

Religious and pilgrimage sites (**18 locations**), including *Imam Zadeh Davood*, *Imam Zadeh Saleh*, and *Imamzadeh Ghasem*, constitute additional driving forces drawing tourists from various regions to this area. Furthermore, historical monuments such as the Kan inscription, located in the Kan Valley, and the Darabad River historic bridge, which dates back to the Safavid era ([Habibi, 2015](#)), add distinctive value and reinforce the tourism potential of the region.

Drivers of Transport Expansion and Accessibility-

The availability of transport infrastructure in the region (Rank 10) through the means of public transport systems (i.e., metro, bus rapid transit, shared taxis, and highway networks) and the expansion of secondary mountain roads, have played an integral role in improving and simplifying access for the people in Tehran, nearby municipalities, and arriving tourists. Empirical evidence from the Municipality and the Traffic Police is indicative of the fact that after the introduction of the Tajrish Metro Station, there was a double increase in tourists flowing into the northern mountainous zones of Tehran on Fridays and national holidays. In addition, with Nowruz and other major national holidays, the usage of using the metro to gain access to northern recreational zones of Tehran rose as much as 35% ([Tehran Metro Operating Company, 2021](#)).

The key drivers identified in the southern foothills of the Alborz Mountain range are a combination of

natural factors (tourism potential and climatic conditions) and man-made drivers (populations growth and investment). In one regard, the drivers have brought about the economic and social advancement of the area; on the other, they have created significant environmental pressure. Recent changes in climate, defined by increasing

temperatures and shrinking rainfall, have altered the trends and diversities of the tourism activity patterns, thereby acting as an overriding driver.

4.2. Pressures

According to the afore-discussed factors and their resulting outputs, varying types of environmental pressures (P) have been established, as in Table 3.

Table 3 – List of Environmental Pressures in the Study Area

No.	Pressure Factor	Intensity of Impact	Scale of Impact	Reversibility	Total	Rank
1	Waste generation	4	4	3.5	11.5	1
2	Excessive consumption and over-extraction of water resources	4.5	3.83	2.5	10.83	2
3	Wastewater and runoff generation	4	3.7	3	10.7	3
4	Land-use change	4.5	3.68	2.5	10.68	4
5	Degradation of rangelands and orchards	4.5	3.67	2	10.17	5
6	Increase in mobile sources of air pollution and traffic volume	4.5	3.5	2	10.00	6
7	Overexploitation of natural resources and rivers	4	3.6	2	9.6	7
8	Soil erosion	4.5	3	2	9.5	8

The rationale and mechanism of what has occurred within the DPSIR framework are assessed through the concepts of Driver (D) and Pressure (P). Accordingly, in the study area (District 1 and parts of Districts 2 and 5), due to the passage through relatively dense residential zones, air pollutants derived from human activities have generated pressures—stemming from a combination of anthropogenic activities and unsustainable development—that have directly affected ecosystem health. Among these pressures, the following can be highlighted:

Waste and Wastewater/Runoff Generation- Solid waste production in the mountainous areas of Shemiran (northern districts of Tehran such as Darband, Darakeh, Darabad, Evin, Velenjak, Kan, Souhanak, and surrounding highlands) is considered one of the major environmental challenges. Owing to its unique natural features, high tourist influx, and proximity to urban fabric, this region is highly vulnerable to the pressures caused by waste generation (Rank 1). Tourists and mountaineers, mountain restaurants and teahouses in areas such as Darband, Darakeh, Tochal, and Kan, as well as peripheral villages and mountain settlements such as Kan, Sulqan, and Souhanak, in addition to pilgrims and visitors to religious or

historical sites—especially during holidays—constitute the main sources of solid waste production.

The average daily waste generation in Tehran (urban + rural) is approximately 45,000 tons, of which nearly 1% (equivalent to ~450 tons per day) is attributed to the mountainous areas of Shemiran (based on regional updates and the share of tourism-oriented populations). The per capita waste production in northern Tehran (including Shemiran) is about 1,200 grams per person per day, which is significantly higher than the citywide average and almost twice the national average (~600–760 grams).

Wastewater production (Rank 3) also imposes considerable pressure on the environment. Certain restaurants and facilities operating along riverbanks (e.g., in Darakeh and Darband) discharge their sewage directly into rivers without treatment (Kouzehgar et al., 2015, pp. 11–25).

Overexploitation of Natural Resources (Water, Soil, Vegetation)- The overuse of natural resources (water, soil, and vegetation) (Rank 7) has severely contributed to erosion, pollution, and ecosystem degradation, exerting destructive impacts that, if continued, will gradually undermine the environmental sustainability of the region.

Deforestation and rangeland degradation (Rank 5), caused by overgrazing, wildfires, logging, construction activities, and climate change, have resulted in reduced vegetation cover, increased soil erosion, and a decline in biodiversity, thereby negatively affecting ecosystems and water resources (Tehran Provincial Department of Natural Resources).

Soil erosion (Rank 8) in this area, due to topography, steep slopes, and intense rainfall, has exerted detrimental effects on soil quality, vegetation cover, water resources, and regional infrastructure. Overextraction from springs and qanats, particularly for tourism-related purposes (restaurants, cafés, etc.), along with the reduced discharge of rivers such as Darakeh and Darband due to unauthorized or unregulated water use, combined with the discharge of untreated sewage into surface water bodies, have led to water quality deterioration and rendered these resources increasingly unusable (Tehran Regional Water Company, 2019).

Transit Traffic and Land-Use Change- Transit traffic in the area, particularly on holidays, has increased

pollution due to the high volume of vehicles and prolonged congestion along local access routes (Rank 6). On weekends and public holidays, intercity traffic toward northern Tehran and the Shemiran region becomes extremely heavy. Given the old urban fabric of Shemiran and the limited capacity of its narrow streets and entry routes, the existing infrastructure is insufficient to accommodate the vehicular load.

Land-use change (Rank 4) has had major impacts on soil erosion, biodiversity loss, water resources, and natural ecosystems. Remote sensing analyses using Landsat imagery revealed that from 1988 to 2018, the extent of residential, commercial, industrial, and transportation areas steadily expanded, while open spaces and green areas (shown in red) significantly decreased (Figures 4 and 5). In this area, land-use transformation has primarily included the conversion of natural lands into residential and tourism zones, which has placed significant stress on the environment and natural resources, threatening the integrity of ecosystems and adversely affecting local communities' livelihoods and the region's economic sustainability.

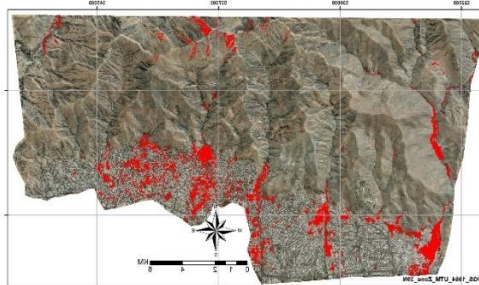


Figure 4. Built-up areas in 1985

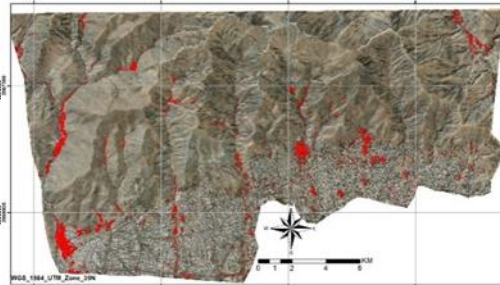


Figure 5. Built-up areas in 2024

4.3. State

In light of the pressures resulting from the aforementioned drivers, specific conditions have

emerged in the study area. These changes can be examined within the framework of the resulting "States" (S), as presented in Table 4.

Table 4 – List of State Indicators in the Study Area

No.	State Indicator	Intensity of Impact	Scale of Impact	Reversibility	Total	Rank
1	Pressure on resources and ecosystem disruption	4.5	4.17	2.5	11.17	1
2	Damage to vegetation cover and soil erosion	4.33	3.67	3	11	2
3	Increased traffic congestion during holidays and crowding along routes	4.25	4.17	2.5	10.92	3
4	Dispersed investment in local tourism	3.83	3.67	3	10.5	4
5	Alterations in architecture and landscape	4.25	3.67	2.5	10.42	5

No.	State Indicator	Intensity of Impact	Scale of Impact	Reversibility	Total	Rank
6	Insufficient facilities for the floating population	3.67	3.67	3	10.34	6
7	Limited infrastructure and weak waste management system	3.75	3.83	2.5	10.08	7
8	Increased water and soil pollution	3.62	3.67	2.67	9.96	8
9	Cultural changes	3.75	3.67	2.5	9.92	9
10	Emergence of new seasonal jobs (e.g., growth of eateries)	4.37	3.67	1.67	9.71	10

Ecosystem Disruption and Pressure on Resources- Ecosystem disruption (Rank 1), caused by urban development, land-use changes, excessive exploitation of natural resources, and pollution, has led to biodiversity loss, alterations in vegetation cover, damage to vegetation and soil erosion (Rank 2), and increased water and soil pollution (Rank 8). As a result, the natural capacity of the region to accommodate tourism has been significantly reduced.

Changes in Regional Architecture and Landscape- Alterations in the architecture and landscape of the region (Rank 5) have significantly influenced aesthetics, cultural identity, ecosystems, and overall quality of life. Inappropriate architectural practices, implemented without consideration of climatic conditions, topography, and land slope, have contributed to increased visual pollution, degradation of natural scenery, and the erosion of local identity. The expansion of tourism and uncontrolled villa construction have drastically transformed the traditional architecture and landscape of Shemiranat. The use of incompatible materials, irregular construction patterns, and the destruction of vegetation cover have diminished visual quality and undermined the region's indigenous identity.

In addition, road development has caused the destruction of vegetation, alteration of the natural landform, greater vehicular influx, noise/visual pollution, and the fragmentation of natural scenery, thereby disrupting the cultural landscape. The

vertical expansion of buildings—particularly along mountain slopes—has eliminated the natural skyline and reduced visual access to pristine landscapes. In some areas, natural views have been replaced with faceless building façades lacking spatial identity. Contemporary architectural trends in the area fail to reflect the climate, culture, and natural environment of Shemiran.

Cultural Change- Cultural transformations (Rank 9) in this region encompass social and cultural impacts stemming from urban development, tourist influx, and shifts in local lifestyle patterns. These changes have affected cultural identity, traditions, and social interactions. The arrival of urban and non-local tourists has influenced dress codes, social behavior, music, language, and local interactions. Younger generations in Shemiran's villages are increasingly inclined toward urbanized lifestyles, while traditional culture is gradually fading.

In addition to these factors, the emergence of new seasonal jobs (e.g., growth of eateries) (Rank 10) and the shortage of facilities for the floating population (Rank 6) have also contributed to shaping new conditions in the study area.

4.4. Impacts

Within the DPSIR framework, the degree of impacts is evaluated to determine the resulting consequences. The most significant impacts in the study area, as identified by experts and respondents, are presented in [Table 5](#).

Table 5 – List of Impacts in the Study Area

No.	Impacts	Intensity of Impact	Scale of Impact	Reversibility	Total	Rank
1	Environmental damages (destruction of vegetation cover, decline in water quality, biodiversity loss, and depletion of natural resources)	4	3.7	3.7	11.4	1
2	Rising cost of living (land, housing, and services) for local residents	4.3	4	3	11.3	2
3	Investment and construction growth (degradation of tourism destinations)	4	4	3	11	3
4	Dependence of the local economy on seasonal income	4.5	3	3	10.5	4
5	Increase in social tensions (conflicts between local residents and tourists)	4	3	3	10	5
6	Cultural diversification and erosion of indigenous culture	4	3	2.5	9.5	6
7	Transformation of the native landscape	3	3	3	9	7
8	Increased risks (floods, wildfires, biological and health hazards, etc.)	3	3	2	8	8
9	Pollution (air, water, noise, visual, etc.)	3.5	3	1	7.5	9

Environmental Damages, Increasing Risks, and Growth of Constructions- Environmental damages (Rank 1) have had significant impacts on the quality of life and the natural landscape of the region. These effects have led to the degradation of natural beauty and the destruction of habitats. As illustrated in Figures 3 and 4, vegetation cover (marked in red) has substantially declined between 1985 and 2025, while built-up areas have increased. The expansion of construction activities, particularly along riverbanks and foothill lands, has negatively affected water and soil quality as well as plant species. With the intensification of human activities in natural areas, ecosystems have been disrupted, leaving destructive consequences. Such consequences include the reduction of soil fertility for agriculture, the occurrence of hazards such as flooding (Rank 8) due to vegetation loss and the increase in built-up areas, and the decline or transformation of tourism destinations and activities—all of which represent negative outcomes of intensified human activities in natural landscapes.

Dependence of the Local Economy on Seasonal Income- The growth of seasonal income (Rank 4), particularly in tourism, local services, and seasonal businesses (such as restaurants, cafés, and local shops), has had a notable impact on the regional economy. However, these effects have been highly sensitive to economic fluctuations, environmental conditions, and tourism policies. Rising living costs and the decline in local quality of life (Rank 2), caused by increasing prices, reduced income, and economic transitions, are strongly evident.

5.5. Response

Various approaches exist for addressing and mitigating problems, as well as reducing negative impacts—either directly through the state (D) or impact (I), or indirectly by acting on pressure (P) and driving force (D). The relationship between driving forces and pressures with technology-based economic activities and their corresponding systems is particularly important. Effective responses to these impacts largely depend on how they are perceived and on the application of new technologies and innovative methods.

Table 6. List of Response Forces in the Study Area

No.	Response	Impact Intensity	Scale of Impact	Reversibility	Total	Rank
1	Policy-making and planning for maintaining sustainability and environmental compatibility with ecotourism activities	4.5	3	4	11.5	1
2	Spatial planning in the three dimensions of economy, society, and environment, with emphasis on integrated natural resource management	5	2	4	11	2
3	Developing guidelines to balance investment between various economic sectors and nature-based tourism	3.75	3	4	10.75	3
4	Planning and management for pollution control	3.5	3	4	10.5	4
5	Restoration of vegetation cover and implementation of watershed management projects	3.25	3	4	10.25	5
6	Development of sustainable tourism with emphasis on education and local capacity building	4	3	3	10	6
7	Organization and optimal management of land use	3.5	2	4	9.5	7
8	Establishing cooperation among governmental institutions, municipalities, environmental organizations, and local communities for tourism development with an emphasis on awareness-raising and education	4	3	2	9	8

In the ecotourism domain of Shemiranat, spatial planning aimed at sustainable use of natural resources and the development of responsible tourism (Ranks 2 and 6) should be examined across three key dimensions: economic, social, and environmental. Economic responses include diversifying income sources, strengthening local employment, and managing tourism-derived revenues. Social responses include active participation of local communities in decision-

making, preserving and enhancing cultural identity and traditions, and providing education for both residents and visitors. Environmental responses include preserving vegetation cover and water resources, implementing precise tourism zoning based on ecological carrying capacity, managing waste, controlling construction activities, and applying green technologies. These measures collectively fall within a spatial planning framework for tourism development.

Table 7. Responses within the Framework of the Socio-Ecological Systems Theory (DPSIR Model)

Row	Dimension	Component	Response
1	Driving Force	▪ Growth of tourist population ▪ Growth of seasonal population ▪ Climate change ▪ Expansion of transport and accessibility	❖ Spatial planning in economic, social, and environmental dimensions ❖ Establishing cooperation among institutions and implementing pollution reduction projects ❖ Preparing a comprehensive tourism development plan
2	Pressure	▪ Wastewater and runoff production ▪ Overexploitation of natural resources ▪ Land-use changes	❖ Planning and management for pollution control ❖ Spatial planning with emphasis on integrated natural resource management ❖ Organization and optimal management of land use
3	State	▪ Cultural changes ▪ Transformations in architecture and landscape	❖ Sustainable tourism development with emphasis on education and local capacity building ❖ Policy-making and planning for environmental compatibility ❖ Revision of construction laws and regulations

4	Impact	▪ Environmental degradation and pollution ▪ Investments in construction sectors ▪ Dependence of the local economy on seasonal income ▪ Social vulnerabilities	❖ Planning and management for environmental damage and pollution control ❖ Restoration of vegetation cover and watershed projects ❖ Developing guidelines for balancing investments across economic sectors and nature-based tourism ❖ Building partnerships among institutions for awareness-raising and community education to reduce impacts
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6. Discussion and Conclusion

The southern foothills of the Alborz, stretching from Kan to Darabad, possess unique geographical advantages, rich natural resources, and valuable historical, cultural, and religious attractions, providing considerable potential for the development of nature-based tourism. However, due to the lack of integrated planning, weak resource management, uncontrolled construction, mounting pressure on natural resources, and insufficient tourism services, this potential has not been properly utilized. The region, with its traditional villages, rich biodiversity, mountain landscapes, indigenous culture, and accessibility (through metro, roads, and hiking trails), offers high capacity for the development of sustainable ecotourism.

Nevertheless, the analysis conducted using the DPSIR framework (Driving forces, Pressures, State, Impacts, and Responses) combined with a scoring method reveals that:

- Unregulated construction in foothill areas has disrupted ecological balance.
- Increasing waste generation and the deterioration of water quality (e.g., Darakeh River) are direct consequences of uncontrolled tourism.
- Weak local participation and lack of education have reduced the effectiveness of conservation and management policies.
- The region's economic and cultural potential, if guided by sound policy-making, could play a significant role in fostering sustainable tourism and improving local livelihoods.

This research applied the DPSIR model to identify and analyze the continuous interactions among drivers (D), pressures (P), state (S), impacts (I), and responses (R) in the southern Alborz foothills. Within the framework of socio-ecological systems (SES) theory, these five components function as interlinked parts of a dynamic human–environment system. The findings show that the social system (e.g., tourist population growth, infrastructure development, cultural transformations, and uncontrolled construction) interacts directly with the ecological system (e.g., natural resources,

vegetation, biodiversity, climate). Without effective management, this interaction imposes severe pressures on the ecosystem's carrying capacity.

Feedback loops play a critical role in this complex system. For example, climate change and environmental degradation diminish the quality of tourist experiences, which, in the long run, result in local economic decline—creating a vicious socio-ecological cycle.

According to the SES perspective, sustainability can only be achieved through synergy among stakeholders (citizens, tourists, government, local institutions) and targeted conservation of natural resources. Land-use planning, participatory education, sustainable tourism development, and the adoption of green technologies are fundamental requirements for maintaining the balance of this system.

The study demonstrates that tourism impacts extend beyond the environment, deeply affecting cultural, economic, and institutional structures of communities, thereby necessitating an interdisciplinary and systems-oriented approach to policymaking. Within the SES model, the southern Alborz foothills represent a fragile socio-ecological system that, while endowed with significant potential for sustainable tourism, faces the risk of collapsing human–nature equilibrium if current trends of degradation and weak management persist.

Strengthening the resilience of this system requires planned interventions, cross-sectoral coordination, and local community engagement. Providing training opportunities for residents and enhancing their participation in tourism development are vital to ensuring that economic benefits remain within local communities, thereby aligning tourism growth with environmental conservation and social well-being (Kiani et al., 2018: p.97).

The results of this study are consistent with the findings of Yang, who emphasized the ecological pressures of tourism on the Yellow River basin; Mohammadpour, who highlighted cultural values and socio-cultural dualities; Irani and colleagues, who underscored the importance of supporting local

communities for rural and urban-regional development; and Tavakolinia et al., who identified the destructive effects of land-use changes and intensified construction in the Rudbar Qasran tourism region. The novelty of the present research lies in its causal-analytical environmental assessment using a scoring method, applied for the first time in the southern Alborz foothills.

In conclusion, achieving sustainable development in the southern Alborz foothills is only possible through comprehensive planning, integrated management, and active participation of all stakeholders. In this pathway, the DPSIR framework serves as a scientific and practical tool for guiding policies, controlling pressures, and managing resources—ensuring not only environmental conservation but also improving the quality of life for local residents and promoting responsible tourism in the region.

Footnote- This study was conducted within the framework of the DPSIR model. The questionnaire data were derived from the results of a doctoral dissertation completed in 2025, entitled “*A Model of Tourism Resilience to Climate Change (Case Study: The Southern Foothills of the Alborz, from Kan to Darabad).*”

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Authors contributions

The authors equally contributed to the preparation of this article.

Conflict of interest

The authors declare no conflict of interest.

References

1. Aliakbari, E. (2016). *Geography of tourism in Iran* (3rd ed.). Tehran: Samt Publications. [In Persian]
2. Aliya, T.Z. (2011). Legal status of ecotourism in Iran. *Taali-ye Hoquq*, 3(11), 129–140. [In Persian] <https://www.vekalatonline.ir/userfiles/Files/Taali-Hoghogh/10/m.olya7.pdf>
3. Benameur, K. B., Mostafa, M. M., Hassanein, A., Shariff, M. Z., & Al-Shattarat, W. (2024). Sustainability reporting scholarly research: a bibliometric review and a future research agenda. *Management Review Quarterly*, 74(2), 823-866. <https://link.springer.com/article/10.1007/s11301-023-00319-7>
4. Bhuiyan, N. (2011). A framework for successful new product development. *Journal of Industrial Engineering and Management*, 4(4), 746-770. <http://dx.doi.org/10.3926/jiem.334>
5. Binder, C. R., Hinkel, J., Bots, P. W. G., & Pahl-Wostl, C. (2013). Comparison of Frameworks for Analyzing Social-ecological Systems. *Ecology and Society*, 18(4). <http://www.jstor.org/stable/26269404>
6. Blamey, R. K. (2001). Principles of Ecotourism, the Encyclopedia of Ecotourism. New York: CAB International. <https://doi.org/10.1079/9780851993683.0005>
7. Boroumand, A. A., & Karimi, A. (2021). Re-conceptualizing and presenting a conceptual model for sustainable ecotourism based on public participation. *Journal of Environmental Science Studies*, 6(1), 3419–3433. [In Persian] https://www.jess.ir/article_127544
8. Bunruamkaew, K., & Murayam, Y. (2011). Site suitability evaluation for ecotourism using GIS & AHP: A case study of Surat Thani province, Thailand. *Procedia-Social and Behavioral Sciences*, 21, 269-278. <https://doi.org/10.1016/j.sbspro.2011.07.024>
9. Ceballos-Lascuráin, H. (1996) Tourism, Ecotourism and Protected Areas: The State of Nature-Based Tourism around the World and Guidelines for Its Development. IUCN Publications, Cambridge, 301. <http://dx.doi.org/10.2305/iucn.ch.1996.7.en>
10. Cheia, G. (2013). Ecotourism: Definition and concepts. *Revista de turism-studii și cercetări în turism*, (15), 56-60. <https://revistadeturism.ro/index.php/rdt/article/view/461>
11. Deci, E. L., & Ryan, R. M. (2012). Self-Determination Theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of Theories of Social Psychology* (pp. 416-437, Vol. 1). Thousand Oaks, CA: Sage. <https://doi.org/10.4135/9781446249215.n21>
12. Drumm, A., & Moore, A. (2002). Ecotourism development. A manual for conservation planners and managers. Volume I: An introduction to ecotourism planning. *The Nature Conservancy, Arlington, Virginia, USA*.

13. Fleischer, A., & Tchetchik, A. (2005). Does rural tourism benefit from agriculture? *Tourism Management*, 26, 493-501. <https://doi.org/10.1016/j.tourman.2003.10.003>
14. Gunn, C. A., & Var, T. (2002). *Tourism planning: Basics, concepts, cases*. Psychology Press. <https://doi.org/10.4324/9781003061656>
15. Habibi, M. (2015). *The formation of a city: The history of Tehran's physical developments*. Tehran: University of Tehran, Center for Studies and Research on Urban Planning and Architecture. (in Persian)
16. Healy, N., & Carvao, S. (2023). World Tourism Organization. In *Encyclopedia of Tourism* (pp. 1-3). Springer, Cham. http://dx.doi.org/10.1007/978-3-319-01384-8_413
17. Imani, B., & Alavi, S. (2022). An Analysis of the Infrastructure for the Development of Rural Ecotourism in Ardabil Province. *Journal of Research and Rural Planning*, 11(4), 73-98. <https://doi:10.22067/jrrp.v11i4.2207.1053>
18. Iran Meteorological Organization. (2021). *Annual climatology report of Tehran Province (Northern Tehran stations)*. Tehran: Ministry of Roads and Urban Development. (In Persian)
19. Irani, S., Ahmadi, N., & Rostami, M. (2022). Application of the DPSIR framework in analyzing the effects of rapid development on natural ecosystems of Iran. *Iranian Journal of Ecology*, 10(1), 15-32. (in Persian)
20. Jin, W., Drueke, E., Li, S., Admasu, A., Owen, R., Day, M., Sun, K., Cheong, S.-W., & Zhao, L. (2020). Observation of a ferro-rotational order coupled with second-order nonlinear optical fields. *Nature Physics*, 16(1), 42-46. <https://doi.org/10.1038/s41567-019-0695-1>
21. Khatibi, A., Danekar, A., Pour-Ebrahim, Sh., & Vahid, M. (2015). Introduction of the DPSIR model and its applicability in environmental decision-making. *Human and Environment*, 13(4), 65-79. (In Persian) https://he.srbiau.ac.ir/article_8959_bb9010bc043fcb0825a5baa9669a8cd3.pdf
22. Kiani Salmi, S., Heydari Soureshjani, R., & Basereh, H. (2018). Investigating the Tendency of the Rural Society to Tourism Development and Identifying the Factors Affecting It (Case Study: Tourism Villages of Karaj). *Journal of Research and Rural Planning*, 7(3), 83-102. <https://doi:10.22067/jrrp.v7i3.67853>
23. Kouzehgar, L., Moslemi, A., & Vahidian, M. (2015). Impact of service units' wastewater on water quality of northern Tehran river valleys (Case study: Darakeh and Darband). *Environmental Sciences Quarterly*, 13(4), 113-124. [In Persian] https://envs.sbu.ac.ir/article_97582
24. Kristensen, P. (2004). The DPSIR framework. *National Environmental Research Institute, Denmark*, 10, 1-10. https://www.academia.edu/download/124687946/Microsoft_s.doc.pdf
25. Kumari, S., Behera, M., & Tewari, H. (2010). Identification of potential ecotourism sites in West District, Sikkim using geospatial tools. *Tropical ecology*, 51(1), 75-85. <https://www.cabidigitallibrary.org/doi/full/10.5555/20103030865>
26. Lewison, R., Rudd, M., Al-Hayek, W., Baldwin, C., Beger, M., Lieske, S., Jones, C., Satumanatpan, S., Junchompoo, C., & Hines, E. (2016). How the DPSIR framework can be used for structuring problems and facilitating empirical research in coastal systems. *Environmental Science & Policy*, 56, 110-119. <https://doi.org/10.1016/j.envsci.2015.11.001>
27. Mahalati, S. (2003). *An introduction to tourism* (2nd ed.). Tehran: Shahid Beheshti University Press. [In Persian]
28. McKinney, T. (2018). Ecotourism. In W. Trevathan (Ed.), *The International Encyclopedia of Biological Anthropology* Wiley. <https://doi.org/10.1002/9781118584538.ieba0149>
29. Mohammadian, A. A., Ghasemi, H., & Houshmand Fini, G. (2009). *Shemiran County*. Tehran: Iranian Encyclopedia Foundation. [In Persian]
30. Mohammadpour, R. (2021). *Environmental impact assessment of tourism development on the Lute Desert using DPSIR-TOPSIS framework*. *Journal of Ecotourism and Environmental Planning*, 10(3), 45-62. <https://dor.isc.ac/dor/20.1001.1.20080875.2021.26.2.5.9>
31. Nazari, A. (2009). Economic valuation of protected areas and their role in sustainable development. *Iranian Journal of Environment*, 9(2), 2. [In Persian] <https://civilica.com/doc/238365>
32. Niyazmand, Mziyar. (2004). Ecotourism: Definitions, concepts, and requirements for development. *Koja Monthly*, 1, 28. [In Persia] <http://noo.rs/eqTqf>

33. Reichman, J. (1996, January). Remarks by Jerome Reichman. In *Proceedings of the ASIL Annual Meeting* (Vol. 90, pp. 276-284). Cambridge University Press.
<https://doi.org/10.1017/S0272503700086353>
34. Salehi, A. Sh. L. Z. A. S. V. R. (2018). Analysis of the factors influencing human environmental conditions in Tehran based on the DPSIR model. *Human Geography Research*, 2(18). [In Persian]
<https://doi.org/10.22059/jhgr.2016.59970>
35. Sojasi Ghidari, H., Roknodin eftekhari, A., & Purtaheri, M. (2014). Prioritizing Ecotourism Entrepreneurship Development in Rural Regions (Case Study: Villages with on River-Valley Tourism Potentials in Tehran province). *Journal of Research and Rural Planning*, 3(1), 13-27.
<http://doi:10.22067/jrrp.v3i5.19611>
36. Tavakolinia, D. J., Motakan, A. A., Sarrafi, M., & Burburi, F. (2017). Assessing the impacts of ecotourism on the Rudbar Qasran and Lavasanat region using the DPSIR framework. *Iranian Journal of Remote Sensing & GIS*, 10(1), 109-126. [In Persian]
https://gisj.sbu.ac.ir/article_96439_b91c1b4480c73c6b948e31c028e5a39f.pdf
37. Tehran Municipality Environmental Studies Office. (2021). *Report on the analysis of Tehran's environmental status with emphasis on mountainous areas*. Tehran: Tehran Municipality, Deputy for Urban Services, Organization for Urban Beautification. [In Persian]
38. Tehran Regional Water Company. (2019). *Report on the status of surface and groundwater resources in northern Tehran (Case study: Darakeh and Darband)*. Tehran: Ministry of Energy, Iran Water Resources Management Company. [in Persian]
39. Tehran Urban & Suburban Railway Operation Company. (2021). *Annual report on public transportation performance with emphasis on tourist stations (Tajrish and Northern Tehran)*. Tehran: Tehran Municipality, Deputy for Transportation and Traffic. [In Persian]
40. Tehran Municipality, (2024). *Developments in the population of Tehran and its environment*. Tehran: Tehran Municipality
41. TIES. (2002). The International Ecotourism Society. Ecotourism: In collaboration with Principles, Practices and Policies for Sustainability. <http://www.uneptie.org/pc/tourism/library/ecotourism.htm>
42. Trišić, I., Nechita, F., Milojković, D., & Štetić, S. (2023). Sustainable tourism in protected areas—Application of the prism of sustainability model. *Sustainability*, 15(6), 5148.
<https://doi.org/10.3390/su15065148>
43. Wondirad, A. (2020). Ecotourism development challenges and opportunities in Wondo Genet and its environs, southern Ethiopia. *Journal of Place Management and Development*, 13(4), 465-491.
<https://doi.org/10.1108/JPMD-12-2018-0109>
44. Yang, B., Ding, L., Zhan, X., Tao, X., & Peng, F. (2022). Evaluation and analysis of energy security in China based on the DPSIR model. *Energy Reports*, 8, 607-615.
<http://dx.doi.org/10.1016/j.egyr.2022.01.229>
45. Zakaei, M. (2011). *Environmental status of Tehran*. [In Persian]



سنجش اکوتوریسم پایدار در پایکوه جنوبی البرز با استفاده از چهارچوب DPSIR

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چکیده مبسوط

۱. مقدمه

اکوتوریسم در قرن بیست و یکم به عنوان گردشگری طبیعت‌محور جایگزینی برای گردشگری انبوه، با هدف یکپارچه‌سازی حفاظت محیط زیست با توسعه اجتماعی-اقتصادی محلی، اهمیت فزاینده‌ای یافته است. دامنه‌های جنوبی کوه‌های البرز، به ویژه منطقه امتداد یافته از کن تا دارآباد در نزدیکی تهران، به دلیل ویژگی‌های غنی اکولوژیکی، فرهنگی و زیرساختی خود، رشد سریع گردشگری را تجربه کرده‌اند. با این حال، فقدان برنامه‌ریزی منجر به تخریب محیط زیست شده است. این مطالعه چارچوب تحلیلی DPSIR (نیروهای محرک - فشارها - وضعیت - پیامد - پاسخ) را برای ارزیابی سیستماتیک پیامدهای محیط زیستی اکوتوریسم در این منطقه به کار می‌گیرد. هدف اصلی پژوهش حاضر، شناسایی زنجیره‌های علت و معلولی و تحلیل محیط زیستی اکوتوریسم به منظور ارائه راه حل برای کاهش اثرات زیانبار حاصل از گردشگری طبیعت‌محور بر محیط زیست با استفاده از چارچوب علی DPSIR (نیروی محرک، فشار، وضعیت، اثر، پاسخ) در پایکوه جنوبی البرز (روستاهای قدیمی کن تا دارآباد) است. این چارچوب توسط آژانس محیط‌زیست اروپا برای تبیین روابط میان انسان و محیط‌زیست ارائه شده و در این پژوهش برای تحلیل پیامدهای اکوتوریسم در محدوده مورد مطالعه به کار رفته است.

۲. روش تحقیق

نوع مطالعه از لحاظ روش شناسی پژوهش، روش توصیفی-تحلیلی با تأکید بر روابط (علی-معلولی) است که داده‌ها به صورت کیفی جمع‌آوری شده و پس از کمی شدن مورد تحلیل قرار گرفته‌اند. این پژوهش از نظر هدف از نوع تحقیقات کاربردی است. از روش کتابخانه‌ای برای تدوین مبانی نظری و پیشینه پژوهش و شناخت منطقه مطالعاتی استفاده شده است و برای گردآوری داده‌ها روش میدانی (پرسشنامه محقق ساخت و مصاحبه) به کار رفته است. جامعه آماری پژوهش را ۳۰ نفر از افراد متخصص از جمله اساتید و خبرگان کلیدی حوزه

گردشگری تشکیل داده‌اند که با روش دلفی انتخاب شده‌اند. به منظور تحلیل داده‌ها از آمار توصیفی و روش امتیازدهی (scoring) در سه بعد: شدت، مقیاس و برگشت‌پذیری پیامدها استفاده شده است. دامنه فضایی محدوده شهری-روستایی از کن تا دارآباد، واقع در شمال تهران است.

۳. یافته‌های تحقیق

این مطالعه موارد زیر را شناسایی کرد:

- ۱۰ نیروی محرک از جمله رشد جمعیت، گسترش شهرنشینی، آب و هوای جذاب و سرمایه‌گذاری محلی در گردشگری.
- ۸ عامل فشار از جمله استفاده بی‌رویه از منابع طبیعی، تغییر کاربری اراضی، آلودگی، فرسایش و افزایش ترافیک.
- ۱۰ شاخص وضعیت مانند اختلال در اکوسیستم، تحول معماری، محدودیت‌های زیرساختی و تغییرات فرهنگی.
- ۹ پیامد اصلی از جمله تخریب محیط زیست، رقیق شدن فرهنگ، وابستگی اجتماعی-اقتصادی به گردشگری فصلی و افزایش خطرات طبیعی.
- ۹ استراتژی پاسخ مانند برنامه‌ریزی فضایی (تنظیم کاربری اراضی)، احیای اکوسیستم، مشارکت ذینفعان، سیاست‌های سرمایه‌گذاری پایدار و مدیریت یکپارچه منابع.

مدل DPSIR به طور مؤثری پیوندهای علی بین پویایی گردشگری و تغییرات زیست‌محیطی را نشان می‌دهد. نیروهای محرک شناسایی شده در منطقه پایکوه جنوبی البرز، ترکیبی از عوامل طبیعی (مانند جاذبه‌های گردشگری و آب و هوا) و انسانی (مانند رشد جمعیت و سرمایه‌گذاری) است. این عوامل از یک سو باعث رونق اقتصادی و اجتماعی منطقه شده‌اند، اما از سوی دیگر، فشارهای محیط زیستی قابل توجهی نیز ایجاد کرده‌اند. تغییرات اقلیمی در سالهای اخیر که موجب افزایش درجه حرارت و کاهش بارندگی شده است بر تغییر

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- افزایش پسماند و کاهش کیفیت منابع آب (مثل رودخانه درکه) از پیامدهای مستقیم گردشگری کنترل نشده‌اند.
 - مشارکت پایین نهادهای محلی و کمبود آموزش، باعث کاهش اثرگذاری سیاست‌های حفاظت و مدیریت شده‌اند.
 - پتانسیل‌های اقتصادی و فرهنگی منطقه، در صورت سیاست‌گذاری صحیح، می‌توانند نقش مهمی در توسعه پایدار گردشگری و معیشت جامعه محلی ایفا کنند.
- دستیابی به اکوتوریسم پایدار در دامنه‌های جنوبی البرز مستلزم برنامه‌ریزی یکپارچه، حکمرانی مشارکتی و سیاست‌گذاری حساس به محیط زیست است. چارچوب DPSIR ابزاری قوی برای تشخیص مشکلات زیست‌محیطی و تدوین مداخلات چند سطحی ارائه می‌دهد. همسویی استراتژیک بین مقامات محلی، آژانس‌های محیط زیست و جوامع برای کاهش فشارها، احیای اکوسیستم‌ها و تضمین منافع عادلانه از گردشگری ضروری است.
- کلیدواژه‌ها:** اکوتوریسم، مدل DPSIR، ارزیابی زیست‌محیطی، دامنه‌های جنوبی البرز، گردشگری پایدار.
- تشکر و قدردانی**
- پژوهش حاضر برگرفته از رساله دکترای سید سپهر اعرابی، گروه گردشگری، دانشکده مدیریت و حسابداری، دانشگاه علامه طباطبائی، تهران، ایران است.

شکل و نوع گردشگری به عنوان عامل محرک تاثیر گذاشته است. در محدوده مطالعاتی (منطقه ۱ و بخشی از مناطق ۲ و ۵) به دلیل عبور از مناطق مسکونی با تراکم نسبتاً زیاد از جمله آلاینده‌های هوا که با فعالیت‌های انسانی حاصل شده است، منجر به فشارهایی گردیده (ترکیبی از فعالیتهای انسانی و توسعه ناپایدار) که به طور مستقیم بر سلامت اکوسیستم تأثیر گذاشته است تهدیدات محیط زیستی کلیدی شامل آلودگی آب و از دست دادن تنوع زیستی است که با هجوم فصلی بازدیدکنندگان و توسعه بدون ضابطه تشدید می‌شود. فرسایش هویت فرهنگی و تنش‌های اجتماعی نیز به عنوان پیامدهای غیرمادی مهم ظاهر شدند. با وجود این چالش‌ها، منطقه از طریق حکمرانی هماهنگ و ظرفیت‌سازی، پتانسیل بالایی برای گردشگری پایدار دارد.

۴. بحث و نتیجه گیری

منطقه شمیرانات با روستاهای قدیمی و با برخورداری از تنوع زیستی، چشم‌اندازهای کوهستانی، فرهنگ بومی و دسترسی مناسب (از طریق مترو، خطوط حمل و نقل عمومی و خصوصی و پیاده‌راه‌ها)، ظرفیت بالایی برای توسعه اکوتوریسم پایدار دارد. با این حال، بررسی انجام‌شده با استفاده از چارچوب تحلیلی DPSIR (محرک، فشار، وضعیت، اثر، پاسخ) و روش امتیازدهی نشان می‌دهد که:

- ساخت‌وساز در مناطق پاکبوهی بدون ضابطه منجر به برهم خوردن تعادل اکولوژیکی شده است.

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Original Article

Innovative Digital Marketing Strategies in Rural Tourism: Leveraging Augmented Reality and Intelligent Algorithms in Technological Ecosystems

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Abstract

Purpose- This study aims to identify and analyze innovative digital marketing strategies in rural tourism, with a specific focus on leveraging Augmented Reality (AR) and intelligent algorithms within technological ecosystems. The main research question is: How can augmented reality and intelligent algorithms be utilized to enhance digital marketing in rural tourism to effectively attract tourists and promote sustainable local development? This research addresses a gap in the integration of AR and artificial intelligence in rural contexts, where prior studies have often examined these technologies in isolation and with less emphasis on rural settings.

Design/methodology/approach- Employing a qualitative exploratory approach and thematic analysis method, data were collected through semi-structured interviews with 16 experts in digital marketing, information technology, and management. Snowball sampling was used for participant selection, with theoretical saturation achieved after the 16th interview.

Findings- The analysis revealed seven overarching themes: technological transformation of the tourism experience (e.g., AR virtual tours and AI personalized recommendations), empowerment of local communities (through digital literacy training and local content production), redefinition of marketing strategies (e.g., location-based marketing and algorithm-optimized advertising), cultural and environmental sustainability (preservation via virtual museums and reduced ecological impact), implementation barriers (e.g., weak infrastructure and ethical concerns), horizons of innovation and research (e.g., gamification and metaverse), and digital identity reconstruction (through cultural branding with emerging technologies).

Research limitations/implications- Limitations include the focus on a specific cultural context (e.g., rural Iran), lack of longitudinal data for long-term change analysis, and reliance on qualitative data potentially influenced by researcher bias. Implications suggest longitudinal studies to assess long-term technology impacts and comparative research across diverse regions.

Practical implications- Rural tourism managers can develop localized AR platforms, implement digital literacy programs for local populations, and deploy AI-powered location-based marketing systems to boost tourist attraction and enhance local sustainability.

Originality/value- This study provides the first comprehensive framework for integrating AR and intelligent algorithms in rural tourism marketing, emphasizing rural-specific challenges like infrastructure deficits and cultural resistance, adding value for sustainable development in developing regions.

Keywords- Digital marketing, Rural tourism, Augmented Reality, Intelligent Algorithms, Sustainable development.

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1. Introduction

The integration of digital marketing strategies into rural tourism has gained significant importance as destinations seek to enhance visibility and attract diverse tourists, fostering sustainable local development. Recent advancements in Augmented Reality (AR), Artificial Intelligence (AI), and Big Data have opened innovative avenues for marketing, enabling rural regions to leverage immersive technologies and data-driven insights (Xie, 2022; Wang, 2023). This study addresses the research question: *How can augmented reality and intelligent algorithms be utilized to enhance digital marketing in rural tourism to effectively attract tourists and promote sustainable local development?* The objectives include identifying innovative marketing strategies, analyzing the impacts of AR and AI on tourist behavior and community engagement, and proposing solutions to overcome implementation barriers in rural contexts. Despite a growing body of literature on emerging technologies in tourism, a critical research gap persists regarding the integrated use of AR and AI in rural tourism marketing. Most studies have focused on urban or well-established tourist destinations, leaving rural-specific challenges—such as weak technological infrastructure, limited digital literacy, and cultural resistance—underexplored (Krishnamma, 2025; Alsufyani, 2025). For instance, while AR enhances tourist engagement through immersive experiences, studies indicate that over 60% of AR projects in rural areas fail due to inadequate internet connectivity (Jang et al, 2023). Similarly, AI-driven personalization improves marketing effectiveness, but privacy concerns and cultural resistance in local communities can hinder adoption (Irsyad et al, 2024). This gap underscores the need for comprehensive studies that examine the synergy of AR and AI in rural tourism, particularly in developing regions like Iran, where digital marketing remains underutilized.

The transformative potential of AR and AI in rural tourism is well-documented. AR creates interactive experiences, such as virtual tours and QR-based applications, that showcase cultural and natural attractions, enhancing visitor satisfaction and promoting local heritage (Zaifri et al, 2023). AI, through recommender algorithms and data analytics, optimizes marketing campaigns by predicting trends and tailoring content to diverse tourist segments (Dewi et al, 2025). The COVID-19 pandemic further accelerated this digital transformation, pushing rural destinations to adopt strategies like social media marketing and influencer collaborations to align with evolving consumer preferences for safe and personalized experiences (Vu et al, 2025; Kristiani et al, 2025). Big Data plays a pivotal role in understanding tourist behavior, enabling targeted marketing that aligns with sustainable practices (Nannelli et al, 2023).

This study focuses on rural areas, particularly in developing regions like Iran, examining specific AR tools (e.g., QR-based apps and virtual tours) and AI tools (e.g., recommender systems and data analytics) within cultural and natural destinations. Key limitations include weak technological infrastructure, low digital literacy among local communities, and privacy concerns, which may constrain technology adoption (Jang et al, 2023; Ying et al, 2024). The scope excludes urban tourism contexts and focuses on rural-specific challenges and opportunities.

In conclusion, the convergence of AR, AI, and Big Data in digital marketing offers transformative opportunities for rural tourism. By embracing these innovations, rural destinations can enhance marketing efforts, foster deeper tourist engagement, and promote sustainable practices that benefit local communities and the environment (Kumar and Barua, 2024). This study contributes to understanding how these technologies redefine marketing strategies, addressing empirical themes such as technological transformation, local community empowerment, marketing redefinition, sustainability, barriers, innovation, and digital identity in rural tourism contexts.

Table 1. Comparative Table of Research Gaps in Rural Tourism Digital Marketing

Previous Studies (Reference)	Research Gap in Previous Studies	How This Study Addresses the Gap
Xie & He (2022)	Focus on smart technologies (big data and AI) in general tourism, without integrating AR and AI in rural contexts or analyzing rural-specific challenges like weak infrastructure.	This study integrates AR and AI, analyzing rural challenges (e.g., infrastructure, digital literacy) in developing regions like Iran, focusing on sustainable digital marketing.
Wang et al (2023)	Emphasis on AR interactive experiences in tourism, but limited to urban destinations and lacking integration with AI or analysis of rural challenges like cultural resistance.	Integrates AR with AI for interactive experiences in rural cultural/natural destinations, critically analyzing cultural resistance and proposing community empowerment solutions.
Krishnamma et al (2025)	Examines technology adoption challenges in tourism, but lacks focus on rural contexts, AR/AI integration, or privacy analysis in digital marketing.	Focuses on privacy as a key limitation in rural areas, proposing specific AR/AI tools (e.g., QR apps, recommender algorithms) for safe, sustainable marketing.
Alsufyani et al (2025)	Analyzes technology challenges in tourism, primarily urban, without exploring AR/AI synergy in developing rural contexts.	Examines AR/AI synergy in rural Iran, analyzing developing region challenges like low digital literacy and proposing local training for empowerment.
Jang et al (2023)	Notes AR project failures due to weak infrastructure, but lacks integration with AI or focus on sustainable rural marketing.	Combines AR with AI to overcome infrastructure issues, proposing targeted marketing strategies that enhance environmental and economic sustainability.
Irsyad et al (2024)	Examines AI personalization in tourism, but lacks AR integration or analysis of cultural resistance in rural communities.	Integrates AI personalization with AR experiences, critically analyzing cultural resistance and proposing culturally sensitive solutions for rural adoption.
Zaifri et al (2023)	Focuses on AR interactive experiences, but limited to general aspects without rural challenges or AI integration.	Extends AR experiences to rural destinations with AI integration, enhancing tourist satisfaction and local heritage preservation, linked to sustainability and innovation themes.
Dewi et al (2025)	Analyzes AI algorithms for personalized marketing, but lacks focus on rural areas or AR integration.	Uses AI for personalization in rural marketing, combined with AR for effective campaigns, proposing solutions for higher conversion and local retention.
Vu et al (2025)	Examines COVID-19's impact on digital transformation, but lacks focus on AR/AI in rural contexts.	Integrates COVID-19 impact with AR/AI for post-pandemic rural strategies, like social media and influencers, to attract safe tourists.
Kristiani et al (2025)	Notes digital strategies like social media, but limited to general aspects without AR/AI integration in rural areas.	Combines social media with AR/AI for rural marketing, focusing on destination appeal and sustainability to overcome rural challenges.
Nannelli et al (2023)	Role of big data in targeted marketing, but lacks AR/AI integration or rural challenge analysis.	Integrates big data with AR/AI for sustainable rural marketing, analyzing tourist behavior and aligning with local and environmental needs.
Ying et al (2024)	Examines digital literacy limitations, but lacks focus on rural tourism marketing with AR/AI.	Proposes digital training for rural communities as a solution to literacy barriers, linked to empowerment and AR/AI adoption.
Kumar & Barua (2024)	Emphasis on sustainability in digital tourism, but lacks integrated AR/AI focus in rural areas.	Focuses on sustainability through AR/AI, proposing local economic development and environmental preservation, linked to digital identity and innovation themes.

Table 2. Table of Introduction Aspects in Rural Tourism Digital Marketing

Aspect	Description	Sources
Importance of Digital Marketing in Rural Tourism	Integration of digital marketing strategies enhances visibility, attracts diverse tourists, and promotes sustainable local development through interactive technologies and data-driven insights.	Xie & He (2022), Wang et al (2023), Kumar & Barua (2024)
Research Gap	Limited studies on the integrated use of AR and AI in rural tourism marketing, with most research focusing on urban destinations. Challenges like weak infrastructure, cultural resistance, and privacy concerns in rural settings remain underexplored.	Alsufyani et al (2025), Jang et al (2023), Irsyad et al (2024)

Research Question	How can augmented reality and intelligent algorithms be utilized to enhance digital marketing in rural tourism to effectively attract tourists and promote sustainable local development?	Zaifri et al (2023), Dewi et al (2025)
Objectives	Identify innovative marketing strategies using AR/AI, analyze their impacts on tourist behavior and community engagement, and propose solutions for barriers like infrastructure and digital literacy in rural contexts.	Nannelli et al (2023), Vu et al (2025)
Recent Studies	AR enhances tourist engagement through virtual tours and QR-based apps, preserving local heritage. AI optimizes marketing with recommender algorithms and data analytics. Social media and influencer collaborations align with post-COVID preferences.	Wang et al (2023), Zaifri et al (2023), Dewi et al (2025), Kristiani et al (2025), Vu et al (2025)
Scope	Focus on rural areas in developing regions (e.g., Iran), examining specific AR tools (QR-based apps, virtual tours) and AI tools (recommender systems, data analytics) in cultural and natural destinations, excluding urban contexts.	Nannelli et al (2023), Alsufyani et al (2025), Ying et al (2024)
Limitations	Weak technological infrastructure (e.g., over 60% of AR projects fail due to poor internet), low digital literacy among local communities, and privacy concerns related to AI-driven data collection, limiting technology adoption.	Jang et al (2023), Irsyad et al (2024), Krishnamma et al (2025), Ying et al (2024)
Empirical Themes	Technological transformation (AR/AI integration), local community empowerment (digital training), marketing redefinition (personalized campaigns), sustainability (cultural/environmental preservation), barriers (infrastructure, privacy), innovation (new marketing tools), and digital identity (redefining rural destinations).	Kumar & Barua (2024), Zaifri et al (2023), Dewi et al (2025), Nannelli et al (2023), Bretos et al (2023)

2. Research Theoretical Literature

The integration of digital marketing strategies into rural tourism has attracted increasing scholarly attention in recent years, particularly with the advent of technologies such as Augmented Reality (AR), Artificial Intelligence (AI), and Big Data. These technologies have fundamentally transformed how rural destinations interact with potential tourists, significantly enhancing marketing effectiveness and the overall tourist experience (Xie & He, 2022; Vu et al, 2025).

Augmented Reality, as a powerful marketing tool, enables the delivery of immersive and interactive content that enhances visitor satisfaction and engagement. Through virtual tours and real-time visualizations, AR allows tourists to explore destination attractions before their visit, thereby enriching their decision-making process (Bretos et al, 2023). This technology not only enhances user experience but also plays a critical role in preserving local culture and heritage, while increasing marketing effectiveness through personalized content based on individual preferences (Setiawan, 2024; Ozdemir, 2021).

The integration of digital technologies into rural tourism has increasingly been recognized as a critical strategy for enhancing tourist engagement and promoting sustainable local development. This theoretical background examines the application of Augmented Reality (AR), Artificial Intelligence (AI), and Big Data in digital marketing within rural tourism contexts. By leveraging theoretical

frameworks such as smart tourism, the Technology Acceptance Model (TAM), and the Unified Theory of Acceptance and Use of Technology (UTAUT), this study elucidates the relationships between these technologies and marketing outcomes, addressing the research question: How can augmented reality and intelligent algorithms be utilized to enhance digital marketing in rural tourism to effectively attract tourists and promote sustainable local development?

Recent studies emphasize the transformative potential of AR and AI in tourism marketing. AR enhances visitor experiences by providing immersive interactions with cultural and natural resources, thereby increasing satisfaction and engagement (Zaifri et al, 2023). In contrast, AI enables personalized marketing strategies by analyzing data and providing customer insights, which are vital for attracting diverse tourist segments (Dewi et al, 2025). Big Data plays a pivotal role in understanding consumer behavior and preferences, enabling targeted marketing that aligns with sustainable practices (Nannelli et al, 2023).

2.1. Conceptual Framework

The theoretical framework of this study is rooted in the smart tourism paradigm, which emphasizes the integration of advanced technologies to enhance tourist experiences and destination competitiveness. The UTAUT model provides insights into the adoption of AR and AI technologies by users, indicating that performance expectancy, effort

expectancy, social influence, and facilitating conditions significantly impact technology acceptance in tourism (Çalışkan et al, 2023). This framework facilitates an examination of how AR and AI redefine marketing strategies in rural tourism.

2.2. Conceptual Propositions

- **Proposition 1:** The implementation of AR in rural tourism marketing enhances tourist engagement by providing interactive and immersive experiences, ultimately leading to greater visitor satisfaction and loyalty (Zaifri et al, 2023).
- **Proposition 2:** AI-driven personalization of marketing improves the effectiveness of digital marketing strategies, resulting in increased conversion rates and customer retention in rural tourism contexts (Dewie et al, 2025).
- **Proposition 3:** The use of Big Data analytics in understanding tourist behavior and preferences strengthens sustainable tourism practices by enabling targeted marketing that aligns with local community needs and environmental considerations (Nannelli et al, 2023).

Despite the promising applications of AR, AI, and Big Data in rural tourism, several limitations persist. Weak digital infrastructure in rural areas can hinder the effective implementation of these technologies, leading to disparities in access and participation (Jang et al, 2023). Additionally, privacy concerns related to data collection and usage pose significant challenges, potentially deterring tourists from engaging with digital marketing initiatives (Krishnamma et al, 2025). Furthermore, limited digital literacy among local communities can constrain the successful adoption of these technologies, necessitating targeted training and support (Ying et al, 2024).

The integration of AR, AI, and Big Data into digital marketing offers significant opportunities for enhancing rural tourism. Future research should focus on empirical studies that explore the long-term impacts of these technologies on tourist engagement and sustainable development. Moreover, addressing barriers to technology adoption, such as infrastructural limitations and privacy concerns, will be essential for maximizing the benefits of digital marketing in rural tourism contexts.

On the other hand, AI technologies—particularly predictive analytics and recommendation

systems—play a crucial role in optimizing digital marketing strategies. For example, a study conducted in Bali, Indonesia, demonstrated that AI significantly improved audience targeting and engagement rates, ultimately increasing return on investment in marketing campaigns (Dewie et al, 2025). The integration of AI with big data analytics enables the identification of behavioral trends and patterns, allowing for more accurate resource allocation and marketing actions (Lu et al, 2024; Xie et al, 2022). This approach aligns with the concept of smart tourism, which aims to enhance the sustainability and competitiveness of rural destinations through innovative technology adoption (Vu et al, 2025).

Despite the numerous benefits, implementing these technologies in rural areas poses several challenges. These include high implementation and maintenance costs, inadequate technological infrastructure, and limited digital literacy among local stakeholders—all of which hinder the adoption of advanced technologies like AR and AI in rural tourism (Dewie et al, 2025). One of the critical factors in ensuring the sustainability of rural businesses is the establishment of adequate and appropriate infrastructure. Equally important is the acceptance of technology by rural communities, their trust in these innovations, and the provision of relevant training to enhance their digital literacy and engagement with technology. (Anabestani et al, 2024) Limitations in the realm of technology negatively impact employment, economic development, and the well-being of rural residents, while also creating temporal and spatial constraints. (Anabestani et al, 2023).

Additionally, balancing technological innovation with the preservation of cultural authenticity and traditional practices remains a major challenge that requires close collaboration and active participation from local communities (Muntean et al, 2025; Kristiani et al, 2025). Addressing these barriers necessitates digital skill training and government support (Kristiani et al, 2025). Studies suggest that smart rural tourism, as an innovative approach, emerges from the integration of factors such as smart economy, smart governance, smart infrastructure, smart people, smart connectivity, and smart education. According to the research by Anabestani and Barani Aliakbari (2023), a spatial analysis of these factors in the target tourism villages of eastern Kermanshah Province highlights

the critical role of these indicators in promoting sustainable rural tourism development. This study is grounded in the premise that blending smart technologies with the unique characteristics of rural areas can lead to a comprehensive framework for enhancing tourist experiences and empowering local communities. Such an approach, recognized in the theoretical literature as a foundation for spatial planning, emphasizes the importance of aligning infrastructure, community participation, and intelligent management

The COVID-19 pandemic has also played a significant role in accelerating digital transformation in rural tourism. Faced with travel restrictions and health concerns, rural destinations were compelled to strengthen their online presence and adopt digital tools to attract and engage with potential visitors (Kristiani et al., 2025). This experience highlighted the importance of flexibility and rapid adaptation in marketing strategies, offering new opportunities to rethink and innovate traditional marketing models.

Existing literature also identifies multiple directions for future research. These include exploring the role of gamification in AR applications and assessing the long-term impacts of AI on rural tourism marketing (Bretos et al., 2023). Understanding the acceptance of AR and AI technologies among users and stakeholders—especially through frameworks such as the Unified Theory of Acceptance and Use of Technology (UTAUT) and the Technology Acceptance Model (TAM)—is another critical area of inquiry (Çalışkan et al., 2023; Zuhroh et al., 2024). Furthermore, evaluating the effectiveness of different digital marketing channels, such as social

media and influencer marketing, particularly in rural tourism, can provide a more precise understanding of successful marketing practices (Saura et al., 2020). In the conducted research on the **bibliometric and content analysis of global trends in digital transformation and rural tourism**, the article identifies five key clusters in studies related to digital transformation within rural tourism:

- The impact of digital marketing strategies on rural destinations.
- The role of digital technology solutions in supporting sustainable tourism development.
- The application of information technology in community-based rural tourism.
- The use of GIS and scanning technologies for rural tourism management.

This study emphasizes the growing significance of digital transformation in rural tourism and proposes future research directions to strengthen the relevance and advancement of this field. (Vu et al., 2025)

In conclusion, the integration of AR, AI, and big data into digital marketing strategies offers unprecedented and innovative opportunities for rural tourism. Despite technical, financial, and cultural challenges, the potential benefits of these technologies in attracting more tourists, enhancing visitor experiences, and fostering sustainable rural development are substantial. Continued and deepened research, along with a focus on training and empowering local communities, is essential for the effective utilization of these technologies and for ensuring a sustainable future for rural tourism.

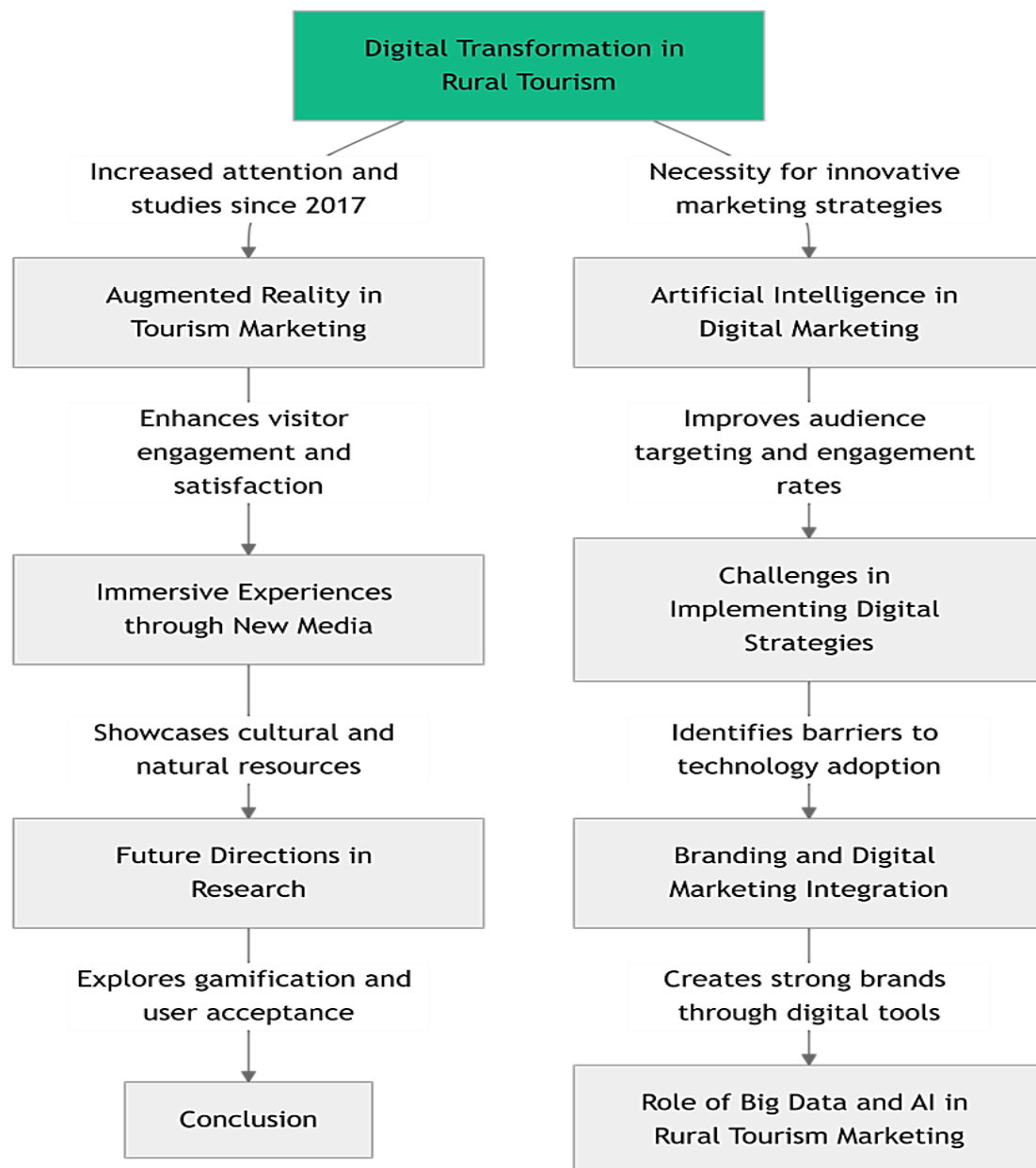


Figure 1. Digital Transformation in Rural Tourism

According to the diagram, multiple key dimensions of digital marketing strategies in rural tourism are interconnected. This framework demonstrates that digital transformation in this domain not only enhances the overall tourist experience but also highlights the pivotal role of tools such as augmented reality (AR) and artificial intelligence (AI) in increasing visitor engagement and satisfaction.

At the same time, the implementation of these technologies entails certain challenges that must be addressed. To overcome such barriers, future research is expected to focus on issues such as gamification and user acceptance, aiming to improve the effectiveness of digital tools in attracting and retaining audiences. Furthermore, the diagram emphasizes the significance of branding and the integration of digital marketing instruments. The intelligent use of

emerging technologies can contribute to building stronger brands for rural destinations and, through big data and artificial intelligence, pave the way for more sustainable marketing practices.

These insights are derived from recent studies (Xie et al, 2022; Dewi et al, 2025; Wang et al, 2023) which underscore the critical role of technology in advancing and promoting sustainable tourism practices

The diagram also illustrates that digital transformation in rural tourism has evolved along two main pathways:

The Augmented Reality (AR) Pathway- Since 2017, increasing attention has been directed toward emerging technologies such as augmented reality. This technology enhances visitor satisfaction and engagement by creating immersive experiences, thereby enabling a more effective presentation of rural cultural and natural resources. Looking ahead, research is expected to focus on gamification and user acceptance, which will ultimately pave the way for the sustainable development of rural tourism.

The Artificial Intelligence (AI) Pathway- On the other hand, the growing demand for innovative marketing strategies has facilitated the integration of artificial intelligence into this field. AI has improved precise audience targeting and boosted engagement rates. However, the implementation of digital strategies continues to face challenges, such as resistance to technology adoption. Consequently, the integration of branding with digital marketing becomes crucial for building stronger destination brands. Ultimately, big data and AI are expected to play a pivotal role in advancing rural tourism marketing.

3. Research Methodology

The present study is exploratory qualitative research conducted with the aim of identifying and analyzing

novel digital marketing strategies in rural tourism. The data were analyzed using the thematic analysis method. This research adopts an inductive approach, which focuses on deriving theory from data, and is grounded in an interpretivist philosophy, emphasizing the understanding of experts' subjective meanings.

The statistical population of the study consisted of experts in the field of digital marketing, specialists in artificial intelligence technologies within advertising agencies, as well as professors of management, marketing, and information technology from universities in Tehran, Isfahan, and Semnan. The selection criteria for participants included possessing academic expertise or practical experience in digital marketing or artificial intelligence—evaluated through their résumés or published works—and having more than three years of managerial experience in relevant projects.

The snowball sampling method was applied, whereby initial experts were identified by the researcher and subsequently, additional participants were recruited through their referrals. In total, 25 participants were selected, with the sample size determined based on theoretical saturation. Specifically, by the 16th interview, overlapping and repetitive codes emerged, and no new information was added to the dataset.

Ultimately, 16 participants were finalized as the representative sample, with theoretical saturation occurring between interviews P7 and P16. However, to ensure greater validity, interviews continued up to P18. The following table illustrates the process of theoretical saturation. The criterion for saturation was the absence of new codes after repeated comparisons.

Table 3. Stages of Interview Saturation

Interview Code	Description	Cumulative Codes up to this Interview	Repeated Codes	New Codes	Saturation Status
P1	Beginning of coding process	36	—	36	Developing
P2	Expansion of basic concepts	64	8	28	Developing
P3	Emergence of complementary concepts	88	12	24	Developing
P4	Overlap with previous interviews	108	15	20	Developing
P5	Gradual reduction of new themes	122	14	14	Developing
P6	Decrease in frequency of new codes	133	11	11	Developing
P7	Beginning of theoretical saturation; identification of key concepts	142	9	9	Start of Saturation
P8	Consolidation of initial concepts	150	8	8	Approaching Saturation
P9	Moving closer to theoretical saturation	158	8	8	Approaching Saturation

Interview Code	Description	Cumulative Codes up to this Interview	Repeated Codes	New Codes	Saturation Status
P10	Minor additions to the model	166	8	8	Approaching Saturation
P11	Continuation of relative saturation	174	8	8	Approaching Saturation
P12	Further reduction of new codes	182	8	8	Approaching Saturation
P13	Nearing complete saturation	190	8	8	Approaching Saturation
P14	Noticeable decline in codes	196	6	6	Approaching Saturation
P15	Almost no new codes	198	2	2	Near Complete Saturation
P16	Complete saturation; no new codes	198	0	0	Complete Saturation
P17	Initial confirmation of saturation with no new codes	198	0	0	Confirmed Saturation
P18	Final confirmation of saturation with no new codes	198	0	0	Confirmed Saturation

The primary data collection tool was semi-structured interviews, conducted in person, by telephone, and online, and recorded with the consent of participants. The interview questions were designed to explore experiences with the use of technologies such as augmented reality, artificial intelligence, big data, and recommender systems in rural tourism marketing, as well as to assess the extent to which these technologies enhance engagement, attract tourists, and contribute to sustainable development. Each interview lasted between 45 and 60 minutes. With participants' informed consent, the interviews were audio-recorded and subsequently transcribed.

Ethical considerations were strictly observed, including obtaining informed consent, ensuring data confidentiality (by storing data on a secure server and anonymizing names), and safeguarding the right to withdraw from participation at any stage. The interview protocol consisted of five key questions:

3.1. The interview included five key questions

1. How do emerging technologies such as augmented reality and intelligent algorithms

contribute to enhancing the effectiveness of digital marketing in rural tourism?

2. What factors facilitate or hinder the successful implementation of digital technologies in rural tourism marketing strategies?
3. What impacts do augmented reality and artificial intelligence have on tourists' experiences, interaction with content, and decision-making in selecting rural destinations?
4. How can the use of digital marketing technologies increase local community participation in tourism development and the preservation of indigenous culture?
5. What role does technology-based digital marketing play in achieving sustainable development goals in rural tourism destinations?

To ensure clarity and comprehensibility, the interview questions were reviewed several times and pilot-tested with three experts. This procedure confirmed that respondents consistently and accurately understood the concepts. The interview protocol table (aligned with the research questions) is presented below:

Table 4. Interview Protocol (Aligned with Research Questions)

Main Question	Objective	Probes (Follow-up Questions)	Alignment with Research Question
1. How do emerging technologies such as AR and intelligent algorithms enhance digital marketing?	To examine the role of technologies	Examples of AR applications in virtual tours	Directly related to the application of AR and AI in attracting tourists and fostering sustainable development
2. What are the success factors for implementing digital technologies?	To identify enablers and barriers	Infrastructural challenges such as poor internet connectivity	Refers to the challenges of implementation in rural contexts

Main Question	Objective	Probes (Follow-up Questions)	Alignment with Research Question
3. What impacts do AR and AI have on the tourist experience?	To analyze the effects on tourist behavior	Influence on interaction and decision-making	Related to the effective attraction of tourists
4. How do technologies enhance local community participation?	To explore community empowerment	Role in preserving indigenous culture	Refers to promoting sustainable local development
5. What is the role of technology-based digital marketing in sustainable development?	To evaluate sustainable outcomes	Sustainable Development Goals (SDGs)	Directly aligned with the core research question

The data obtained from the interviews were analyzed using **thematic analysis** based on the six-step framework:

- Familiarization with the data:** At this stage, the researcher repeatedly and actively reviewed the data with the aim of identifying meanings and patterns. Initial note-taking and marking of emerging concepts—later used in subsequent stages—began here.
- Generating initial codes:** After familiarization, initial coding was performed. Relevant segments of the data were identified and coded according to the research focus. Coding could be either data-driven or theory-driven, depending on the research objectives.
- Searching for themes:** The initial codes were systematically organized into potential themes. Some codes formed main themes, others became sub-themes, while unrelated codes were discarded.
- Reviewing themes:** At this stage, the identified themes were refined through a two-level process: first, by reviewing themes against the summarized codes, and second, by evaluating them against the entire dataset. Coding and theme development continued until a satisfactory thematic map was achieved.
- Defining and naming themes:** Once finalized, the themes were defined, named, and analyzed. This included revisiting each theme to specify its scope and detailing the data represented within it.
- Producing the report:** In the final stage, the researcher conducted the ultimate analysis and prepared the research report. The report included refined themes and their

interpretations. This step-by-step, structured, yet flexible process allowed the researcher to systematically analyze the data and provide reliable findings.

The coding rules were carefully designed and applied to ensure consistency and validity of the data analysis. For the initial codes, an inductive (data-driven) coding approach was employed, meaning that codes were directly derived from the interview transcripts without relying on pre-existing theoretical assumptions, thereby enabling the discovery of natural patterns in the data. Conversely, for identifying and refining themes, a deductive approach was applied, guided by well-established theoretical frameworks such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT). This inductive–deductive combination enabled the researcher to remain faithful to the data while also benefiting from theoretical frameworks to structure the themes.

To examine coding reliability, the researcher, along with a collaborating scholar (as a second coder), independently analyzed a subset of the data. Four interviews (A, B, C, and D) were randomly selected and coded independently by both coders. The results were then compared, and the level of agreement and disagreement across codes was analyzed. To calculate intercoder reliability, Cohen's Kappa coefficient was employed, which indicates the degree of agreement between two coders. The closer the coefficient is to one, the higher the reliability. The table below presents the results of intercoder reliability.

For this calculation, Cohen's Kappa formula was applied

$$\text{Reliability (\%)} = \frac{\text{Total Number of Codes}^2 - \text{Number of Agreements}}{\text{Total Number of Codes}^2} \times 100$$

Table 5. Intercoder Reliability Results

Interview ID	Number of Codes	Number of Agreements	Number of Disagreements	Intercoder Reliability
A	50	18	5	0.72
B	46	15	6	0.63
C	48	17	4	0.69
D	54	19	2	0.74
Total	198	69	17	0.70 (Average)

To examine the reliability of the research instrument, several measures were undertaken. First, key concepts such as augmented reality and rural tourism marketing were precisely defined to ensure a shared understanding among the interviewees. The interview questions were reviewed multiple times to guarantee their clarity and comprehensibility, and a pilot study with three experts confirmed that respondents correctly understood the concepts. The interviews were conducted uniformly by the researcher, following a standardized interview protocol, which included the sequence of questions and the method of recording responses, to maintain consistency in data collection. Furthermore, the initial findings were presented to five interviewees to assess the stability of the data, and their feedback was used to refine the codes and themes. These measures enhanced the reliability of the analysis and ensured that the research instrument produced valid and consistent results.

To ensure the validity of the findings, triangulation was employed, whereby data were collected from three sources: digital marketing consultants and artificial intelligence specialists in advertising agencies, faculty members from universities in Tehran, Isfahan, and Semnan, and researchers in the field of marketing management. These sources provided diverse perspectives, and by comparing the codes and themes extracted from each source, the consistency of the data was confirmed. In addition, existing theoretical and empirical literature was used as a supplementary source for validation. To control data quality, the preliminary analysis results were presented to five interviewees to verify the researcher's interpretation of their statements. The feedback indicated that some findings required adjustment to accurately reflect the interviewees' intended meanings, and these modifications were implemented. This process not only reinforced the validity of the findings but also ensured that the results aligned with the actual perspectives of the participants.

Researcher reflexivity was considered a critical and self-aware approach. Given the researcher's prior experience in the field of augmented reality (AR),

which could potentially influence data interpretation, specific measures were taken to mitigate such biases. One of these measures involved daily journaling, which entailed detailed documentation of the researcher's thoughts, assumptions, and personal preconceptions throughout the data analysis process, helping to identify and manage potential biases. Additionally, regular debriefing sessions were held with research colleagues to obtain external perspectives and critical feedback, thereby preventing unconscious directional influences. Systematic member checking was also conducted, with the feedback used to adjust and refine the findings, substantially reducing bias and enhancing the credibility of the results. These measures provided greater assurance of the neutrality and transparency of the research process. To ensure reproducibility, the research data were organized and maintained manually and systematically in designated folders with precise labeling.

4. Research Findings

In the present study, to identify and analyze rural tourism marketing within the digital marketing ecosystem—particularly considering AI-based technologies—semi-structured interviews were conducted with 16 experts and specialists. The participants included professionals in marketing, AI developers and engineers, digital marketing consultants, and academic faculty members specializing in digital marketing and consumer behavior.

Regarding demographic characteristics, 70% of the participants were male, and 30% were female. Age distribution was as follows: 35% were under 40 years old, 45% were between 40 and 50 years old, and 20% were over 50 years old. Educational backgrounds varied, with 13% holding a bachelor's degree, 37% a master's degree, and 50% a doctoral degree. In terms of professional experience, 25% had less than 10 years of experience, 45% had between 10 and 15 years, and 30% had more than 15 years of work experience.

Table 6. Descriptive Statistics of the Study

Feature	Category	Number (n)	Percentage (%)
Gender	Male	11	70%
	Female	5	30%
Age Group	Under 40 years	6	35%
	40 to 50 years	7	45%
	Above 50 years	3	20%
Education	Bachelor's degree	2	13%
	Master's degree	6	37%
	Doctorate degree	8	50%
Professional Experience	Less than 10 years	4	25%
	10 to 15 years	7	45%
	More than 15 years	5	30%

Table 7. Table of Sample Interviews, Texts, and Initial Code Conclusions

Interview Number	Interview Text	Initial Code Conclusions
P5	"To be honest, we worked in a village where we showcased its attractions using AR. For instance, by scanning a QR code, tourists could see how an old structure used to look, as if it were alive before their eyes! They got very excited and stayed longer."	The use of AR for the interactive display of attractions has increased tourist interest and extended their stay duration.
P9	"We held a free workshop in a village where kids and young people learned how to create content with their phones. We also had a digital course, and one person learned to develop an app and now earns income from selling handicrafts online, which is amazing!"	Free digital training has enhanced the skills of local communities and created new economic opportunities for young individuals.
P12	"In a village, we created a virtual museum that displays local dances and handicrafts using VR. Tourists can explore it without harming the culture. The locals are happy because it preserves their heritage and attracts more visitors."	Virtual museums utilizing VR have improved the preservation of cultural heritage while simultaneously increasing tourist attraction.

The analysis of the interview data resulted in the identification of 198 initial codes, which were categorized into 22 organizing themes (subcategories). Ultimately, these organizing themes were synthesized into 7 overarching themes

that represent the identification and analysis of innovative digital marketing strategies in rural tourism, utilizing augmented reality and intelligent algorithms within technological platforms.

Table 8. Analysis of Codes from Interviews on Digital Marketing in Rural Tourism

Overarching Theme	Organizing Theme (Subcategory)	Open Codes (Examples)
Technological Transformation in Tourism Experience	Augmented Reality in Destination–Tourist Interaction	Interactive display of attractions with AR, virtual pre-trip tours, digital reconstruction of old buildings, 360-degree cultural heritage experience, multisensory digital experience, enhancing tourist mental engagement, interactive educational content, improving spatial perception, use of QR codes on tourist routes
	Artificial Intelligence in Preference Analysis	Analyzing past trips, identifying individual preferences, building tourist behavior models, personalized place recommendations, trip scheduling based on timing, travel style classification, sentiment analysis of feedback, personalized messaging, predicting tourist return
	Internet of Things and Geospatial Data	Automatic notifications near attractions, wearable devices connected to destination systems, monitoring crowded spots, GPS navigation, energy consumption control in accommodations, analyzing tourist movement paths, using Beacons on trails, real-time alerts, tourist density analysis
Empowering Local Communities through Technology	Local Content Production by Residents	Recording local narratives, using native language in apps, documenting rituals, local podcasts, local-led tour narration, ritual visualization with AR, transferring traditional knowledge, participatory ethnography, visual content creation by local youth
	Digital Literacy and Education in Villages	Free digital training courses, AR workshops for students, developing local platforms, government support for media literacy, promoting family learning,

Overarching Theme	Organizing Theme (Subcategory)	Open Codes (Examples)
		local digital mentoring, digital content design training, improving digital business skills, personal data management education
	Redistribution of Benefits from Digital Marketing	Increasing handicraft sales, online rental of local homes, income from local advertising, collaboration with local influencers, creating tech-based jobs, digital financial flow in the community, renting technology infrastructure, youth employment in content management, financial benefits from platform partnerships
Redefining Marketing Strategies	Location-Based Marketing	Location-dependent ads, instant offers near attractions, GPS use in apps, alternative route suggestions, tourist flow analysis, location-based digital ticket sales, location-specific discount offers, combining spatial data with demographics, traffic pattern analysis
	Optimizing Advertising with Smart Algorithms	A/B testing campaigns, detecting message effectiveness, interaction rate analysis, dynamic ad budget allocation, selecting channels by region, smart ad scheduling, personalized message design, real-time feedback analysis, improving click-through rates by content redesign
	Using Data Mining to Attract Tourists	Clustering tourists by travel style, identifying less-visited areas, extracting keywords from social media, analyzing tourist return rates, comparing seasonal tourism performance, local trend analysis, length of stay in specific areas, analyzing interest changes over time, complaint analysis
Cultural and Environmental Sustainability	Digital Preservation of Heritage	Creating virtual museums, VR documentation, digitizing local narratives, preserving cultural symbols on platforms, digitally archiving dances and music, simulating traditional ceremonies, 3D scanning, interactive handicraft exhibitions, developing local cultural databases
	Reducing Environmental Vulnerability through Technology	Alerts for sensitive environmental areas, distributing tourists in space and time, using data to prevent overcrowding, monitoring litter on trails, optimizing eco-tourism routes, calculating digital carbon footprints, real-time ecological alerts, optimizing energy consumption, monitoring trees and water resources
	Balancing Technology and Tradition	Using cultural symbols in apps, consulting elders before content creation, displaying traditional textures in digital spaces, preserving local tone in messaging, native storytelling, preventing commercialization of symbols, empathetic participation, integrating digital narratives with rituals, aligning with community values
Implementation Barriers and Challenges	Technological Infrastructure in Villages	Weak internet, lack of AR/VR equipment, absence of local servers, inability to run heavy apps, high bandwidth costs, lack of technical support teams, dependency on urban internet, infrastructure quality disparities, no local cloud services
	Digital Skill Gap	Unfamiliarity with content design, poor media literacy, cultural resistance to technology, inability to analyze data, lack of knowledge of smart tools, generational gap in tech understanding, fear of digital mistakes, dependency on outsiders, shortage of trained personnel
	Ethical and Data Security Challenges	Breaches of tourist privacy, location data leaks, insecure data storage, lack of clear policies, absence of encryption standards, concerns about app eavesdropping, commercial use without consent, lack of awareness of data rights, risks from uninformed use of algorithms
Innovation Horizons and Research	Adoption of New Technologies in Rural Tourism	Acceptance analysis using TAM model, AR adoption among youth, trust in new technologies, cultural impact on acceptance, resistance of traditionalists, motivators for AI use, tourists' familiarity with technology, AR use in nature trips, willingness to try new experiences
	Future of Gamification in Travel Experience	Designing local missions with points, use of digital badges, combining games with navigation, measuring user engagement with challenges, interaction with hidden QR codes, raising digital tourist levels, encouraging responsible tourism, using games for environmental education, virtual point festivals
	Mixed Reality and Metaverse in Destination Marketing	Designing digital destination spaces in the metaverse, simulating interactions in virtual worlds, pre-trip destination experience, creating tourist avatars, linking physical and digital realities, leveraging cultural NFTs, interactive virtual tours, ritual displays in the metaverse, ticket sales in mixed reality
Recreating Digital Identity in Rural Tourism	Cultural Branding with New Technologies	Creating digital symbols from cultural elements, designing interactive AR logos, using native music in apps, building local brand narratives with AI, developing virtual characters to introduce destinations, digital storytelling of

Overarching Theme	Organizing Theme (Subcategory)	Open Codes (Examples)
		village history, game design based on local myths, creating NFTs for cultural symbols, digital social campaigns to strengthen village brand
	Digital Storytelling of Destinations	Producing local stories as multimedia content, combining archival photos with interactive effects, documenting rituals with digital narratives, simulating village historical journeys, video interviews with elders, identity podcasts, reconstructing local tales, interactive storytelling in apps, visual storytelling of time travel
	Symbolic Community Participation in Digital Identity Creation	Collecting symbols from residents, using local language and dialect, involving children in digital design, slogan selection by locals, creating digital characters inspired by real people, choosing colors and symbols from rituals, showing daily life in AR videos, family narratives as brand content, public campaigns for brand design
	Integrating Digital Identity Across Marketing Channels	Using consistent signs and colors on websites, logo and symbol coherence across platforms, shared music in videos, unified brand messaging on social media, digital branding package design, consistent storytelling in content production, visual style coherence in AR, synchronizing digital campaigns with brand narrative, slogan consistency with digital destination voice

5. Discussion and Conclusion

The present study aimed to identify and analyze novel digital marketing strategies in rural tourism, with an emphasis on leveraging Augmented Reality (AR) and intelligent algorithms. Using an exploratory qualitative approach and thematic analysis method, semi-structured interviews were conducted with 25 experts in digital marketing, information technology, and management. Seven overarching themes were extracted: technological transformation in the tourism experience, empowering local communities with technology, redefining marketing strategies, cultural and environmental sustainability, implementation barriers and challenges, innovation and research horizons, and digital identity reconstruction in rural tourism. These themes provide a comprehensive framework for understanding the impact of new technologies on rural tourism marketing and suggest practical solutions to capitalize on opportunities and manage challenges.

The theme of technological transformation in the tourism experience revealed that AR and artificial intelligence significantly enhance tourists' experiences. Codes such as "interactive display of attractions with AR," "virtual tours before travel," and "preference analysis with AI" emphasize creating personalized and interactive experiences. These technologies increase tourist engagement by providing multisensory content and customized recommendations. For example, a study shows that AR offers deeper, more informative interactive experiences, while AI enables personalized experiences tailored to individual tourist

preferences. Implementing these technologies significantly increases destination attractiveness and supports sustainable tourism development (Setiawan, 2024).

Correia (2025) explains how AI and AR create personalized and deeply engaging experiences for tourists, improving learning outcomes and visitor satisfaction. The integration of these technologies facilitates immersive interactions with cultural heritage, enhancing cognitive engagement and personalizing the tourism experience.

The theme of empowering local communities with technology focuses on the role of technology in increasing participation and capacity of rural residents. Codes like "local content production by residents," "digital literacy training," and "economic benefit redistribution" indicate strengthening local capacities. These findings align with Mohd (2025), who shows that AR aids in preserving culture and empowering communities by documenting local rituals and presenting them as digital content.

A related study highlights how improving digital literacy among rural women can lead to significant socio-economic empowerment and inclusion. It stresses that digital literacy initiatives can help overcome barriers faced by rural women, enabling access to resources and fuller participation in their communities. This aligns with the idea of local content production and education as empowerment tools (Meenu et al, 2025).

Another research shows that digital literacy training significantly improves rural participants' skills, leading to better economic opportunities through digital marketing of local products. The findings

suggest such training not only enhances individual capabilities but also contributes to the overall economic well-being of the community, supporting the concept of redistributing economic benefits (Budiarto et al, 2024).

The theme of redefining marketing strategies demonstrated that smart technologies make marketing more targeted and effective. Codes like "location-based advertising," "optimization with intelligent algorithms," and "data mining for tourist attraction" reflect transformation in marketing campaigns. El-Alaoui et al (2025) emphasizes that investing in smart digital technologies enables the development of flexible and effective marketing strategies. This study highlights how technologies like location-based ads and data analytics can enhance offer personalization, improving tourist appeal and satisfaction.

Another study discusses how big data and AI-based marketing strategies offer a new level of precision in tourism marketing. It shows that these technologies enable tourism businesses to create targeted marketing campaigns, optimize their reach, and ultimately increase revenue through more effective engagement with potential tourists (Lu et al, 2024).

The theme of cultural and environmental sustainability emphasizes the role of technology in preserving heritage and the environment. Codes such as "digital heritage documentation," "reducing environmental vulnerability," and "balance between technology and tradition" indicate a commitment to sustainability. A related study examined how integrating traditional practices with technology enhances cultural heritage preservation. Findings showed that "technology acceptance" explains about 45.5% of the variance in "cultural engagement," while "digital documentation" accounts for 38% of the variance in "preservation effectiveness." This highlights the importance of digital tools in ensuring sustainable heritage practices (Lukita et al, 2024).

Other research on intangible cultural heritage preservation revealed that digital methods are vital for protecting orally transmitted knowledge and practices. The study emphasized the need for increased awareness and documentation to ensure sustainability of these cultural assets, showing that digitalization plays a crucial role in preserving cultural diversity (Isa et al, 2018).

The theme of implementation barriers and challenges addressed technical, cultural, and ethical limitations in rural areas. Codes such as "weak internet infrastructure," "digital skill gap," and "privacy violations" highlight key obstacles. A study analyzing digital inclusion in rural Ecuador found that only 27% of rural households had internet access compared to 67% in urban areas. It identified "technology infrastructure limitations" and "insufficient digital skills training" as significant barriers. Cultural resistance and economic constraints further hinder equitable access to ICT (Boné-Andrade, 2023).

Another study explored challenges faced by businesses adopting digital marketing strategies in rural areas. Key barriers included "limited internet access," "low digital literacy," and "cultural resistance" to change. The study stressed the need for tailored solutions such as improving local digital infrastructure and promoting digital literacy through partnerships (Garg et al, 2024).

The theme of innovation and research horizons focused on future potentials of new technologies. Codes like "gamification in travel experience" and "mixed reality in the metaverse" illustrate innovative pathways. A study on designing immersive gamified experiences in the metaverse showed these experiences can significantly enhance student learning. Results indicated gamification greatly increases motivation and engagement, principles that can be effectively applied in travel experiences as well (Damasevisius and Sidekersniene, 2023).

Another study introduced the metaverse as a transformative platform for various sectors including tourism. It emphasized integrating extended reality technologies like AR and mixed reality to create immersive experiences and redefine user interaction innovatively. This research highlighted innovative potentials in marketing, education, and tourism, envisioning a promising future for these technologies (Koohang et al, 2023). The theme of digital identity reconstruction emphasizes technology's role in strengthening destination branding. Codes like "cultural branding with AR," "digital storytelling," and "symbolic community participation" indicate the creation of digital identity. A study focusing on an AR app in Tarragona, Spain, showed AR significantly improves destination brand communication and tourist experiences. It demonstrated that AR apps

can create satisfying tourism experiences and effectively convey destination branding, highlighting AR's high potential in tourism branding strategies (Huertas and Gonzalo, 2020).

Another study examined the use of digital storytelling as a participatory media technique enhancing community engagement. It emphasized that digital narratives can reinforce cultural branding by sharing local community stories, thereby strengthening identity and ties to the destination (Klaebe et al, 2007).

From a theoretical perspective, this study fills the gap in rural tourism marketing literature by elucidating the synergistic role of AR and intelligent

algorithms, providing a comprehensive framework to understand the impact of new technologies. Practically, the findings assist rural destination managers in designing effective marketing strategies using digital tools like AR, recommender systems, and location-based marketing, empowering local communities and enhancing cultural and environmental sustainability. However, the success of these strategies depends on managing infrastructural, cultural, and ethical challenges. This study suggests new avenues for future research, including exploring gamification, the metaverse, and technology adoption, which could contribute to sustainable rural tourism development.

Table 9: Comparative Analysis of Themes and Findings in Discussion and Conclusion

Overarching Theme	Key Findings	Connection to Existing Studies	Practical Applications	Challenges and Limitations	Future Directions
Technological Transformation in Tourism Experience	Utilization of AR and AI for interactive and personalized tourist experiences; enhancing mental engagement and customized recommendations.	AR provides deeper, more informative experiences; AI enables personalized experiences (Setiawan, 2024).	Use of AR and AI to enhance destination appeal and support sustainable tourism development.	High costs of technology implementation and need for user training.	Investigating the long-term effectiveness of AR and AI on tourist experiences.
Empowering Local Communities with Technology	Increased participation and capacity of rural residents through local content production, digital literacy training, and economic benefit redistribution.	AR plays a role in cultural preservation and community empowerment through ritual documentation (Mohd, 2025). Digital literacy improves economic outcomes (Meenu et al, 2025; Budiarto et al, 2024).	Strengthening local capacity with training and content creation; creating economic opportunities through digital marketing.	Cultural resistance and limited technology access in rural areas.	Studying the impact of digital training on rural women's participation.
Redefining Marketing Strategies	Use of smart technologies for targeted advertising, optimization with algorithms, and data mining for tourist attraction.	Investment in digital technologies creates flexible marketing strategies (El-Alaoui et al, 2025). Big data and AI increase marketing precision (Lu et al, 2022).	Designing targeted marketing campaigns with tools like location-based ads and data analytics.	Dependence on digital infrastructure and data privacy concerns.	Analyzing the impact of data mining on tourist behavior on a large scale.
Cultural and Environmental Sustainability	Preservation of cultural heritage and environment through digital documentation, reducing environmental vulnerability, and balancing technology with tradition.	Technology enhances cultural heritage preservation with 45.5% acceptance and 38% documentation effectiveness (Lukita et al, 2024). Digital methods are vital for oral knowledge preservation (Isa et al, 2018).	Use of digital tools for heritage protection and reducing environmental impacts.	Lack of resources for documentation and insufficient technology acceptance by local communities.	Examining the long-term impact of technology on environmental sustainability.
Barriers and Challenges in Implementation	Technical limitations (weak internet), digital skill gap, and ethical issues (privacy violations).	Internet access in rural areas is limited (27% vs. 67% urban) with insufficient digital skills training (Boné-	-	Weak infrastructure, cultural resistance, and privacy violations.	Developing local solutions to improve infrastructure.

Overarching Theme	Key Findings	Connection to Existing Studies	Practical Applications	Challenges and Limitations	Future Directions
		Andrade, 2023). Cultural resistance and economic constraints are barriers (Garg et al, 2024).			
Horizons of Innovation and Research	Future potential of technologies like gamification and metaverse for innovative travel experiences.	Gamification increases motivation and engagement (Damasevisius and Sidekersnienė, 2023). Metaverse is a transformative platform (Koohang et al, 2023).	Use of gamification and metaverse for immersive and innovative interactions.	Lack of familiarity with new technologies and high costs.	Investigating gamification and technology adoption in rural tourism.
Digital Identity Reconstruction in Rural Tourism	Strengthening destination branding with cultural branding, digital storytelling, and symbolic community participation.	AR improves destination brand communication and tourist experiences (Huertas and Gonzalo, 2020). Digital storytelling enhances community engagement (Klaebe et al, 2007).	Designing branding with AR and digital narratives to strengthen destination identity.	Technical challenges in AR implementation and insufficient community participation.	Studying the impact of digital storytelling on brand identity.

6. Practical Recommendations

- Develop native AR platforms to introduce attractions:** Rural tourism destinations can design AR-based applications offering interactive content such as 360-degree virtual tours, digital reconstruction of historical buildings, and display of local rituals. These platforms should be developed with local residents' participation to produce authentic and indigenous content. For example, codes like “interactive display of attractions with AR” and “local narrative tours by residents” highlight AR’s potential to enhance tourist experience and preserve local culture. These tools can be activated via QR codes on tourist routes and, linked to location-based systems, provide customized recommendations to tourists.
- Digital literacy training for local communities to produce content:** Given the theme of "empowering local communities," free digital training workshops should be held for rural residents, especially youth. These workshops should focus on digital content design, using AR tools, and managing marketing platforms. Codes like “digital content design training” and “free digital training courses” emphasize digital literacy’s importance in increasing local participation. Such programs can be supported by government or tourism organizations to reduce the digital skill gap and enable local communities to play an active role in creating the destination’s digital identity.
- Implement AI-powered location-based marketing systems:** Using intelligent algorithms to analyze spatial data and deliver location-based ads, such as sending discount notifications near attractions or suggesting alternative routes, is recommended as an effective strategy. Codes like “location-dependent advertising” and “tourist flow analysis” emphasize the potential of this approach. These systems can increase tourist engagement using GPS and beacons and help prevent overcrowding at busy spots, also supporting environmental sustainability.
- Create virtual museums and digital cultural archives:** To strengthen cultural sustainability, rural destinations can create AR and VR-based virtual museums documenting rituals, handicrafts, and local narratives. Codes like “virtual museum creation” and “digital archiving of dances and music” emphasize the importance of digital heritage preservation. These cultural archives can be developed with community participation and offered to tourists through digital platforms and social networks, increasing destination appeal and preserving local culture.

Table 10. Research Limitations

Limitation	Explanation	Stakeholder Responsibilities	Proposed Timeline for Addressing Limitation
Qualitative data analysis based on an interpretive paradigm may be influenced by the researcher's mindset and preconceptions	Qualitative analysis, due to its interpretive nature, may be affected by the researcher's personal perspectives, although efforts have been made to mitigate bias by focusing on participants' experiences.	Researcher and team for review and validation, in collaboration with independent experts.	Immediate review and validation within 1-2 months post-analysis completion.
Data collection conducted solely through interviews	Limiting data collection to interviews may reduce the depth of analysis, and the use of complementary methods (e.g., observation or questionnaires) could be beneficial.	Researcher and research team for designing complementary methods, in partnership with research institutions.	Design and implementation of complementary methods over 3-4 months.
Conducting the study within a specific time frame may not reflect dynamic changes in user behavior or the market	The temporal limitation of the study may hinder analysis of long-term changes in behavior or market trends; longitudinal studies are recommended.	Researcher and funding supporters for planning longitudinal studies, in collaboration with universities.	Planning and initiation of longitudinal studies over 6-12 months.
Influence of the study's specific cultural context	The specific cultural context (e.g., rural areas of Iran) may limit the generalizability of findings to regions with different cultures.	Researcher and cultural experts for comparative analysis, in collaboration with international researchers.	Conducting comparative analysis over 4-6 months across various regions.
Lack of longitudinal data for long-term change analysis	The absence of longitudinal data restricts the analysis of dynamic changes in tourist behavior or technology impacts.	Researcher and tourism organizations for collecting longitudinal data, in partnership with regional bodies.	Initiation of longitudinal data collection over 12-18 months.

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Authors contributions

The authors equally contributed to the preparation of this article.

Conflict of interest

The authors declare no conflict of interest.

References

1. Alsufyani, T., Al-haimi, B., Ahmed, S. A. B., & Alqahtani, M. (2025). The Impact and Future Trends of Augmented Reality on Digital Marketing. *International Journal of Research and Innovation in Social Science*, 9(4), 4365-4370. <https://doi.org/https://dx.doi.org/10.47772/IJRIS.S.2025.90400312>
2. Anabestani, A., Darmanlou, Y. and Rahmani, B. (2024). Analysis of the Impact of Smart Tourism on the Sustainable Development of Rural Businesses in Tafresh County, Iran. *Journal of Research and Rural Planning*, 13(3), 83-99. <http://dx.doi.org/10.22067/jrrp.v13i3.2409-1109>
3. Anabestani, A., Zolfaghari, M. and Tavakolinia, J. (2023). Development of Impactful Scenarios for Smart Village Approaches on the Sustainability of Peri-Urban Settlements of the Metropolis of Tehran (Case Study: Villages of Islamshahr County). *Journal of Research and Rural Planning*, 12(4), 99-124. <http://dx.doi.org/10.22067/jrrp.v12i4.2312-1097>
4. Boné-Andrade, M. F. (2023). Inclusión digital y acceso a tecnologías de la información en zonas rurales de Ecuador. *Revista Científica Zambos*, 2(2), 1-16. <https://doi.org/10.69484/rcz/v2/n2/40>
5. Bretos, M.A., Ibáñez-Sánchez, S. & Orús, C. (2024). Applying virtual reality and augmented reality to the tourism experience: a comparative literature review. *Spanish Journal of Marketing - ESIC*, 28 (3), 287-309. <https://doi.org/10.1108/SJME-03-2023-0052>
6. Budiarto, B. W., Karyadi, S., Wasiran, W., Pratiwi, R., & Irwan, D. (2024). Improving Digital Literacy of Village Communities in Indonesia through Information Technology-Based Community Service Programs. *Unram Journal of Community Service*, 5(3), 267–271. <https://doi.org/10.29303/ujcs.v5i3.716>
7. Çalışkan, G., Yayla, İ. & Pamukçu, H. (2025). The use of augmented reality technologies in tourism businesses from the perspective of UTAUT2. *European Journal of Innovation Management*, 28 (4), 1498-1526. <https://doi.org/10.1108/EJIM-04-2023-0271>

8. Correia, P. (2025). From Virtual to Reality: Enhancing Cultural Tourism Through AI, VR, and the Metaverse. International Conference on Tourism Research.
9. Damaševičius, R., & Sidekersniene, T. (2023). Designing immersive gamified experiences in the metaverse for enhanced student learning. In *2023 International Conference on Intelligent Metaverse Technologies & Applications (iMETA)* (pp. 1-6). IEEE. <https://doi.org/10.1109/iMETA59369.2023.10294971>
10. Dewi, L. K. C., Putra, I. B. U., Widodo, S., Yudithia, Y., & Soares, A. (2025). An Empirical Study on the Artificial Intelligence Practices on the Digital Marketing Effectiveness within Tourism Village in Bali, Indonesia. *Journal of Digitainability, Realism & Mastery (DREAM)*, 4(01), 1–8. <https://doi.org/10.56982/dream.v4i01.290>
11. El-Alaoui, A., Lali, K., & Farhaoui, Y. (2025). Smart Tourism for Competitive Territories: Enhancing Marketing Strategies with Intelligent Digital Technologies. *Salud, Ciencia Y Tecnología - Serie De Conferencias*, 4, 1351. <https://doi.org/10.56294/sctconf20251351>
12. Garg, A. K., Singh, C., Soni, K., Agarwal, P., & Tripathi, S. K. (2024). CHALLENGES FACED BY BUSINESS WHEN ADOPTING DIGITAL MARKETING STRATEGIES IN RURAL AREAS. *ShodhKosh: Journal of Visual and Performing Arts*, 5(5), 193–211. <https://doi.org/10.29121/shodhkosh.v5.i5.2024.3615>
13. Huertas, A., & Gonzalo, J. (2020). The role of augmented reality in destination branding. *Tourism and hospitality management*, 26(2), 419-436. <https://doi.org/10.20867/thm.26.2.8>
14. Irsyad, Z., Iswanto, D., & Istiqlal, I. (2024). The Role of Artificial Intelligence and Big Data in Improving Personalization of Tourism Marketing Campaigns to Maximize Tourist Experience. *SCIENTIA: Journal of Multi-Disciplinary Science*, 3(2), 100–114. <https://doi.org/10.62394/scientia.v3i2.146>
15. Isa, W. M. W., Zin, N. A. M., Rosdi, F., & Sarim, H. M. (2018). Digital preservation of intangible cultural heritage. *Indonesian Journal of Electrical Engineering and Computer Science*, 12(3), 1373-1379. <http://doi.org/10.11591/ijeecs.v12.i3.pp1373-1379>
16. Jang, E.-K., Lim, E. M., Kim, J., Kang, M.-J., Choi, G., & Moon, J. (2023). Risk Management of Methane Reduction Clean Development Mechanism Projects in Rice Paddy Fields. *Agronomy*, 13(6), 1639. <https://doi.org/10.3390/agronomy13061639>
17. Klæbe, H., Foth, M., Burgess, J., & Bilandzic, M. (2007). Digital storytelling and history lines: Community engagement in a master-planned development. In *Proceedings of the 13th International Conference on Virtual Systems and Multimedia* (pp. 108-120). United Nations Educational, Scientific and Cultural Organization (UNESCO). <https://web.archive.org/web/20080816072054/http://eprints.qut.edu.au/archive/00008985/01/8985.pdf>
18. Koohang, A., Nord, J. H., Ooi, K. B., Tan, G. W. H., Al-Emran, M., Aw, E. C. X., ... & Wong, L. W. (2023). Shaping the metaverse into reality: a holistic multidisciplinary understanding of opportunities, challenges, and avenues for future investigation. *Journal of Computer Information Systems*, 63(3), 735-765. <https://doi.org/10.1080/08874417.2023.2165197>
19. Krishnamma, B., Babu, K. & Zacharia, A. M. (2025). Tourism 2.0: Exploring the evolution of smart destinations. *J Manag Res Anal*, 12(1), 3-9. <https://doi.org/10.18231/j.jmra.2025.002>
20. Kristiani, R.D., Triraharjo, Y., Pangestu, A., Wiweka, K. & Setiawan, B (2025). Strategi Pemasaran Digital untuk Menarik Minat Wisatawan Muda ke Kawasan Desa Sawarna, Kabupaten Lebak, Banten. *Jurnal Manajemen Pariwisata dan Perhotelan*, 3(1), 39-49. <https://doi.org/10.59581/jmpp-widyakarya.v2i4.4542>
21. Kumar, A., & Barua, C. S. (2024). Leveraging digital innovations in tourism marketing: A study of destination promotion strategies. *International Journal of Business and Management Research*, 12(1), 08-12. <https://doi.org/10.37391/ijbmr.120102>
22. Lu, Y., Lai, I. K. W., Liu, X. Y., & Wang, X. (2022). Influence of memorability on revisit intention in welcome back tourism: The mediating role of nostalgia and destination attachment. *Frontiers in Psychology*, 13, 1020467.
23. Lukita, C., Lutfiani, N., Salam, R., Pangilinan, G. A., Rafika, A. S., & Ahsanitaqwm, R. (2024). Technology integration in cultural heritage preservation enhancing community engagement and

- effectiveness. In 2024 3rd International Conference on Creative Communication and Innovative Technology (ICCIT) (pp. 1-5). IEEE. <https://doi.org/10.1109/ICCIT62134.2024.10701088>
24. Meenu, Dua, K., & Yadav, Y. (2025). Digital Literacy for Rural Women: Pathways to Empowerment and Socioeconomic Inclusion. *Journal of Scientific Research and Reports*, 31(1), 37–47. <https://doi.org/10.9734/jsrr/2025/v31i12743>
25. Mohd, D.Y. (2025). Offline Augmented Reality for Rural Tourism Development: Empowering Cultural Preservation and Community Sustainability through ID-QUBE and ID-MAP Design. *Journal of Information Systems Engineering and Management*. <https://doi.org/10.52783/jisem.v10i28s.4368>
26. Muntean, M. C., Capatina, A., Micu, A., Micu, A. E., Sorcaru, I. A., & Lupoae, O. D. (2024). Unlocking The Digital Gateway: Artificial Intelligence Impact In Transforming Tourism Marketing. In Proceedings of the International Management Conference (Vol. 18, No. 1, pp. 472-481). Faculty of Management, Academy of Economic Studies, Bucharest, Romania. <https://doi.org/10.24818/imc%2F2024%2F05.02>
27. Nannelli, M., Capone, F., & Lazzeretti, L. (2023). Artificial intelligence in hospitality and tourism. State of the art and future research avenues. *European Planning Studies*, 31(7), 1325–1344. <https://doi.org/10.1080/09654313.2023.2180321>
28. Ozdemir, M. A. (2021). Virtual Reality (VR) and Augmented Reality (AR) Technologies for Accessibility and Marketing in the Tourism Industry. In C. Eusébio, L. Teixeira, & M. Carneiro (Eds.), *ICT Tools and Applications for Accessible Tourism* (pp. 277-301). IGI Global Scientific Publishing. <https://doi.org/10.4018/978-1-7998-6428-8.ch013>
29. Rina, D. K., Yohanes, A. P. T., Art, D. P., & Kadek, W. (2024). Strategi Pemasaran Digital untuk Menarik Minat Wisatawan Muda ke Kawasan Desa Sawarna, Kabupaten Lebak, Banten. *Journal Management*, 3(1), 39-49. <https://doi.org/10.59581/jmpp-widyakarya.v3i1.4542>
30. Saura, J. R., Reyes-Menendez, A., & Palos-Sanchez, P. R. (2020). The digital tourism business: A systematic review of essential digital marketing strategies and trends. *Digital marketing strategies for tourism, hospitality, and airline industries*, 1-22. <https://doi.org/10.4018/978-1-5225-9783-4.ch001>
31. Setiawan, B. (2024). The Augmented Reality (AR) Based on Artificial Intellegence (AI) in Integrated Marketing Communication (IMC) in Tourism Villages. *Media Wisata*, 22(2), 341-352. <https://doi.org/10.36276/mws.v22i2.695>
32. Vu, T.T.H., Hoang, H.H., Hoang, T.N.N., & Nguyen, X.L. (2025). Bibliometric and content analysis of global trends in digital transformation and rural tourism. *Geojournal of Tourism and Geosites*, 58(1), 161–175. <https://doi.org/10.30892/gtg.58114-1399>
33. Wang, X., Yao, J., Zhang, C., & Yan, X. (2023). Research on immersive experience of rural tourism marketing in the Internet Era. *Journal of Social Science Humanities and Literature*, 6(5), 124-127. <https://doi.org/10.53469/jsshl.2023.06%2805%29.18>
34. Xie, D. & He, Y. (2022). Marketing Strategy of Rural Tourism Based on Big Data and Artificial Intelligence, *Mobile Information Systems*, 2022, 9154351, 7 pages, 2022. <https://doi.org/10.1155/2022/9154351>
35. Yang, L. & Dong, X. (2022). Research on the Development Model of Rural Tourism Based on Multiobjective Planning and Intelligent Optimization Algorithm, *Journal of Advanced Transportation*, 2022, 6219438, 12 pages. <https://doi.org/10.1155/2022/6219438>
36. Ying, T. W., Alias, N., & DeWitt, D. (2024). Technology readiness and perception among secondary school students in the Klang valley. *JuKu: Jurnal Kurikulum & Pengajaran Asia Pasifik*, 12(3), 38-47. <https://doi.org/10.22452/juku.vol12no3.5>
37. Zaifri, M., Khalloufi, H., Kaghat, F. Z., Benlahbib, A., Azough, A., & Zidani, K. A. (2023). Enhancing Tourist Experiences in Crowded Destinations through Mobile Augmented Reality: A Comparative Field Study. *International Journal of Interactive Mobile Technologies (iJIM)*, 17(20), pp. 92–113. <https://doi.org/10.3991/ijim.v17i20.42273>
38. Zuhroh, N. F., Suwitho, S., Mildawati, T., Pahlawan, M. R., & Baihaqy, A. (2024, November). Augmented and virtual reality in tourism marketing: a systematic literature review of adoption factors and visitor engagement. In *International Conference of Business and Social Sciences* (pp. 887-904). <https://doi.org/10.24034/icobuss.v4i1.574>



استراتژی‌های نوآورانه بازاریابی دیجیتال در گردشگری روستایی: بهره‌گیری از واقعیت افزوده و الگوریتم‌های هوشمند در اکوسیستم‌های فناوری

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چکیده مبسوط

۱. مقدمه

گردشگری روستایی به عنوان یکی از ارکان توسعه پایدار، نقش مهمی در تقویت اقتصاد محلی، حفظ فرهنگ بومی و حفاظت از محیط زیست ایفا می‌کند. در عصر تحولات سریع تکنولوژیکی، استفاده از استراتژی‌های بازاریابی دیجیتال نوین، به ویژه با بهره‌گیری از فناوری‌های پیشرفته مانند واقعیت افزوده (AR) و الگوریتم‌های هوشمند، به ابزاری کلیدی برای جذب گردشگران و افزایش جذابیت مقاصد روستایی تبدیل شده است. این مطالعه با هدف پاسخ به سؤال اصلی تحقیق طراحی شده است: چگونه می‌توان از واقعیت افزوده و الگوریتم‌های هوشمند برای ارتقای بازاریابی دیجیتال در گردشگری روستایی استفاده کرد تا گردشگران را به طور مؤثر جذب کرده و توسعه محلی پایدار را ترویج دهد؟ این پژوهش به بررسی خلأ موجود در ادغام AR و هوش مصنوعی (AI) در زمینه‌های روستایی می‌پردازد، جایی که مطالعات پیشین اغلب این فناوری‌ها را به صورت جداگانه یا با تمرکز بر مقاصد شهری بررسی کرده‌اند. اهداف تحقیق شامل شناسایی استراتژی‌های نوین بازاریابی دیجیتال، تحلیل تأثیرات AR و AI بر رفتار گردشگران و مشارکت جوامع محلی، و ارائه راه‌حل‌هایی برای غلبه بر موانع پیاده‌سازی در زمینه‌های روستایی، به ویژه در مناطق در حال توسعه مانند ایران است. این مطالعه با تمرکز بر مقاصد فرهنگی و طبیعی روستایی، به بررسی ابزارهای خاص AR (مانند برنامه‌های مبتنی بر QR و تورهای مجازی) و ابزارهای AI (مانند سیستم‌های توصیه‌گر و تحلیل داده‌ها) می‌پردازد و از تمرکز بر زمینه‌های شهری اجتناب می‌کند.

۲. مبانی نظری تحقیق

ادغام فناوری‌های دیجیتال مانند AR، AI و داده‌های بزرگ (Big Data) در بازاریابی گردشگری روستایی، در سال‌های اخیر توجه زیادی

را به خود جلب کرده است. این فناوری‌ها نحوه تعامل مقاصد روستایی با گردشگران را متحول کرده‌اند و اثربخشی بازاریابی را به طور قابل توجهی افزایش داده‌اند. واقعیت افزوده با ارائه محتوای تعاملی و غوطه‌ور، تجربه گردشگران را از طریق تورهای مجازی و بازسازی‌های دیجیتال غنی‌تر می‌کند و به حفظ میراث فرهنگی کمک می‌کند. هوش مصنوعی، از طریق الگوریتم‌های پیش‌بینی‌کننده و سیستم‌های توصیه‌گر، امکان شخصی‌سازی بازاریابی را فراهم می‌کند و با تحلیل داده‌های بزرگ، رفتار گردشگران را شناسایی کرده و محتوای هدفمندی ارائه می‌دهد. داده‌های بزرگ نقش محوری در درک رفتار مصرف‌کننده ایفا می‌کنند و بازاریابی هدفمند را با شیوه‌های پایدار هم‌راستا می‌سازند. چارچوب نظری این مطالعه بر پارادایم گردشگری هوشمند استوار است که بر ادغام فناوری‌های پیشرفته برای ارتقای تجربه گردشگران و رقابت‌پذیری مقاصد تأکید دارد. مدل پذیرش فناوری (TAM) و نظریه یکپارچه پذیرش و استفاده از فناوری (UTAUT) به تحلیل پذیرش این فناوری‌ها توسط کاربران کمک می‌کنند و نشان می‌دهند که انتظار عملکرد، سهولت استفاده، تأثیر اجتماعی و شرایط تسهیل‌کننده بر پذیرش فناوری تأثیر دارند. با این حال، چالش‌هایی مانند زیرساخت‌های ضعیف، هزینه‌های بالای پیاده‌سازی، و مقاومت فرهنگی در مناطق روستایی مانع از پذیرش گسترده این فناوری‌ها می‌شوند.

۳. روش تحقیق

این پژوهش از رویکرد کیفی اکتشافی و روش تحلیل تماتیک استفاده کرده است. جامعه آماری شامل متخصصان بازاریابی دیجیتال، فناوری اطلاعات و اساتید مدیریت از دانشگاه‌های تهران، اصفهان و سمنان بود که با معیارهایی مانند داشتن حداقل سه سال تجربه مدیریتی در پروژه‌های مرتبط و تخصص آکادمیک یا عملی در حوزه‌های بازاریابی

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ه- موانع و چالش‌های پیاده‌سازی: زیرساخت‌های ضعیف (مانند اینترنت ضعیف)، شکاف مهارت‌های دیجیتال، و نگرانی‌های اخلاقی (مانند نقض حریم خصوصی) از موانع اصلی هستند.

و- افق‌های نوآوری و تحقیق: گیمیفیکیشن، متاورس، و تحلیل پذیرش فناوری، مسیرهای نوآورانه‌ای برای آینده بازاریابی گردشگری روستایی ارائه می‌دهند.

ز- بازسازی هویت دیجیتال: برندینگ فرهنگی با استفاده از AR، داستان‌سرایی دیجیتال، و مشارکت نمادین جامعه، هویت دیجیتال مقاصد را تقویت می‌کند.

۵. بحث و نتیجه‌گیری

یافته‌های این مطالعه با تحقیقات پیشین هم‌راستا است. به‌عنوان مثال، AR تجربه‌های عمیق‌تر و جذاب‌تری ایجاد می‌کند و AI اثربخشی بازاریابی را از طریق شخصی‌سازی افزایش می‌دهد. توانمندسازی جوامع محلی از طریق آموزش سواد دیجیتال و تولید محتوای محلی با یافته‌های تحقیقات گذشته هم‌خوانی دارد که بر نقش آموزش در توانمندسازی اقتصادی و اجتماعی تأکید دارند. پایداری فرهنگی و محیطی با مستندسازی دیجیتال و مدیریت جریان گردشگران، با مطالعات پژوهش‌های پیشین سازگار است که بر اهمیت حفظ میراث ناملموس تأکید دارند. موانع پیاده‌سازی مانند زیرساخت‌های ضعیف و مقاومت فرهنگی نیز با نتایج تحقیقات قبلی تأیید می‌شود. افق‌های نوآوری مانند گیمیفیکیشن و متاورس با مطالعات قبلی هم‌راستا است که پتانسیل این فناوری‌ها در تعاملات نوآورانه را نشان می‌دهند. بازسازی هویت دیجیتال از طریق برندینگ فرهنگی و داستان‌سرایی دیجیتال نیز با یافته‌های گذشته هم‌خوانی دارد که بر تقویت هویت مقصد تأکید دارند.

کلیدواژه‌ها: بازاریابی دیجیتال، گردشگری روستایی، واقعیت افزوده، الگوریتم‌های هوشمند، توسعه پایدار.

تشکر و قدرانی

پژوهش حاضر حامی مالی نداشته و حاصل فعالیت علمی نویسندگان است. بنابراین، از اساتید، کارشناسان و مشاوران ارجمند که با حمایت و همکاری خود در به سرانجام رساندن این پژوهش نقش بسزایی داشتند، صمیمانه تشکر و قدردانی می‌کنیم.

دیجیتال یا هوش مصنوعی انتخاب شدند. نمونه‌گیری گلوله‌برفی برای انتخاب ۲۵ شرکت‌کننده به کار رفت و اشباع نظری پس از مصاحبه شانزدهم حاصل شد، اما برای اطمینان از اعتبار، مصاحبه‌ها تا نفر هجدهم ادامه یافت. سوالات مصاحبه بر نقش فناوری‌های AI و AR در بازاریابی، عوامل تسهیل‌کننده و موانع پیاده‌سازی، تأثیر بر تجربه گردشگران، مشارکت جوامع محلی، و دستیابی به اهداف توسعه پایدار متمرکز بود. ملاحظات اخلاقی مانند رضایت آگاهانه، محرمانگی داده‌ها و حق انصراف رعایت شد. تحلیل داده‌ها بر اساس چارچوب شش مرحله‌ای تحلیل تماتیک شامل آشنایی با داده‌ها، تولید کدها، جستجوی تم‌ها، بازبینی تم‌ها، تعریف و نام‌گذاری تم‌ها، و تهیه گزارش انجام شد. کدگذاری اولیه به‌صورت استقرایی و کدگذاری تم‌ها به‌صورت قیاسی با استفاده از چارچوب‌های نظری مانند TAM و UTAUT صورت گرفت. برای بررسی پایایی، چهار مصاحبه به‌صورت مستقل توسط دو کدگذار تحلیل شد و ضریب کاپای کوهن (میانگین ۰.۷۰) نشان‌دهنده پایایی مناسب بود. اعتبار یافته‌ها از طریق مثلث‌سازی داده‌ها و بازبینی توسط پنج مصاحبه‌شونده تأیید شد.

۴. یافته‌های تحقیق

تحلیل داده‌های مصاحبه‌ها منجر به شناسایی ۱۹۸ کد اولیه شد که در ۲۲ تم سازمان‌دهنده و نهایتاً ۷ تم اصلی دسته‌بندی شدند:

الف- تحول تکنولوژیکی تجربه گردشگری: استفاده از AR برای نمایش تعاملی جاذبه‌ها (مانند تورهای مجازی و بازسازی‌های دیجیتال) و AI برای تحلیل ترجیحات و ارائه توصیه‌های شخصی‌سازی‌شده، تجربه گردشگران را غنی‌تر کرده و تعامل ذهنی آن‌ها را افزایش می‌دهد.

ب- توانمندسازی جوامع محلی از طریق فناوری: تولید محتوای محلی توسط ساکنان، آموزش سواد دیجیتال، و بازتوزیع مزایای اقتصادی (مانند فروش آنلاین صنایع دستی) مشارکت و ظرفیت جوامع را تقویت می‌کند.

ج- بازتعریف استراتژی‌های بازاریابی: بازاریابی مبتنی بر مکان، بهینه‌سازی تبلیغات با الگوریتم‌های هوشمند، و داده‌کاوی برای جذب گردشگران، کارایی کمپین‌های بازاریابی را افزایش می‌دهد.

د- پایداری فرهنگی و محیطی: ایجاد موزه‌های مجازی، مستندسازی دیجیتال میراث، و کاهش آسیب‌های زیست‌محیطی از طریق توزیع گردشگران در زمان و مکان، پایداری را ترویج می‌دهد.

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The Effect of Tourism on the Transformation of Geographical Space Relations (Case Study: Bala Taleqan District, Iran)

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Abstract

Purpose- Geographical space relations have recently experienced profound changes under the influence of several factors, including tourism. The extensive effects of tourism on geographic space have often made negative structural changes. Since tourism outwardly supports local economies, these outcomes have seldom received careful investigation. Therefore, it is highly important to pay attention to the cultural effects, particularly the lasting and frequently disruptive effects on cultural relations. To this end, the present research aims to uncover how the phenomenon of tourism affects the geographic space structure, which forms the central core of human-environment interaction.

Design/methodology/approach- This research adopted a qualitative design with quantitative content analysis. The method was content analysis, while snowball sampling was used in line with the research method. The participants consisted of fifteen residents, leading to the extraction of one hundred concepts and twenty-five axial categories. To measure the frequency of each category and its proportionate role in affecting rural spaces, the related diagrams were drawn and analyzed with the help of MAXQDA software. The geographical scope of this research comprises selected villages in the Bala Taleqan district.

Findings- The findings point out significant and negative effects of tourism on the study area, including economic, social, and environmental effects. The greatest negative effects were observed in the social dimension. Results demonstrate that tourism exerts a pervasive effect on the cultural and value systems of the local community, gradually transforming and eroding them. This indicates that the region has been significantly damaged by tourists.

Research Limitations- This study focuses on Bala Taleqan and seeks to investigate the consequences and effects of tourism on this region.

Practical implications- Recognizing the negative effects of rural tourism and suggesting solutions for local managers to reinforce positive effects while reducing negative effects in Bala Taleqan.

Originality/Value- In contrast to conventional studies, this study often emphasizes a critical approach, identifying damages, challenges, and the reasons for local resistance to rural tourism. Therefore, by identifying the motives behind such opposition, the study can find solutions for the development of rural tourism and fostering better relations between local inhabitants and tourists.

Keywords- Tourism, Geographic Space, Rural Relations, Rural Communities, Taleqan.

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1. Introduction

Rural tourism can have negative consequences and effects on the culture of the host society, including higher crime and delinquency, changes in architectural style, more luxury-oriented behaviors, social tensions, and a sense of cultural backwardness. Furthermore, rural tourism is important in terms of several aspects: it can improve the regional tourism industry, ensure that tourism becomes a part of regional planning, and protect the capacities of tourism areas at the district and provincial levels. The control of negative effects (especially socio-cultural effects) as the necessary need for a tourist area, and identifying and mitigating such effects for achieving sustainable rural tourism development are other important effects of tourism. The success of the tourism industry depends on how the support of residents and hosts is understood. Even though tourism is a basic resource-driven activity, relying on services and attractions, its successful progress greatly depends on reciprocal interaction between host communities and tourists. Negative attitudes in the local community and hosts are eventually transferred to tourists, which in turn reduces the likelihood of future tourism (Sadeghi Deh Cheshmeh et al., 2020: 266).

In many developing countries, most key actors in tourism, namely governments, who design tourism development policies, focus on economic aspects of tourism. In their destination planning, their main concern is often increasing tourist arrivals without paying attention to cultural considerations. Consequently, positive and negative cultural effects of tourism (e.g., loss of local identity) are ignored in host communities. In Iran, mismanagement of settlement areas has caused the transformation of the environment under human activity. In such assessments, the World Travel and Tourism Council (WTTC) has paid specific attention to land-based pollution. (Goeldner, 2003: 85) The effects caused by this phenomenon in generating spatial discontinuities and environmental imbalances are as follows:

The preparation of infrastructure and recreational facilities leads to soil degradation, a reduction in fertility and water retention, modifications in soil texture and structure, and increased soil bulk density. Tourism also has various impacts on vegetation. One form is the destruction of

vegetation, primarily during construction, which diminishes coverage, lowers frequency and height, weakens resistance, and reduces reproductive capacity. These changes can be observed in the damage to vegetation, land, and trees caused by tourists. (Rahbari, 2005: 6) Another factor for the destruction of vegetation is the new and non-native species, which through multiple methods, disrupts native flora and fauna, thereby disturbing the ecological order of the area. (Tekiehkhah & Khalili, 2014: 4)

Land-use conversion is another environmental consequence that tourism may cause if not properly managed. Moreover, shifts in water quality are among the most important effects of tourism activities during the phases of preparation, construction, and operation, creating hazardous conditions for buildings, infrastructure, and the health of residents and visitors. (Shakeri, 2015: 61) During the 1970s, the consequences of tourism were critically examined by anthropologists and sociologists, who emphasized its negative socio-cultural effects. In terms of economic development, tourism affects host communities by increasing retail sales, expanding the number of commercial institutions, altering tax structures, enlarging markets for locally produced handicrafts, and increasing job opportunities. (Chen, 2001: 2) However, the destruction of natural resources and cultural and historical heritage is an important issue that is linked to the environmental effects of tourism development. (Alkorish & Jenkins, 1997: 91)

Therefore, in the spatio-temporal continuum, which is the essential framework of human relations, geographical phenomena emerge in line with the constructive nature of space. Based on the spatiality and considering that spatial thinking is the basis of interaction, the influence of tourism as a human phenomenon on the structure of space is not an exception. According to the content above, the present study seeks to answer the following question: What cultural, environmental, and economic effects has tourism had on the rural spaces of Bala Taleqan.

2. Research Theoretical Literature

Over the past decade, peri-urban tourism has been regarded as a means of creating new life in economies. It has also been introduced as a way to preserve and honor local culture and resources. The unstable conditions of agriculture and the risks and uncertainties for this sector, which threaten not only

the incomes of villagers and agricultural producers but also the lives of a portion of society, have doubled the growing need for new sources of revenue in peri-urban regions. Consequently, finding new income opportunities that rely on the internal features of communities, and planning to reduce the negative aspects of such activities, have become among the most important priorities of development authorities in countries. Therefore, in the last two decades, peri-urban communities and managers and policymakers have sought to reinforce and diversify income sources for residents, and plan to organize activities and programs that have often been operating without planning in peri-urban regions (Byrd, 2008: 8). Experiences about tourist presence in an area reveal that unplanned peri-urban tourism may have more negative effects than benefits. Results of different studies indicate that planned tourism development pursues objectives, such as sustainable local employment, economic growth, and raising incomes, increased expenditures associated with infrastructure creation, encouraging growth in other branches of the economy, engaging local communities in conserving the environment and local culture, and enhancing cultural exchanges between visitors and residents (Ghaderi, 2023: 25). With respect to the socio-cultural effects of tourism on the lives of residents, various theories and models have been proposed, including Doxey's (1975) model, Butler's (1980) Tourism Area Life Cycle (TALC), and Social Exchange Theory. From the early 1960s to the mid-1970s, simultaneously with the rapid expansion of tourism, this phenomenon was regarded as a powerful strategy for development, particularly from an economic dimension. During this period, the focus was primarily on the economic benefits resulting from tourism, while its social and cultural consequences were regarded with optimism, ignoring cultural effects. Since the mid-1970s, the mere supportive framework of tourism has been criticized, and the attention has shifted to the unfavorable socio-cultural and environmental consequences of tourism, which result from weak planning (Gartner, 2006: 153).

Despite its varied nature, rural tourism always carries a huge cultural load. This mutual cultural exchange can be observed in both host and guest communities, with differing levels of acceptance or rejection according to social conditions.

Recognizing the effects of tourism on host communities has become a main field of interest for geographers and other tourism researchers. These effects can be negative and positive, which must be carefully assessed in analyzing their influence on host communities. The cultural aspect is among the most important dimensions of tourism. Indeed, the cultural and social effects of tourism are central considerations in tourism development in any region, especially in rural areas, where the intensity of cultural interaction between host and guest is high, but it has rarely been investigated in academic circles. This type of tourism, which depends on the presence of cultural resources and attractions, is often labeled culture-based tourism (Adabi Mamagani et al., 2014: 55).

Toulabi Nejad et al. (2022) found that tourism in the villages of Chabahar County had significant effects on the economic and social welfare indicators of rural households. The systematic study by Ghasemlou et al. (2022) indicated that approximately 69 percent of the effects of tourism development on the livability of rural regions were assessed as positive in a way that the strongest effects were observed in the physical and economic dimensions, and the weakest in the environmental dimension. Mohebi and Amiri (2024) argue that rural tourism can serve as an effective instrument for economic growth at times and in places where agriculture alone cannot remain a reliable source of livelihood over the long term. In most rural areas, where agriculture dominates the economy and remains vulnerable, attention to other development activities, such as tourism, as a complement to this sector, can ensure improvement in living conditions for rural populations in multiple aspects. Therefore, proper planning in each village, considering its potential, can effectively resolve unemployment and job problems for villagers. Planning for rural tourism development is thus considered a practical solution for addressing the employment problem in these areas. By its special dynamism, this industry can have major effects on the economic, social, and environmental conditions of rural communities, particularly at the local scale.

Research by Ghadiri Masoum et al. (2012) demonstrates that in Taleqan County, tourism has generated flows of capital through the sale of agricultural products and land. In terms of environmental conservation, most of the effects have been negative, and land degradation, noise

pollution, and traffic have increased. Regarding the marketing of agricultural products, villagers have begun to sell their products directly to tourists in recent years, which has strengthened reciprocal ties between the local and host communities. Finally, concerning migration, conditions depend on household economic status, social welfare, and the degree of development of the studied regions.

Alizadeh et al. (2025) believe that tourism has a direct effect on the quality of service provision, which in turn can affect the level of satisfaction that residents have toward tourism. When services are disrupted, it often results in locals' dissatisfaction with the presence of tourists.

Rural tourism is regarded as one of the key bases of sustainable development in rural regions. This type of tourism, by emphasizing the use of both cultural and natural attractions of rural areas, plays a central role in generating jobs and income for local communities while also preserving rural heritage and enhancing the living quality of residents (Torabi, Khavarian-Garmsir, et al., 2023). However, the unsustainable development and inadequate planning of tourism in such areas may lead to negative environmental outcomes and the depletion of valuable natural assets (Ghaderi & Henderson, 2012). Therefore, a more comprehensive understanding of tourists' environmental behaviors and recognizing the drivers of responsible environmental behavior have been recommended as a fundamental prerequisite for sustainable planning and management of rural tourism destinations (Gao et al., 2017; Torabi et al., 2024).

Mohibizadeh et al. (2025) emphasize in their study that socio-cultural resilience is the most important factor in rural tourism development, and the degree to which rural tourism succeeds is largely tied to this dimension.

In several well-known destinations around the world, the expansion of mass tourism has changed cultural authenticity as a result of the increase in the number of visitors from diverse cultural backgrounds, because tourism is a place-based phenomenon and affects the characteristics of destinations at different scales (Ziaei, 2015: 120). This phenomenon can change spatial components of tourism areas and affects the residents' sense of place, as the globalization of tourism often coincides with the commodification (Ghadami, 2014: 43). Harold Proshansky's theory suggests that place identity forms part of an individual's overall

identity, resulting from their broader understanding of the physical world where they live (Proshansky, 1978, p.147). Among the socio-cultural effects of tourism for place identity is the "demonstration effect", which points to the obvious differences between visitors and host communities, in such a way that the mere presence of tourists can cause behavioral changes among locals, especially younger generations (Bemanian, 2009: 20). Under such circumstances, residents observe the financial capability of tourists, and as they realize their inability to achieve the lifestyle displayed by visitors, they may experience disillusionment. This pursuit of imitation decreases their sense of belonging to their living places (Mison, 2011: 74).

The beautiful villages of Taleqan are dispersed across the northern and southern slopes at an altitude of 1,400 to 2,600 meters along rivers and springs and have attracted a large number of visitors. Bala Taleqan, located about 100 kilometers northwest of the capital of Alborz Province, is within a vast valley of the Alborz Mountains. The region of Taleqan comprises 84 mountain villages, with a longitude of nearly 80 kilometers from northeast to southwest and a latitude of approximately 15 kilometers, encompassing an area of about 1,400 km². The geographical coordinates of Taleqan are around 80° longitude and 38.5° latitude. The Shahroud River, known as the lifeline of this land, originates in the eastern foothills with a longitude of nearly 105 kilometers westward. It carries the waters of more than 15 small and large rivers fed by springs and snowmelt, eventually joining the Sepidrud, merging with the Ghezel Ozan River, and flowing towards the Caspian Sea. Bala Taleqan consists of two districts: the central district and Bala Taleqan.

According to the 2016 census conducted by the Statistical Center of Iran, the population of the Bala Taleqan district was recorded at 26,976 people. The city of Taleqan, situated in a highland region within the Alborz range, consists of four neighborhoods: Shahrak, Galinak, Kulej, and Pordeh Sar. Its location in the central Alborz causes it a mountainous and summer-like climate, leading to a seasonal habitation. During the summer months, the population exceeds 15,000, but the permanent population is around 8,000. The villages for this study were selected based on the number of tourist arrivals and include villages of Bala Taleqan (Hashan, Karkabud, Geliyard, Owrazan, Vashteh,

Guran, Mangolan, Avanak, Sagan, Navizak, Sagan Chal, Bezaj, Khasban, Jozinan, Hasan Jun, and Haranj). Due to easier accessibility and their strong historical and cultural backgrounds, these villages have received more tourists compared to other villages in Taleqan.

Between the 1960s and 1980s, the concept of tourism compatibility received attention, introducing the idea of alternative tourism into tourism literature (Weaver, 2012, pp. 39-42). This concept stresses that tourism development must account for the prevailing conditions within local communities, encompassing economic, social, cultural, and environmental dimensions, as well as their capacities. Tourism should be planned and implemented in a way that aligns with these local conditions and capacities (Swarbrooke, 1999, p. 318). By the late 1990s, scientific and practical achievements from the supportive, precautionary, and compatibility perspectives outlined the requirements for tourism development, underlying theoretical discussions within the sustainable development paradigm framework (Weaver, 2004, p. 512). Later, the concept of carrying capacity emerged, which has two special functions in tourism planning. First, it recognizes that tourism destinations have finite and perishable resources that must be presented to acceptable limits. Second, it provides a framework for evaluating the social effects of tourism development (Neidig, 2006, p. 27). During the same period, social exchange theory gained attention, rooted in behavioral psychology and the economic theory of utility-based fairness (Kim, 2002, p. 12). Human relationships are interpreted through the balance of costs and benefits, where individuals decide whether to commit to an interaction after weighing its costs and benefits. (Ap, 1990, pp. 610-616). Tourism outcomes are categorized as positive (benefits) or negative (costs) (Gursoy et al., 2002).

Doxey (1975) introduced an index for stages of resident satisfaction and dissatisfaction in tourism destinations to explain how local attitudes shift as tourism grows. With rising tourism density, increasing prices, and perceived threats to traditional lifestyles, opposition to development from local communities becomes apparent. Residents often feel that their community is changing and tourism costs outweigh its benefits, resulting in annoyance toward tourism development, as the growth of tourism causes

hostility and opposition among residents toward tourists and tourism facilities. (Ardakani, 2003, p. 63).

Geographical space comprises structures, compositions, phenomena, and systemic and spatial relationships. Each dimension is integrated within the overall framework of space and forms a specialized subject within geographic sciences, including locational, biological, and climatic aspects. Despite numerous positive effects of tourism, it has also fundamentally changed the spatial structure of destination areas. These enduring changes have been the subject of extensive global research on the cultural effects of tourism on the culture of host communities. In this regard, Taghdisi et al. (2012) studied the socio-cultural effects of tourism in Dalahu County, indicating increases in social and cultural anomalies and changes in local traditions due to tourism. Adabi Mamaghani, Khani, Sajasi, Gheidari, and Farrokhi (2014) studied culture-centered tourism on social-cultural changes in rural destinations, indicating that tourism significantly affected social and cultural dimensions. Amini and et al (2015) studied host community attitudes towards tourism development in Damab Village, Isfahan Province, indicating that tourism caused socio-cultural disturbances, including the commercialization and commodification of the village's cultural aspects, as well as the expansion of social and cultural irregularities. Sheikhi (2015: 23), in a study in Sistan and Baluchestan, indicated that sustainable tourism development could reduce inter-ethnic tensions in multiethnic communities.

In summary, rural tourism has diverse positive and negative effects on host communities. Its cultural effects are particularly significant, including negative effects, such as cultural transformations, conflicts between residents and tourists, changes in cultural patterns, and in some cases, changes in local culture. Economically and environmentally, tourism affects rural income and product sales while sometimes contributing to agricultural degradation. The socio-cultural consequences of rural tourism can affect its trend, provoking widespread resistance from local communities. Social and cultural anomalies, changes in customs, and tension between tourists and residents exemplify these consequences.

3. Research Methodology

3.1. Geographical Scope of the Study

The research was conducted in the Taleqan region, with its maps presented in Figures 2 and 3. Taleqan is the center of Bala Taleqan District and one of the cities in Alborz Province, Iran. The county comprises about 86 villages. The total area of Taleqan is approximately 1,200 km², located at 36°12' N latitude and 50°47' E longitude. This region is a highland area, situated 133 kilometers northwest of Tehran and 96 kilometers from Karaj. Its borders include Mazandaran Province in the

north, Savojbolagh County in the south, Fashgel Dareh and Abyek County in the southwest, and the Alamut region in the northwest. According to the most recent census, Taleqan's population is estimated at 3,545. However, due to its placement within the central Alborz Mountains, it has seasonal population fluctuations, particularly during spring and summer. Local languages include Taleqani and Mazandarani. Villagers between Jostan and the Kandovan Mountains speak Mazandarani with the Taleqani-Tabari accent, while those in western Jostan speak in Mazandarani with the Taleqani accent (Figure 1).

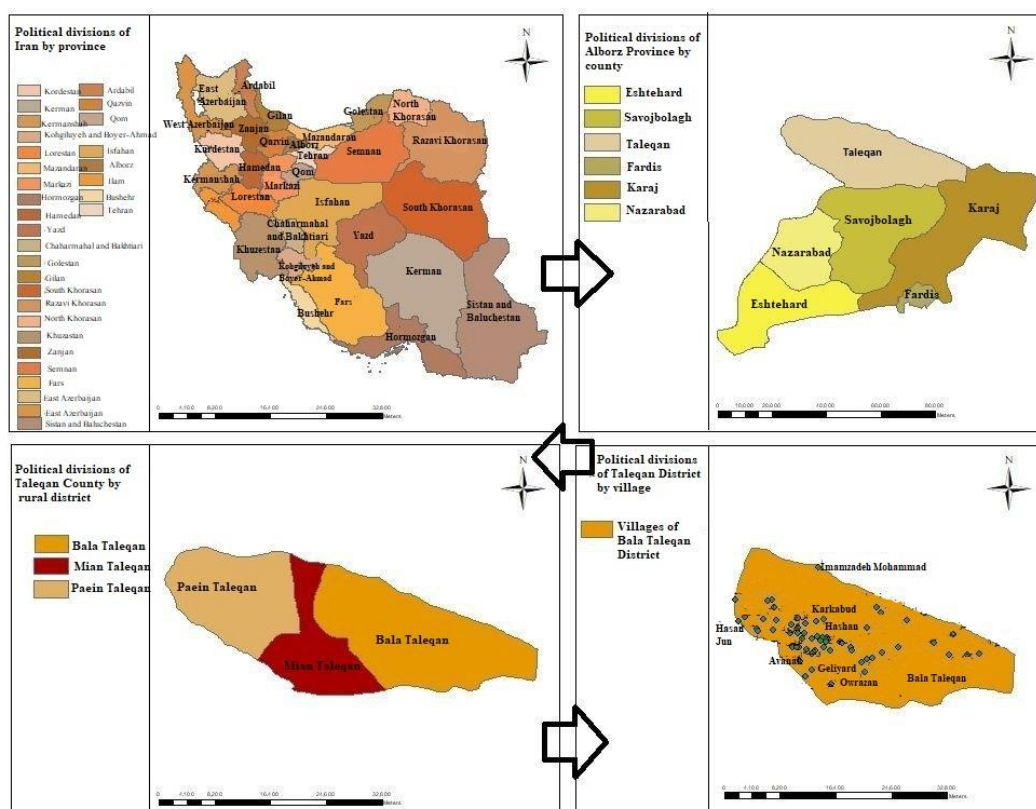


Figure 1. Study Area

3.2. Methodology

This study employed content analysis as its methodological framework, using a qualitative approach with a quantitative content analysis strategy. The research process included the following steps:

- Collecting and analyzing data until saturation;
- Coding data at three levels (finding concepts in data): open, axial, and selective coding.

The data collected for grounded theory development were analyzed using theoretical coding. Initially, suitable codes were assigned to different segments of the data and organized into categories, a process known as open coding. The researcher then examined the dimensions of these categories and their interrelationships during axial coding. Through theoretical sampling during the coding process, additional data about different individuals,

events, and situations were collected, providing a rich image of concepts and categories. Selective coding was finally used to monitor the categories, leading to the emergence of a theoretical framework.

This research aligns with the interpretivist paradigm, in which tourism effects as a social reality are shaped through shared interpretations produced and reproduced by social actors. An inquiry strategy was used to explore meanings and interpretations to develop scientific understanding from the perspectives of social actors. Sampling was purposive, using multiple purposive techniques combined with snowball and theoretical sampling

strategies. Snowball sampling enhanced research validity according to participant trust. Codes were extracted through in-depth interviews with residents and experts in two stages: initially to extract concepts and subsequently to construct a continuum of core and selective codes.

Accordingly, data collection methods included field visits (in-depth interviews), snowball sampling, semi-structured interviews with experienced, primarily local participants, and desk studies. By the 15th interview, responses became repetitive, indicating data saturation. Analysis was performed using grounded theory (Figure 2).

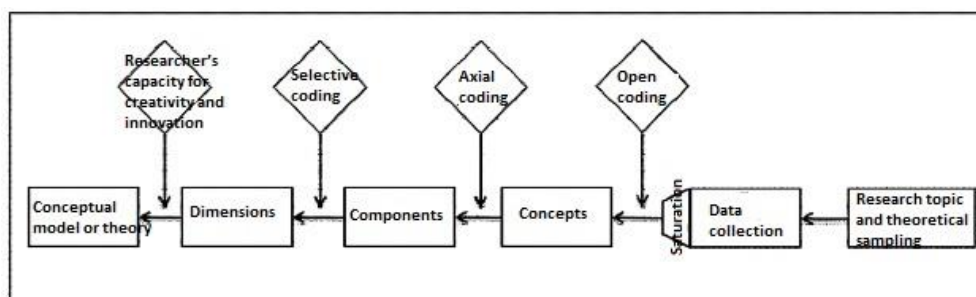


Figure 2. Grounded Theory.

Table 1 illustrates the household distribution and population of the villages in Taleqan.

Table 1. Villages in the Study

Province	County	District	Village	Population	Households
Alborz	Taleqan	Bala Taleqan	Hashan	53	23
Alborz	Taleqan	Bala Taleqan	Karkabud	111	44
Alborz	Taleqan	Bala Taleqan	Owrazan	267	84
Alborz	Taleqan	Bala Taleqan	Geliyard	309	90
Alborz	Taleqan	Bala Taleqan	Vashteh	893	296
Alborz	Taleqan	Bala Taleqan	Guran	380	132
Alborz	Taleqan	Bala Taleqan	Mangolan	291	103
Alborz	Taleqan	Bala Taleqan	Avanak	92	41
Alborz	Taleqan	Bala Taleqan	Sagran Chal	216	66
Alborz	Taleqan	Bala Taleqan	Sagran	140	49
Alborz	Taleqan	Bala Taleqan	Navizak	248	81
Alborz	Taleqan	Bala Taleqan	Bezaj	281	96
Alborz	Taleqan	Bala Taleqan	Khasban	778	279
Alborz	Taleqan	Bala Taleqan	Jozinan	449	151
Alborz	Taleqan	Bala Taleqan	Hasan Jun	762	275
Alborz	Taleqan	Bala Taleqan	Haranj	582	202

4. Research Findings

As discussed above, tourism, especially in recent years, has significantly altered rural spatial structures and settlement patterns, often introducing external, disorganized, and non-native elements. These interventions have disrupted long-standing

human mechanisms established over centuries, resulting in structural-functional inconsistencies across the geographic space and diminishing spatial cohesion. Intervening and contextual factors, by guiding basic and emergent actions, have contributed to a general disorder in settlement organization.

In this study, approximately 100 initial concepts were extracted from participatory interviews with local villagers. Through initial coding, 25 open codes were generated, which then led to the axial codes or categories. Using MAXQAD software, frequency diagrams were drawn for each final category, demonstrating their relative influence. Finally, 20 core dimensions were identified,

forming the pattern for the grounded theory paradigm of the study.

Table 2 presents a wide range of economic, social, and environmental factors affecting the region. Participants reported the extensive degree of regional degradation and that tourism has imposed significant negative effects.

Table 2. Core Concepts and Axial Categories

Row	Concepts	Axial Codes
1	Tourists have caused damage to agricultural fields.	Land Degradation
2	During the summer, villagers face security risks due to increased tourist arrivals.	Insecurity
3	Guards are hired in spring and summer to ensure village safety.	Lack of Security
4	Tourists excessively exploit local environmental resources.	Environmental Damage
5	Many tourists are unfamiliar with village nature and misbehave.	Social Incompatibility
6	Tourists often generate cultural and value conflicts with villagers.	Cultural Conflicts
7	Tourists do not respect the cultural values of residents.	Social Disorder
8	Tourists roam the village at all hours, contrary to local norms.	Overcrowding
9	Most tourists ignore villagers' religious and traditional practices.	Disrespect for Cultural Values
10	Tourist presence has risen land prices, tempting locals to sell.	Rising Land Prices
11	Tourists introduce elements that harm rather than benefit the village.	Incompatible Cultural Interventions
12	Tourism growth has changed traditional village life.	Lifestyle Changes
13	Tourism has changed living standards in ways often incompatible with village geography.	Changing Local Standards
14	Tourists often cause pollution through smoking, hookah, and other activities.	Environmental Pollution
15	Increased traffic and tourist gatherings disrupt village tranquility.	Noise Pollution
16	Young villagers imitate tourists, leading to family challenges and identity changes.	Transformation of Local Identity
17	Tourism growth has caused deterioration of the historical village texture.	Damage to Historical Texture
18	Warm seasons and higher tourist numbers increase noise and disorder.	Disturbance of Peace
19	Tourist style of clothing is often different from local village norms.	Cultural Conflicts
20	Tourists serve as inappropriate examples for rural youth.	Unsuitable Role Modeling
21	Capitalist and commercial influences have replaced the traditional rural lifestyle due to the presence of tourists.	Commodification of Villages
22	Tourists' cultural roots differ significantly from locals.	Social Differences
23	Tourists disrespect religious ceremonies and roam in inappropriate clothing styles.	Cultural Misbehavior
24	Tourist arrivals increase housing costs, causing economic difficulties for locals.	Rising Capitalism
25	Rural housing architecture increasingly imitates urban architecture, often improperly.	Changing Settlement Texture

Furthermore, the results presented in the table have been organized into selective codes, shown in Table 3. Land degradation has been one of the most critical negative consequences of tourism. Unfortunately, tourists have caused significant damage to agricultural lands, making farmers the primary opponents of tourism in the region because

not only have they failed to benefit from tourism, but their lands have also suffered harm. Social problems, especially rooted in the traditional social and cultural structure of the area, have led to conflicts between tourists and residents, while environmental effects have also been extensive (Table 3).

Table 3. Frequency of Selective Codes

Row	Selective Codes and Dimensions	Frequency
1	Land degradation	15
2	Insecurity	15
3	Environmental damage	15
4	Social incompatibility	14
5	Incompatible cultural interventions	14
6	Noise pollution	15
7	Disrespect for cultural values	14
8	Rising land prices	15
9	Rising capitalism	14
10	Lifestyle changes	13
11	Changing local standards	14
12	Environmental pollution	14
13	Transformation of local identity	18
14	Damage to Historical Texture	14
15	Disruption of Peace	13
16	Unsuitable Role Modeling	13
17	Commodification of villages	12
18	Changing construction patterns	13
19	Changes in Settlement Texture	13
20	Cultural Misbehavior	12

Figure 3 illustrates the commodification of rural tourism. This diagram highlights how tourism has fully transformed the cultural structures of villages toward profit-oriented practices, disregarding the cultural dimensions of tourism. Commodification is concerning because a segment of the village, benefiting financially from tourists, has begun

promoting ceremonies that superficially appear culturally authentic but are in reality exaggerated and unreal, and not performed similarly in the past. This extremism has caused disputes between elders and village leaders, as tensions rise over the misrepresentation of traditional practices.

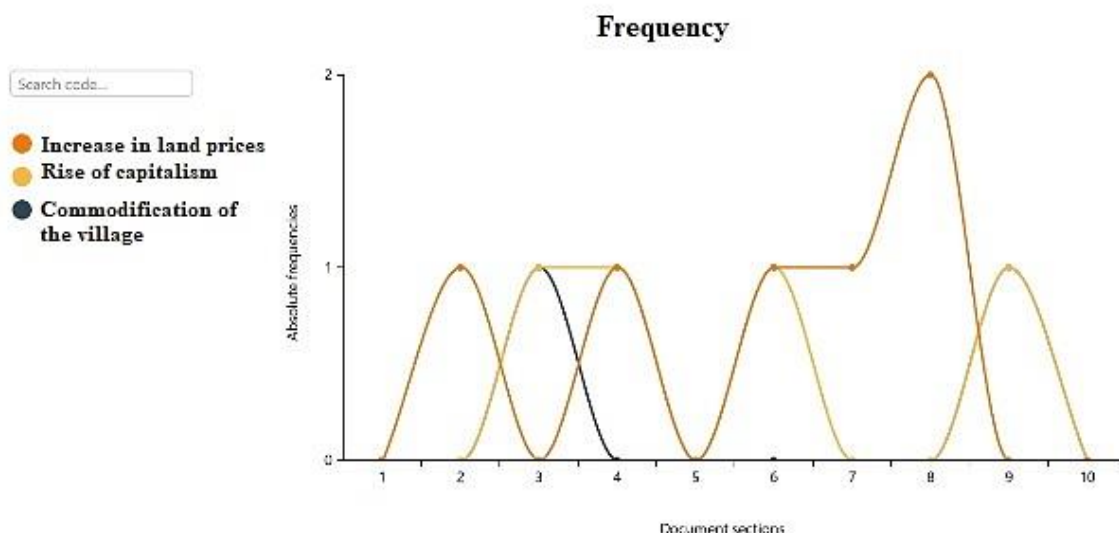
**Figure 3. Frequency of Selective Codes**

Figure 4 shows the consequences of tourism on environmental degradation, including damage to farmland and historical sites. The diagram indicates the pervasive negative effects of tourism on the

region's physical structure. Traditional rural buildings are being replaced with villa-urban constructions, altering the area's traditional rural structure.

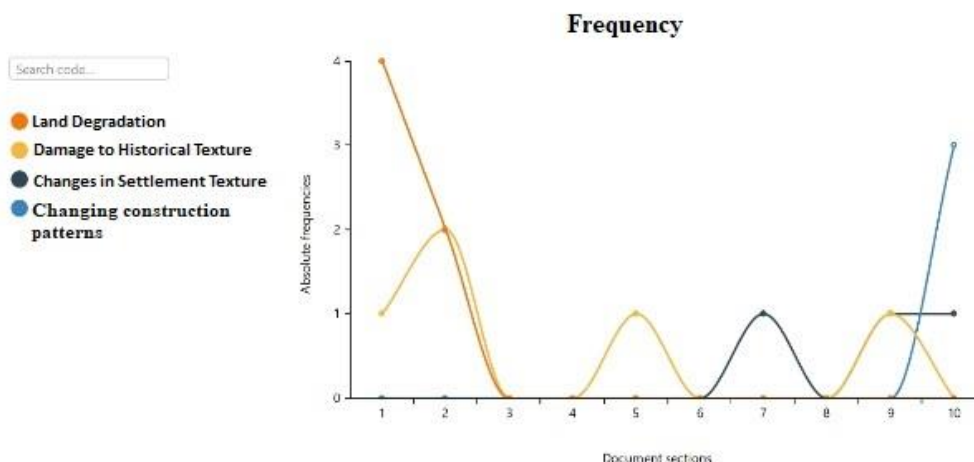


Figure 4. Frequency of Selective Codes

As depicted in Figure 5, tourism has led to significant environmental pollution, including noise and waste, which has negatively affected the aesthetic quality of the area. Unfortunately, tourists, particularly from Tehran, have left various types of waste, creating an unsightly

environment near Talaghan Dam. Noise from recreational activities and singing in the village and central town during weekends disturbs local religious residents, and these disruptions are especially offensive during periods associated with mourning ceremonies.

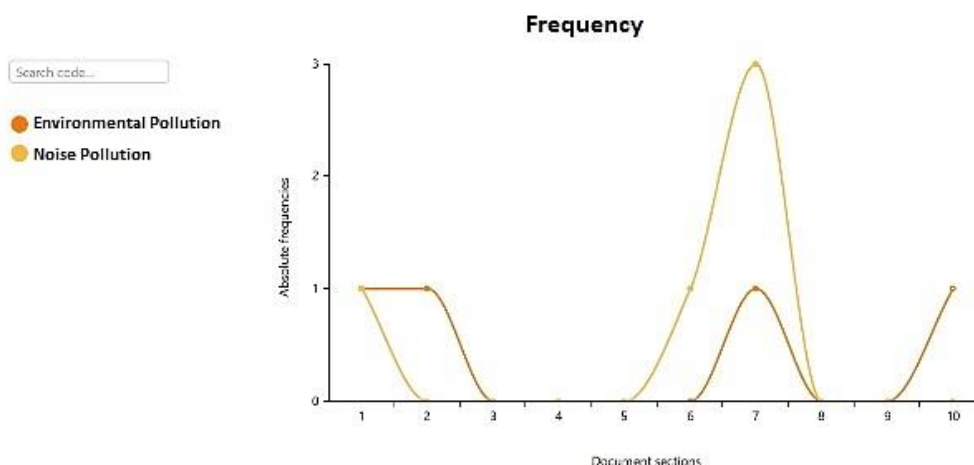


Figure 5. Frequency of Selective Codes

Figure 6 demonstrates that the cultural and social identity of the rural environment has been deeply changed, with tourism altering the view of the area. Traditional lifestyles and local values have diminished, and patterns of life have shifted from rural to urban under the influence of tourists. This is

most apparent among the youth, who embrace these changes, while their fathers resist them, attributing these shifts to tourists, who they claim have “corrupted their children”. This has led to considerable intergenerational conflicts within families.

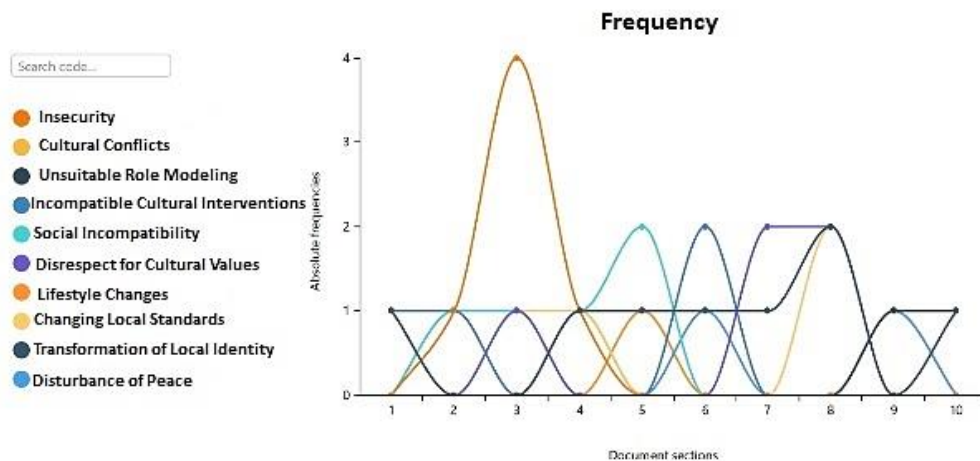


Figure 6. Frequency of Selective Codes

Figure 7 indicates that social changes have been the most significantly influenced by tourism, with the most profound changes occurring in the social dimension. In other words, rural social structures have undergone widespread change. Additionally, due to inadequate waste collection systems, limited

cooperation from residents, and the weak performance of village councils, waste management remains a major challenge. This is particularly problematic in Talaghan, where natural tourism and scenic landscapes are central attractions.

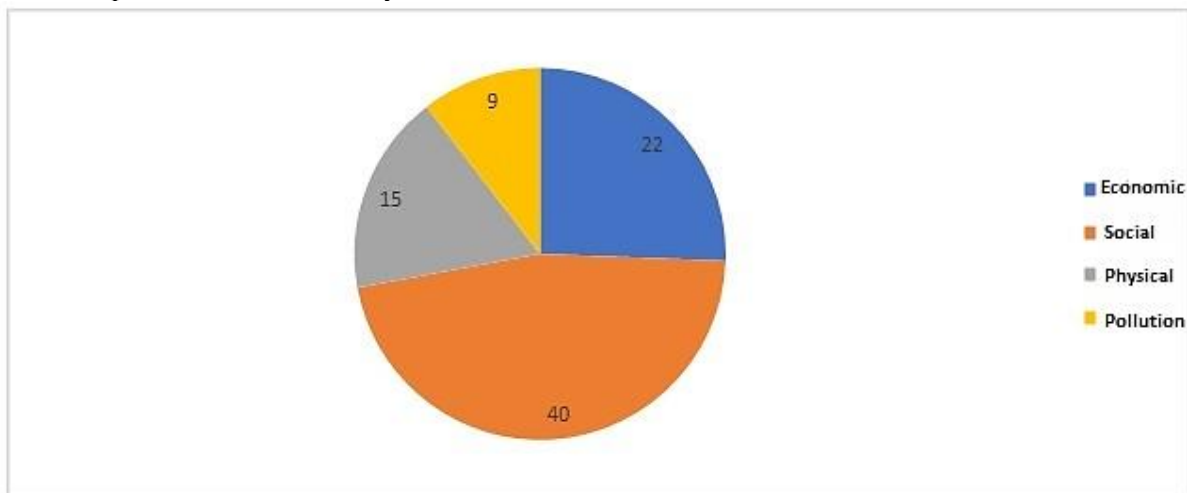


Figure 7. Frequency of Core Categories

As mentioned above, the primary effect of tourism in the rural areas of Bala Talaghan has been on socio-cultural relations, followed by economic, physical, and environmental categories. The major challenges stem from the religious texture of the villages and the incompatibility between tourists

and local social norms. Consequently, social problems have increased, and there has been minimal cooperation for rural tourism development. Tourism events and ceremonies have become arenas of social challenges rather than opportunities to strengthen culture (Figure 8).

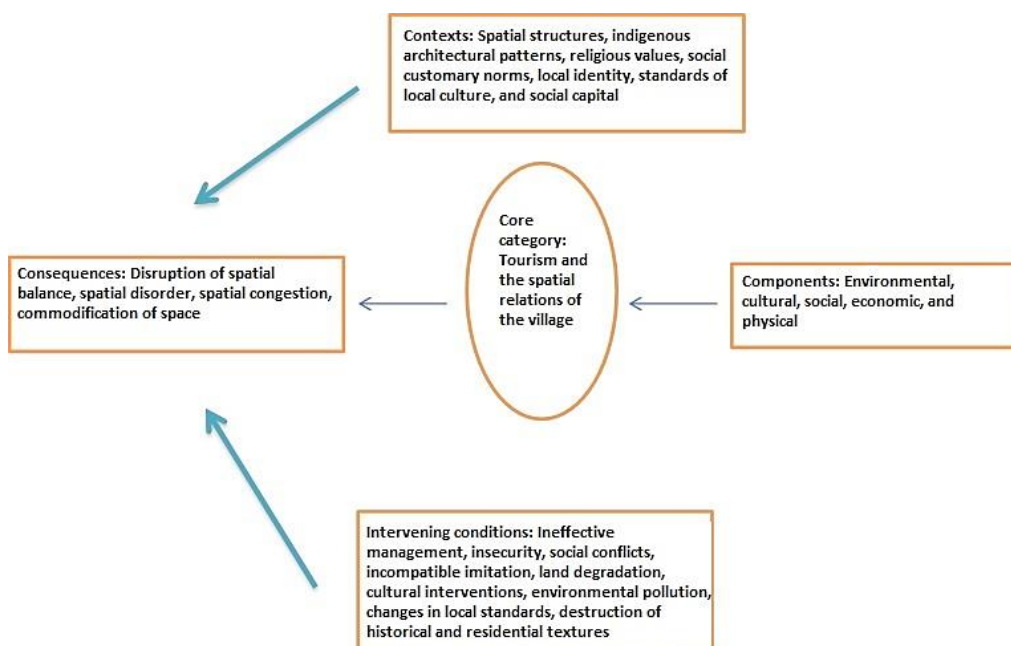


Figure 8. Paradigmatic Pattern Derived from Grounded Theory

5. Discussion and Conclusion

The rapid expansion of tourism and its increasing influence on human relations, environmental stability, and residential landscapes have led to significant structural disturbances and imbalances. As traditional residential and spatial patterns have been surpassed, a basic duality has emerged in the villages under study. The destruction of spatial and identity connections, particularly in Bala Taleqan, has affected religious, cultural, and belief-based dimensions. The lack of effective management and strategic planning has resulted in the commodification of rural and residential spaces, undermining the villages' structural and functional purposes. Since the meaning of space is rooted in social interactions and spatial-identity structures, the growth of capitalism and the uncontrolled exploitation of local resources without consideration of the host culture have disrupted customary practices. Changes in the organization of space have consequences due to unrestrained growth under capitalist pressures. Furthermore, insufficient planning and limited participation by local people in shaping tourism objectives in Taleqan have exacerbated spatial conflicts, leading to an imbalance of geographic space structures and ecosystem instability. According to this research and existing studies, tourism, particularly since its uncontrolled growth after the 1960s, has been gradually scrutinized due to its negative social,

economic, and cultural impacts, highlighting a deficiency in management and planning. Social anomalies, especially driven by inadequate management and region-specific policy-making, have been particularly notable, concerning village commodification and reinforcement of centralization. The most significant role of tourism in host communities in recent decades has been related to social, cultural, and particularly religious norms. Compared with prior research, while tourism has generated economic benefits, it has simultaneously produced widespread challenges affecting local social standards, thereby reshaping the geographic spaces of communities. Sustainable development that is balanced and aligned with local patterns seeks to restore equilibrium in spatial components; without such alignment, the result is a proliferation of spatial disarray across the national geographic landscape.

Based on the aforementioned content, the following recommendations are offered:

- Enforce and monitor regulations concerning land use changes and the protection of rural landscapes.
- Avoid converting non-touristic areas into tourist destinations.
- Pay attention to the social structure and core values of host communities when designing policies and planning.

- Implement management and planning frameworks according to local communities and spatial structures.

This study, consistent with Adabi Mamaghani et al. (2014), emphasizes that social and cultural development is the most profound impact of tourism in the region, highlighting the necessity of addressing cultural dimensions for successful rural tourism. Furthermore, Toulabi Nejad et al. report that tourism can enhance economic and social welfare for rural households, provided its negative cultural and social effects are minimized. These findings are consistent with Ghasemloou et al. (2023), demonstrating the visible impact of tourism development on the quality of life of residents. Additionally, as Movahedi and Amiri (2024) argue, rural tourism, if managed for cultural impacts, can become a tool to improve villagers' livelihoods. In line with Taghdisi, Taghvaei, and Piri (2012), this research argues that tourism leads to an increase in socio-cultural anomalies and alterations in local

customs, causing resistance and opposition to tourism development from community members. Likewise, Adabi Mamaghani, Khani, Sajasi, Ghidari, and Farrokhi (2014) reported extensive changes in local communities driven by tourism. Amini Bakhti and Baba Jamali (2015) also observed that tourism has been commodified, with certain events in Taleqan differing from their historical and cultural origins to meet tourist expectations. Finally, consistent with Sheikh (2015), this research reports that tourism has the potential to alleviate some regional tensions, although it can also act as a factor of social tension.

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Authors contributions

The authors equally contributed to the preparation of this article.

Conflict of interest

The authors declare no conflict of interest.

References

1. Adabi Mamaghani, M., Khani, F., Sajasi Ghidari, H. & Farrokhi, S. (2014). Assessing the socio-cultural effects of culture-centered tourism development in rural destinations: Case study of Kan District, Sulqan Rural District. *Spatial Planning*, 4(2), 55-78. [In Persian] DOI: [20.1001.1.22287485.1393.4.2.4.0](https://doi.org/10.1001.1.22287485.1393.4.2.4.0)
2. Alizadeh, M., Hajinejad, A., and Yasouri, M. (2025). Evaluating the Delivery and Quality of Rural Tourism Services in Eco-Lodges of Guilan Province. *Journal of Research and Rural Planning*, 14(1), 1-22. <https://doi.org/10.22067/jrrp.v14i1.2504-1135>
3. Alkorish, A., Jenkins, C. L. (1997). *An introduction to tourism*. Oxford: Butterworth-Heinemann.
4. Amini, A., Bakhti, S. & Baba Jamali, F. (2015). Host community attitude on rural tourism development. *Tourism Management Studies*, 10(30), 77-106. DOI: 20.1001.1.23223294.1394.10.30.4.3
5. Ap, J. (1990). Residents' perceptions, Research on the social impacts of tourism. *Annals of Tourism Research*, 17:610-616. [https://doi.org/10.1016/0160-7383\(92\)90060-3](https://doi.org/10.1016/0160-7383(92)90060-3).
6. Ardakani, S. (2003). The application of tourism life cycle and carrying capacity concepts in tourism development. *Journal of Tourism Studies*, 2, 49-66. [In Persian] DOI: 20.1001.1.23223294.1382.1.2.3.1
7. Barre, H. (1996). *Culture, tourism, development: crucial issues for the XXIst century*. Paris: UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000108539>
8. Beeton, s. (2006). *Community development through tourism*. Collingwood, land links press. <https://doi.org/10.1071/9780643093881>
9. Beheshti Rad, S. & Malek, N. (2016). Factors influencing place identity in educational environments. *National Conference on Contemporary Challenges in Architecture, Landscape, and Urban Planning*, 20-22. [In Persian] <https://en.civilica.com/doc/530462/>
10. Bemanian, M.R. & Mahmoudinejad, H. (2009). Principles of rural tourism planning and development. Tehran: Hele Publications. [In Persian]
11. Byrd E.T., Ca'rdenas. D.A. & Greenwood, J.B. (2008) Factors of stakeholder understanding of sustainable tourism. *Hospitality and Tourism Research*, Vol. 8, No. 3, pp. 192-204. [https://doi.org/ DOI:10.1057/thr.2008.21](https://doi.org/10.1057/thr.2008.21)
12. Chen, P.-t. (2001). *Distribution of tourism economic impact: An application* Communication, 15(1), 33-46. <https://doi.org/10.1504/IJTP.2010.034206>
13. Gao, J., Huang, Z., & Zhang, C. (2017). Tourists' perceptions of responsibility: An application of norm activation theory. *Journal of Sustainable Tourism*, 25(2), 276-291. Scopus. <https://doi.org/10.1080/09669582.2016.1202954>
14. Gartner, W. (2006). *Planning and management of lake destination development: Lake gateways in Minnesota*, In: Hall, C. Michael, Harkonen, T. (Editors), *Lake Tourism: An Integrated Approach to Lacustrine Tourism Systems*, Channel View Publications. 153. <https://doi.org/10.1016/j.tourman.2008.03.001>

15. Ghadami, M. & Gholamiyan Baei, M. (2014). Tourism impacts: Outcomes, frameworks, and policies. Tehran: Mahkameh Publications. [In Persian]
16. Ghaderi, E. (2023). Introduction to the tourism geography of Iran. Mahkameh Publications. [In Persian]
17. Ghaderi, Z., Hall, M. C. M., & Ryan, C. (2022). Overtourism, residents, and Iranian rural villages: Voices from a developing country. *Journal of Outdoor Recreation and Tourism*, 37, 100487. <https://doi.org/10.1016/j.jort.2022.100487>
18. Ghaderi, Z., & Henderson, J. C. (2012). Sustainable rural tourism in Iran: A perspective from Hawraman Village. *Tourism Management Perspectives*, 2, 47–54. <https://doi.org/10.1016/j.tmp.2012.03.001>
19. Ghadiri Masoum, M., Baghyani, H.R. & Nourani, H. (2012). The role of rural tourism in urban-rural relations in Taleqan County. *Spatial Planning*, 2(1), 27-48. [In Persian] Dor: 20.1001.1.22287485.1391.2.1.2.2.
20. Ghasemloo, H., Hossienzadeh, A., & Roumiani, A. (2022). Analysis of the effects of tourism development on the livability of rural areas, Case study: Tourism Villages of Tarom County. *Geography and Territorial Spatial Arrangement*, 12(44), 81-116. [In Persian] <https://doi.org/10.22111/gaij.2022.41778.3005>
21. Goeldner, C. R., & Ritchie, J. R. B. (2003). *Tourism Principles, practices, Philosophies*. John Wiley & Sons, Canada.85.
22. Gursay, D., Jorowski, C., Uysal, M. (2002). Resident Attitudes: A Structural Modeling Approach, *Annals of Tourism Research*, 31(3):495-516. [https://doi.org/10.1016/S0160-7383\(01\)00028-7](https://doi.org/10.1016/S0160-7383(01)00028-7)
23. Hafeznia, M.R. & Kaviyani Rad, M. (2014). Philosophy of Political Geography. Tehran: Strategic Studies Research Institute. [In Persian]
24. Kim, K. (2002). The effects of Tourism Impacts Upon Quality of life of residents in the Community, *Virginia Polytechnic Institute and State University*, Blacksburg, VA. 172. <http://hdl.handle.net/10919/29954>
25. King, B., Pizam, A., Milam, A. (1993). Social Impacts of Tourism: Host Perceptions. *Annals of Tourism Research*, 20(4), 650-665 [https://doi.org/10.1016/0160-7383\(93\)90089-L](https://doi.org/10.1016/0160-7383(93)90089-L)
26. Mison, P. (2011). Tourism: Impacts, planning, and management (Rouzbeh Mirzaei & Pouneh Torabian, Trans.). Tehran: Narmeh Publications.
27. Mohebizadeh, I., Jafarinia, G., and Pasalarzadeh, H. (2025). Investigating the Impact of Socio-cultural Resilience Dimensions of Coastal Regions on Sustainable Tourism Development (Case Study: Coastal Regions of Bushehr). *Journal of Research and Rural Planning*, 13(4), 81-96. <https://doi.org/10.22067/jrrp.v13i4.2410-1112>
28. Movahedi, R. & Amiri, F. (2023). Effects of Tourism on Rural Employment (Case Study: Varkaneh Village of Hamedan County). *Journal of Research and Rural Planning*, 12(4), 1-17. <https://doi.org/10.22067/jrrp.v12i4.2304-1078>
29. Neidig, A.H. (2006). *Rural Leaders' perception of tourism development in San Juan County*, Utah <https://www.coconino.az.gov/DocumentCenter/View/27919/Rural-Leaders-Perceptions-of-Tourism-Development-in-San-Juan-County-Utah?bidId=>
30. Proshansky, H. M., Fabian, A.K., & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self, *Journal of Environmental Psychology*, 3(1), 57-83 [https://doi.org/10.1016/S0272-4944\(83\)80021-8](https://doi.org/10.1016/S0272-4944(83)80021-8)
31. Rahbari, M. (2005). Tourism and sustainable development. In *Proceedings of the First National Conference on the Role of Tourism in Mazandaran's Development*. Tehran: Resanesh Publishing, 175. [In Persian] <https://civilica.com/doc/395800/>
32. Sadeghi Deh Cheshmeh, M. & Ghaedamini Harouni, A. (2020). Identifying negative cultural impacts of tourism on host communities (Case study of Deh Cheshmeh village). *Tourism Management Studies Quarterly*, 15(25), 263-308. [In Persian] <https://doi.org/10.22054/tms.2021.50908.2291>
33. Shakeri, R. (2004). Developing guidelines for evaluating the environmental impacts of tourism development projects. Tehran: Tarbiat Modares University. [In Persian] <https://elmnet.ir/doc/10535419-41152>
34. Sheikhi, A. R. (2015). Tourism impacts in a multiethnic society: The case of Baluchis in Iran. *Tourism Culture & social ization of the self. Journal of Environmental Psychology*. 3 (3): 57-83. [In Persian] <https://doi.org/10.3727/109830415X14339495039414>
35. Swarbrooke, J. (1999). Sustainable Tourism Management, CAB International (CABI). *Tourism Research*, 20:650-665. <https://doi.org/10.1079/9780851993140.0000>
36. Taghdisi, A., Taghvaei, M. & Piri, S. (2012). Host community attitude towards socio-cultural tourism impacts in Dalahu County. *Spatial Planning*, 2(1), 121-140. [In Persian] DOI: 20.1001.1.22287485.1391.2.1.7.7d
37. Tekeyekhah, J., & Khalili, Z. (2014). Planning to mitigate environmental impacts for the development of Abidar Forest Park. Second National Student Conference on Forestry Sciences. University of Tehran. [In Persian] <https://civilica.com/doc/278476>
38. Torabi, Z.-A., Khavarian-Garmsir, A. R., & Hall, C. M. (2024). Factors influencing climate change adaptation of tourism businesses. *Journal of Policy Research in Tourism, Leisure and Events*, 1–21. 47. <https://doi.org/10.1080/19407963.2024.2391049>

39. Torabi, Z.-A., Khavarian-Garmsir, A. R., Hall, C. M., & Khatibi, N. B. (2023). Unintended Maladaptation: How Agritourism Development Policies in Iran Have Increased Vulnerability to Climate Change. *Sustainability*, 15(17). <https://doi.org/10.3390/su151713003>
40. Toulabi Nejad M., Manzam Esmailpor A., Rahmani S., Sadeghi K. (2022). The effects of tourism on the promotion of rural welfare (Case study: coastal villages' city of Chabahar). *Journal of applied researches in geographical sciences*, 22 (65), 283-301. [In Persian] <https://doi.org/52547/jgs.22.65.283>
41. Weaver, D. (2004). *Tourism and the elusive paradigm of sustainable development*, Book Editor(s): [Alan A. Lew](#), C. Michael Hall, Allan M. Williams. <https://doi.org/10.1002/9780470752272.ch41>
42. Weaver, D. (2012). *Sustainable Tourism, Theory and Practice*, New York: Routledge. https://books.google.com/books/about/Sustainable_Tourism.html?id=tRg0OsVj1MgC
43. Ziaei, M., & Mirzaei, R. (2007). *Specialized lexicon in leisure, tourism, and hospitality*. Tehran: Termeh Publishing. [In Persian]



تأثیر گردشگری بر دگرگونی روابط فضایی جغرافیایی (مطالعه موردی: بخش بالا طالقان، ایران)

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چکیده مبسوط

۱. مقدمه

است در پژوهشی در منطقه سیستم و بلوچستان به بررسی تأثیرات گردشگری در جوامع چند قومی پرداخت نتایج نشان می‌دهد از طریق توسعه پایدار گردشگری می‌توان تنش‌های بین اقوام را تقلیل بخشید.

۳. روش تحقیق

روش انجام پژوهش در این مقاله تحلیل محتوا است، در این تحقیق از روش تحقیق کیفی راهبرد تحلیل محتوای کمی استفاده شده است. نمونه‌گیری در این پژوهش، هدفمند و از نوع نمونه‌گیری با استفاده از تکنیک‌های هدفمند چندگانه و ترکیب دو راهبرد نمونه‌گیری گلوله برفی و نمونه‌گیری نظری است. بر این اساس روش جمع‌آوری و گردآوری داده‌ها از طریق بازدید میدانی (مصاحبه عمیق)، گلوله برفی، مصاحبه نیمه ساختاریافته از افراد با تجربه و غالباً بومی و کتابخانه‌ای است، در بخش مصاحبه‌ها، در مصاحبه شماره ۱۵ جواب‌ها تکراری شد و داده‌ها به اشباع رسید

۴. یافته‌های تحقیق

گردشگری منجر به آلودگی‌های گسترده محیط‌زیست اعم از آلودگی صوتی و پسماند شده است و ظاهر نامناسبی برای منطقه به همراه داشته است. متأسفانه گردشگران به ویژه از تهران منطقه را با انواع زباله آلوده کرده‌اند. سد طالقان نمای زشتی از انواع زباله‌ها در دریاچه دارد و سر و صدای رقص و آواز گردشگران در روستا و شهرک مرکزی طالقان در اواخر هفته به گوش می‌رسد. مردم محلی مذهبی هستند و با این مراسم‌ها کنار نمی‌آیند به ویژه که در زمان تعطیلی‌های مرتبط با عزاداری‌ها هم این رفتار گردشگران مردم بومی را آزرده می‌کند. هویت فرهنگی و اجتماعی محیط‌های روستایی به شدت تغییر کرده است و گردشگری چهره منطقه را تغییر داده است. سبک زندگی و ارزش‌های رایج در روستاها از بین رفته است و الگوهای زندگی تحت تأثیر گردشگران کاملاً از حالت محلی به وضعیت شهری تغییر پیدا کرده است. ساختارهای روستایی در بعد اجتماعی تغییر گسترده‌ای کرده است. این تحولات اجتماعی منطقه را به شدت در حال تغییر دادن است. همچنین چون

موفقیت صنعت گردشگری بستگی به شناخت و درک و فهم کیفیت حمایت ساکنان محلی و میزبان دارد. باینکه گردشگری یک فعالیت منابع پایه است و به خدمات ارائه شده و جاذبه‌های دیدنی بستگی دارد اما توسعه موفقیت آمیز آن تا حد زیادی مستلزم تعامل دوسویه جامعه محلی و میزبان دارد. کج خلقی‌های جامعه محلی و میزبان نهایتاً به گردشگران منتقل خواهد شد که این امر سبب کاهش گردشگری در آینده خواهد شد. بنابراین در پیوستار زمانی- فضایی که اصلی‌ترین چارچوب مناسبات انسانی است، پدیده‌های جغرافیایی در ارتباط با ویژگی‌های ساختاری بودن فضا شکل می‌گیرند. از این رو با مبنا قراردادن فضا‌مندی و در نظر گرفتن آنکه اندیشه فضایی بنیان برهم‌کنش‌ها است، تأثیراتی که گردشگری به عنوان یکی از پدیده‌های انسانی بر ساختار فضا می‌گذارد نیز از این مستثنا خارج نمی‌باشد. این پژوهش بنا بر آنچه ذکر شد در پی پاسخ به این سوال است که اساساً گردشگری چه اثراتی در فضاهای روستایی بخش بالا طالقان به لحاظ فرهنگی، زیست محیطی و اقتصادی داشته است؟

۲. مبانی نظری تحقیق

فضای جغرافیایی شامل ساختار، ترکیب‌ها، پدیده‌ها، روابط سیستمی و فضایی است که ابعاد مختلفی دارد هر یک به نوبه خود در چارچوب کلیت فضا با یکدیگر نظام یافته و موضوع یکی از رشته‌های تخصصی علوم جغرافیایی به شمار می‌آیند. گردشگری علاوه بر اثرات مثبت بی‌شماری که داشته است، منجر به تغییرات اساسی در ساختار فضایی مناطق هدف گردشگری شده است که بصورت مانایی طی چرخش‌های فضایی که صورت گرفت همچنان این ابعاد را پژوهشگران در حوزه اثرات گردشگری بر فرهنگ جوامع مقصد تحقیقات گسترده‌ای در سطح جهان انجام داده‌اند. گردشگری منجر به افزایش ناهنجاری‌های اجتماعی فرهنگی و تغییر در آداب و رسوم جامعه محلی شده است. می‌توان گفت که توسعه گردشگری تأثیرات عمیقی بر تغییرات اجتماعی فرهنگی منطقه مورد مطالعه داشته است. همچنین گردشگری باعث ناهنجاری‌های اجتماعی فرهنگی شامل کالایی و تجاری شدن جنبه‌های فرهنگی روستا و گسترش ناهنجاری‌های اجتماعی و فرهنگی در روستا شده

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سیستم جمع آوری زباله ندارد و مردم بومی هم همکاری نمی کنند و سوراخهای اسلامی روستایی هم ضعیف عمل می کنند

۵. بحث و نتیجه گیری

این تحقیق همانند ادبی ممقانی و همکاران (۱۳۹۳) معتقد است که تحولات اجتماعی و فرهنگ مهمترین تاثیر گردشگری در منطقه است و برای موفقیت گردشگری روستایی ابعاد فرهنگی گردشگری باید دیده شود. همچنین تحقیق فوق همانند طولابی نژاد و همکاران نشان دادند که گردشگری می تواند منجر به رفاه اقتصادی و اجتماعی خانوارهای روستایی بشود مشروط بر آنکه به آثار منفی فرهنگی و اجتماعی آن توجه شود و این تاثیرات منفی به حداقل برسد. همچنین نتایج تحقیق یافته های قاسملو و همکاران (۲۰۲۳) همسو است که نشان می دهد که اثرات توسعه گردشگری بر زیست پذیری مردم بومی مشهود است. همچنین این تحقیق همانند موحدی و امیری (۱۴۰۳) معتقد هتند که گردشگری روستایی مشروط به مدیریت اثرات فرهنگی می تواند ابزاری برای بهبود معیشت روستاییان باشد. این تحقیق همانند تقدیسی تقوایی و پیری (۱۳۹۱) معتقد است که گردشگری منجر به افزایش ناهنجاری های اجتماعی فرهنگی و تغییر در آداب و رسوم جامعه محلی شده است و همین امر اعتراض مردم محلی و واکنش آنان را به همراه داشته است و سبب مخالفت هایی با توسعه گردشگری شده است.

همچنین این تحقیق همانند ادبی ممقانی، خانی، سجاسی، قیداری و فرخی (۱۳۹۳) اعتقاد داشتند که جامعه دمحلّی دچار تحولات زیادی شده است و گردشگری جامعه بومی را دستخوش تغییر گسترده کرده است. همچنین تحقیق فوق همانند امینی بختی و بابا جمالی (۱۳۹۴) معتقد هستند که گردشگری تبدیل به کالایی برای فروش شده است و برخی رویدادهای گردشگری که در طالقان برگزار شده است با اصل و ریشه تاریخی موضوع تفاوت داشته و نوعی انحراف از فرهنگ جامعه به جهت راضی کردن گردشگر صورت گرفته است. همچنین این تحقق همانند شیخ (۲۰۱۵) معتقد است که برخی تنش های موجود در منطقه را می توان با کمک گردشگری کمتر کرد هر چند که گردشگری می تواند خود عامل تنش اجتماعی باشد.

کلیدواژه ها: گردشگری، فضای جغرافیایی، روابط روستایی، جوامع روستایی، طالقان.

تشکر و قدرانی

این مطالعه برگرفته از یک طرح تحقیقاتی پسادکتری در دانشگاه رازی است. بنابراین، از اساتید و کارشناسان ارجمند که با حمایت و همکاری خود در به سرانجام رساندن این پژوهش نقش بسزایی داشتند، صمیمانه تشکر و قدردانی می کنیم.

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Ruralization, Agricultural Production Structures and Food Security in Islamic Countries

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Abstract

Purpose- Islamic countries are generally characterized by rural lifestyles and relatively young populations. Despite the global trends of accelerated urbanization and population aging, the traditional structure of rural settlement in these countries has remained largely unchanged. The present study aims to examine the structural factors influencing food security in Islamic countries by analyzing the extent and distribution of rural populations as the key contributors to food security, as well as the demographic composition and environmental structures that shape agricultural production.

Materials, Methods, and Approach- The development strategies of many countries worldwide are based on the quality, efficiency, and spatial distribution of rural populations. The proportion of the rural population in relation to employment distribution across economic sectors and its contribution to gross domestic product (GDP) are of critical importance to policymakers in both developed and developing nations. The research employs a descriptive-analytical method, utilizing reliable international data sources and global organizational statistics. The statistical population includes **51 Islamic countries**, and the data are classified according to the characteristics and attributes of the study population within the research topic.

Findings- First, Islamic countries generally possess rural structures and youthful populations. Second, significant disparities exist in settlement and rural habitation patterns across Islamic countries. Approximately 60% of the rural population of Islamic countries reside in just six nations -Pakistan, Indonesia, Bangladesh, Nigeria, Ethiopia, and Egypt- whereas in six others- Kuwait, Bahrain, Qatar, Djibouti, the Maldives, and Brunei Darussalam- the total rural population does not exceed one million people. Finally, the capacity for agricultural production and food security across Islamic countries is generally fragile. Twenty-six countries have less than 5% of arable land, and twenty-seven countries exhibit an average agricultural value-added of less than USD 5,000 per farmer, rendering them effectively food-insecure and dependent on imports.

Keywords: Food security, Islamic countries, Rural population, Agricultural economy, Rural economy.

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1. Introduction

According to data from the United Nations and affiliated population research institutions, in 1960 the global rural population was approximately 2 billion people, accounting for 66.4% of the world's total population. By 2020, rural areas were home to 3.4 billion people, representing 29.4% of the global population (Table 1). International reports from 2020 indicate that 1.2 billion rural inhabitants lived in South Asia, 938 million in East Asia, 656 million in Sub-Saharan Africa, 261 million in Oceania and peripheral archipelagos, 123 million in Latin America, 113 million in the European Union, 78 million in other parts of the Eurozone, and 64 million in North America (United Nations Population Studies Office Report, 2020).

International data show that the most significant declines in the proportion of the global rural population occurred between 2010–2020, followed by 2000–2010. The global rural population trend over the past six decades reveals an accelerating decline in rural proportions, primarily driven by urban migration and the decreasing rate of rural population growth. Nonetheless, rural populations in developing countries increased by over 100 million people during the decade leading up to 2020, reaching approximately 700 million. In fact, much of the net, gradual growth in global rural population has taken place in developing regions. According to official international data, the rural population of developing countries was about 180 million in 1950, rising to approximately 500 million in 2000 (Table 2).

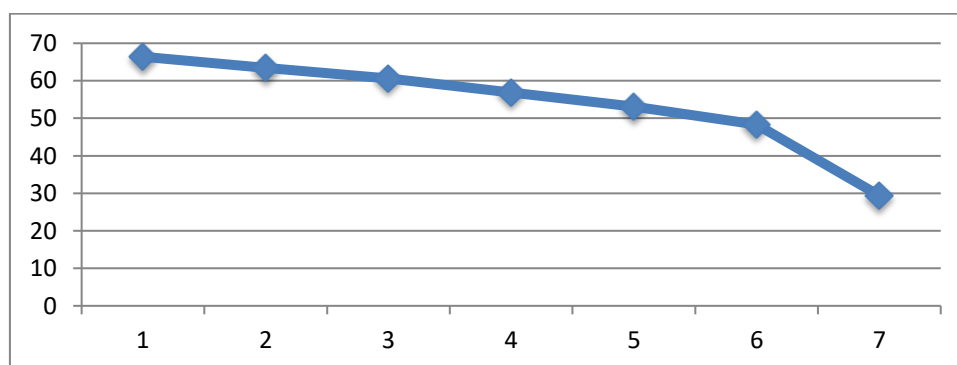


Figure 1. Trend in the Ratio of the Global Rural Population

Table 1. Trends in the Rural Population of Developing Countries Over the Past Seventy Years

Row	Year	Population (millions)
1	1950	180
2	1960	217
3	1970	267
4	1980	325
5	1990	400
6	2000	498
7	2010	598
8	2020	701

Source: United Nations Population Studies Office Report, 2020.

The rural population of each country plays an essential role in the structure of agriculture and the provision of food security. In Islamic countries, food security largely depends on the structure of rural society and agricultural infrastructure. Evidently, if an Islamic country has a higher capacity for grain production, it creates opportunities for export, whereas the lack of such capacity leads to grain imports. Therefore,

considering the level of production, imports, or exports of grains in Islamic countries is crucial for understanding their level of food security.

In this regard, studies indicate that in most research and investigations related to food security conducted by international organizations, attention is given to the production of seven major cereal crops—including wheat, rice, barley, maize, and other edible grains—referred to as *cereals*. This

term differs from *grains*, which specifically denotes maize and wheat plants (for example, see reports by FAO, the World Bank, the Global Food Security Index, UNESCO, and the official Global Food Security website). Nevertheless, annual reports listing global rankings of countries in terms of food security emphasize 18 key indicators for achieving food security. These indicators include nutritional standards, urban absorption capacity, food consumption as household expenditure, food loss, protein quality, agricultural import tariffs, dietary diversity, agricultural infrastructure, the proportion of the population living below the global poverty line, GDP per capita, food safety net programs, access to financial resources, agricultural research expenditure, administrative corruption, political stability risk, adequacy of food supply, and food safety (Global Food Security Index, 2022).

However, it appears that indicators such as the number of agricultural beneficiaries, the amount or per capita of production, arable land per capita, cereal production per capita, soil quality, and the level or share of cereal imports are serious variables that can be used in evaluating food security (Safari, 2023). According to the Global Food Security Index, countries such as Qatar, the United Arab Emirates, Bahrain, and other southern Persian Gulf nations—which, on the one hand, lack adequate levels of agricultural and cereal production, arable land, and rural working populations, and on the other hand, possess high capacities for importing and providing food for their urban populations due to income from underground resources—rank higher in food security than many cereal-producing countries. This demonstrates major shortcomings in current ranking systems. For this reason, the present study, by reviewing global food security indicators and the ranking of Islamic countries, aims to analyze and classify the food security situation in Islamic nations using a composite approach that considers additional parameters such as arable land per capita and annual cereal imports. Based on this framework, the following research questions are posed:

1. How do rural population capacity and agricultural capabilities contribute to the GDP and food security of Islamic countries?
2. What is the status of Islamic countries according to composite food security indicators?

2. Research Theoretical Literature

Food security refers to the access of all individuals in a society, at all times, to sufficient and healthy food for an active and healthy life, in which household income plays a key role. Food security is achieved when the per capita household food basket is properly selected and prepared, and factors such as food production or imports, public education on healthy nutrition, and national-level policymaking are considered important in ensuring its components. The concept of food security differs from that of *food safety*, which emphasizes the provision of healthy and uncontaminated food; in fact, food safety is a subset of food security.

According to the World Bank, food security is defined as the access of all people to sufficient food for a healthy life throughout their lifetime. This definition is built upon three main elements: food availability, food accessibility, and stability of access. Food availability concerns domestic production or imports; food accessibility refers to the physical and economic access of households to food; and the stability of access emphasizes consistent and reliable availability of food for all individuals.

Based on global organization estimates, 70 percent of global hunger exists in rural areas. Although agricultural and food production takes place in rural regions, per capita access to food in rural areas is lower than in urban regions. Moreover, studies have shown that countries with greater governmental investment in agricultural growth have experienced less hunger and poverty, and higher levels of food security.

At the World Food Summit held in 1996, the leaders of all participating countries agreed that increased investment in agriculture and for farmers enhances rural and farmers' access to healthy food and improves food availability and accessibility indicators. Therefore, the summit concluded that, first, public and private investment in agricultural development should be directed toward reducing global hunger by half; second, agricultural growth—rather than industrial growth—should be considered a key factor in reducing poverty and hunger; and finally, food security should be defined as a major goal of planning in the third millennium (Kalantari, 1994; Hoquqi, 1998; FAO, 1992).

In contrast to food security, *food insecurity* refers to insufficient access to adequate food. Adequate food meets human nutritional needs; good food provides

the nutrients necessary for the body's organic functions; healthy food contains essential vitamins, nutrients, and energy; and culturally appropriate food refers to food that is acceptable and familiar within the community. Thus, availability, physical and economic accessibility, utilization, and stability of food supply are four key pillars of food security (Kavenei, 2023).

The *Food Security Index* measures a country's ability to provide food for its citizens, based on three fundamental factors: affordability, availability, and quality (Wikipedia, Global Food Security Index). Given the importance and credibility of food security, it has become one of the main pillars of national security. Countries, therefore, develop different strategies for achieving it, depending on factors such as culture, history, consumption patterns, consumer preferences, production resources, natural resources, comparative advantages, policymaking, and production planning (Mehr News Agency Report No. 5491608).

According to the Research Institute for Agricultural Planning, Economics, and Rural Development of the Ministry of Agriculture Jihad, countries generally follow seven strategies to achieve food security: (1) support, service, and relief programs; (2) investment in markets and advertising; (3) identifying new resources and substitute products; (4) empowerment; (5) storage; (6) structural and institutional reforms; and (7) research and development.

In the European Union, food security policies in 2020 were defined around four main objectives:

ensuring the supply and consumption of safe and sustainable food, creating an innovative and resilient agricultural sector, preserving biodiversity and the environment while combating climate change, and providing food in both urban and rural areas (Moseley, 2009).

Accordingly, many countries—including several Islamic nations—have developed diverse programs to ensure food security in recent decades. These include expanding agricultural activities, preparing rural development plans, producing strategic crops, leasing international farmlands, diversifying cultivation, securing water resources, developing protein supply programs, and improving productivity in agricultural production (for further information, see Jafarvand et al., 2022; Safari, 2023; Afrakhteh & Hajipour, 2024; Riahi & Siyadati, 2022).

Numerous studies have been conducted on food security, particularly in recent years, some of which are summarized in Table 2. The present study differs from previous research in two fundamental aspects. First, the scale of analysis in this study is defined at the national and international level, whereas most previous studies have examined the issue at local scales. Second, the food security indicators used in this research differ from those commonly employed by international organizations; instead, this study seeks to critically review existing indicators and develop new composite indicators for classifying food security across Islamic countries.

Table 2. Recent Studies Related to Food Security

Authors	Year	Title	Findings / Results
Bagherzadeh Azar et al.	2017	Estimation of the National Food Security Level Using the New Global Food Security Index (GFSI)	Utilized macro-level data from the Food and Agriculture Organization (FAO), the World Bank, the Central Bank, the Budget and Planning Law, and the Ministry of Roads and Urban Development to assess food security, indicating an increasing trend with fluctuations in the country.
Veisi	2024	Evaluation of the Self-Sufficiency Strategy and Its Impact on Territorial Governance and Environmental Sustainability in Iran	Identified the pressure and threats posed by the self-sufficiency policy on Iran's biological and water resources, warning that its continuation endangers the social and economic life of many cities and villages.
Ghorbani	2024	The Impact of Macroeconomic Uncertainty on Food Security in Iran Using the Structural Vector Autoregression (SVAR) Approach	Developed a macroeconomic uncertainty index based on estimates of seven key macroeconomic variables, finding a long-term negative effect on food security.
Nikbakht-Dehkordi & Zeinalipour,	2024	Investigating the Opportunities and Challenges of Knowledge-Based Agriculture in Ensuring Sustainable Food Security	Highlighted the priority purchase rights to preserve agricultural lands in the member states of the European Union.
Sardouyi-Nasab	2024	Food Availability and Accessibility: Challenges and Solutions	Emphasized the ineffectiveness caused by resource instability and the lack of long-term policies in the agricultural sector as

Authors	Year	Title	Findings / Results
			major factors reducing domestic production and increasing import dependency.
Latifmanesh	2024	Food Security and Resource Management in Iran: Challenges and Solutions Based on Sustainable Technologies	Addressed the risks to food security, especially in rural and agriculture-dependent regions.
Ghaderi	2024	Examination of Food Security and Analysis of Its Challenges in the Rural Areas of Urmia County	Identified five fundamental challenges to food security: weaknesses in environmental policymaking, poor economic conditions, environmental hazards, cultural barriers and social change, and agricultural instability.

Source: Documentary Studies, 2024.

3. Research Methodology

The present study is descriptive-analytical in nature. Data collection in this research has been carried out through the use of official documentary sources at both domestic and international levels. To make an initial assessment of the list of Islamic countries, using reliable sources and based on the majority of Muslim populations, a list of 51 Islamic countries was compiled and recorded. Then, based on recent data from global statistical centers, rates related to demographic structure and settlement systems (rural and urban population ratios) were classified. Subsequently, data related to production, agricultural structures, and arable lands in Islamic countries, as well as indicators affecting food security rankings, were organized. Accordingly, the findings of the research were presented in five main areas:

1. Distribution and classification of the rural population in Islamic countries;
2. The share of the agricultural economy in the per capita Gross Domestic Product (GDP) of Islamic countries;
3. Classification of Islamic countries in terms of the ability of agricultural employment in GDP;
4. Agricultural production indicators and food security in Islamic countries;
5. Agricultural capability, production, and imports in Islamic countries.

4. Research Findings

4.1. Distribution and Classification of the Rural Population in Islamic Countries

According to existing and official sources, more than 50 countries in the world are recognized as Islamic countries, mostly located in Southeast Asia, the Middle East, and North Africa. In identifying Islamic countries, several points are noteworthy. First, the boundaries of the Islamic world form a connected region stretching from Morocco in North Africa to the Indian subcontinent, and from Central

Asia and Kazakhstan to East Africa, including several disconnected parts in South and Southeast Asia, Europe, and small Muslim-populated states (Momeni, 2010). In all these areas, some countries have a Muslim majority, while others have Muslim minorities. The term “Islamic world,” which probably first appeared in 1906 by Zuraymer in the book *The Mohammedan World of Today*, had previously been introduced by Muslim geographers during the Golden Age of Islam under various titles such as Islamic lands, Islamic territory, Muslim region, and Islamic countries (ibid). Second, the global Muslim population in 2006 was estimated at 1.362 billion, distributed across 204 countries. This population was, first, spread across 50 independent countries where Muslims made up between 50 to 100 percent of the total population; second, it existed as religious enclaves within certain geographical units in other countries; third, it formed significant population groups in European and American countries; and finally, it appeared as small groups scattered across other parts of the world (ibid). Third, the Organization of Islamic Cooperation (OIC) has 57 member states, some of which do not have a Muslim population exceeding 50 percent (OIC website, 2024). Therefore, countries with a significant Muslim majority are emphasized and were included in this research.

Based on demographic information from United Nations-affiliated centers in 2019 and 2020, among the 51 countries examined in this study, Indonesia, Pakistan, Nigeria, Bangladesh, Ethiopia, and Egypt are the six most populous Islamic countries, each with populations exceeding 100 million, while Bahrain, Djibouti, the Maldives, and Brunei Darussalam are the least populous, each with fewer than two million people (Appendix Table 1). According to the same data, the total population of these countries is nearly two billion, although not all of them are Muslim. Furthermore, the average population of Islamic countries is less than 40

million. Among these countries, 23 nations have a population growth rate exceeding two percent, and most of those with high growth rates are located in North and sub-Saharan Africa. The remaining Muslim countries have a growth rate below two percent, and five countries have either less than one percent growth or negative growth, which is noteworthy.

According to 2019 statistical data, Bahrain, Palestine, Lebanon, Qatar, Pakistan, Kuwait, and Nigeria are among the countries with high population density, while the Maldives, Libya, Mauritania, Kazakhstan, Mali, and Saudi Arabia are among those with low population density (ibid).

Despite the rapid trend of urbanization, the rate of rural population in Islamic countries remains relatively high. A high rural rate, however, does not necessarily mean that these countries have strong agricultural production capacity or food security. Some countries such as Ethiopia, Afghanistan, Burkina Faso, Tajikistan, Malawi, and Niger have more than 70 percent rural population. Following them are Uzbekistan, Bangladesh, Bosnia and Herzegovina, Pakistan, Tanzania, Chad, Sudan, Somalia, Sierra Leone, Kyrgyzstan, Guinea, Madagascar, the Maldives, Mali, and Yemen, where more than 50 percent of the population lives in rural areas. In total, 21 Islamic countries still have higher rural population rates than urban ones.

In contrast, in countries such as Algeria, Iran, Brunei Darussalam, Turkey, Djibouti, Iraq, Saudi Arabia, Oman, Palestine, Libya, Malaysia, and Morocco, there is a rapid trend of urbanization, and the rural population rate is sharply declining to below 30 percent. Additionally, in several other countries such as Jordan, the United Arab Emirates, Bahrain, Qatar, Kuwait, and Lebanon, the rural population rate is below 15 percent, and in some cases, close to zero (Table 4).

According to official data, Afghanistan, Pakistan, Bangladesh, Ethiopia, Egypt, Sudan, Tanzania, Niger, Burkina Faso, Malawi, Chad, Guinea, Kyrgyzstan, and the Maldives are the 14 Islamic countries with the highest rural population ratios. In contrast, Lebanon, Jordan, and the six Gulf states of Saudi Arabia, the United Arab Emirates, Qatar,

Oman, Kuwait, and Bahrain have the lowest rural population ratios and highest urbanization rates among Islamic countries. The average rural population rate among Islamic countries is about 44 percent, while the average urban rate is about 56 percent. The rural population rate among Islamic countries with more than 30 million people is around 47 percent, and among those with over 80 million people, it exceeds 50 percent. The average rural population rate among Muslim countries with fewer than 10 million people is approximately 32 percent, and among the six Gulf states, it is close to 10 percent. In fact, large-population Islamic countries are mainly rural-based societies, while the Gulf states represent urban-centered societies (ibid). Out of the total 1.984 billion people living in Islamic countries, approximately 1.011 billion (or 51 percent) are rural dwellers, which indicates that rural and nomadic lifestyles remain predominant in the structure of Islamic societies.

Among Islamic countries, Pakistan, Indonesia, Bangladesh, and Nigeria together account for about 45 percent of the rural population of the Islamic world, and if Ethiopia and Egypt are added, this share reaches around 60 percent. In contrast, in Kuwait, Bahrain, Qatar, Djibouti, the Maldives, and Brunei Darussalam, the total rural population does not exceed one million people (ibid).

According to 2019 data, 16 Islamic countries are experiencing negative rural population growth, while only three countries have negative total population growth. Some countries with high rural population growth rates (above 3 percent) are small in size and population.

Among the 18 Islamic countries with populations exceeding 30 million, the average rural population growth rate is 1.6 percent, indicating the persistence of rural population structures in these countries. Regarding the aging index, Islamic countries are generally youthful societies, and apart from 14 countries where the elderly population exceeds 7 percent, the rest are predominantly young and cannot be classified as aging nations. Particularly, among the 18 Islamic countries with populations above 30 million, the proportion of elderly people is less than 5 percent (Tables 3 and 4).

Table 3. Classification of Islamic Countries Based on Population (2019)

Row	Group	Islamic Countries
1	Group 1: Countries with a population of over 100 million	Ethiopia, Indonesia, Bangladesh, Pakistan, Egypt, Nigeria
2	Group 2: Countries with a population between 50 and 100 million	Iran, Tanzania, Turkey
3	Group 3: Countries with a population between 30 and 50 million	Uzbekistan, Afghanistan, Algeria, Sudan, Iraq, Saudi Arabia, Malaysia, Morocco, Yemen
4	Group 4: Countries with a population between 15 and 30 million	Burkina Faso, Chad, Côte d'Ivoire, Senegal, Syria, Somalia, Kazakhstan, Madagascar, Malawi, Mali, Niger
5	Group 5: Countries with a population between 2 and 15 million	Azerbaijan, Albania, Jordan, United Arab Emirates, Bosnia and Herzegovina, Tajikistan, Turkmenistan, Tunisia, Sierra Leone, Oman, Palestine, Qatar, Lebanon, Libya, Kyrgyzstan, Kuwait, Guinea, Mauritania
6	Group 6: Countries with a population of less than 2 million	Bahrain, Brunei Darussalam, Djibouti, Maldives

Source: [The Global Economy, employment in agriculture, Country Ranking, 2020](#); [The World Bank, employment in agriculture, 2020](#)

Table 4. Classification of Islamic Countries Based on the Percentage of Rural Population (2019)

Row	Group	Islamic Countries
1	Group 1: Countries with a rural population above 70%	Ethiopia, Afghanistan, Burkina Faso, Tajikistan, Malawi, Niger
2	Group 2: Countries with a rural population between 50% and 70%	Uzbekistan, Bangladesh, Bosnia and Herzegovina, Pakistan, Tanzania, Chad, Sudan, Somalia, Sierra Leone, Kyrgyzstan, Guinea, Madagascar, Maldives, Mali, Yemen
3	Group 3: Countries with a rural population between 30% and 50%	Azerbaijan, Albania, Indonesia, Turkmenistan, Tunisia, Côte d'Ivoire, Senegal, Syria, Kazakhstan, Egypt, Mauritania, Nigeria
4	Group 4: Countries with a rural population between 15% and 30%	Algeria, Iran, Brunei Darussalam, Turkey, Djibouti, Iraq, Saudi Arabia, Oman, Palestine, Libya, Malaysia, Morocco
5	Group 5: Countries with a rural population below 15%	Jordan, United Arab Emirates, Bahrain, Qatar, Kuwait, Lebanon

Source: [The Global Economy, employment in agriculture, Country Ranking, 2020](#); [The World Bank, employment in agriculture, 2020](#)

4.2. The Share of Agricultural Economy in the Per Capita Gross Domestic Product of Islamic Countries

The per capita Gross Domestic Product (GDP) of Islamic countries is significant in several respects. First, it reflects the overall productive and economic capacity of these nations. When this indicator is compared with other indices, such as the share of agriculture in GDP, it becomes possible to determine the precise ability of Islamic countries to ensure food security. This comparison reveals the general status of these countries in terms of agricultural production, the efficiency of agricultural production systems, labor force capacity, agricultural economic structure, and, ultimately, the quality of water and soil resources in contrast to the extraction of underground resources. The variations among these factors illustrate the developmental patterns of Islamic countries over recent decades.

Accordingly, it can be stated that the first group—oil-rich countries located in the southern Persian Gulf—occupy high positions among Islamic countries. When the per capita GDP of these nations is compared with the global average, the results show that their rates are above the world mean. In addition to these six countries, Turkey, Brunei Darussalam, Kazakhstan, and the Maldives are among the distinguished nations in this regard and can be placed in the first tier of Islamic economies. The second group consists of seven countries generally classified as those with relatively high per capita GDP. A comparison of the population chart and GDP chart of Islamic countries indicates that, apart from Turkey and Saudi Arabia, there are almost no highly populated nations within the high-GDP-per-capita category. Instead, the majority of high GDP values belong to countries with small populations.

The third group includes 21 Islamic countries with relatively low per capita GDP, while the fourth

group—comprising 13 countries—is mainly located along the sub-Saharan African belt or consists of scattered states lacking significant underground resources (see [Table 5](#)).

Regarding the share of agriculture in the GDP—an indicator of the capacity of the agricultural economy in production and food security—Islamic countries can be categorized into several groups. Data analysis shows that the first group, consisting of nine countries, derives more than 25% of its GDP from the agricultural sector. These nations generally lack robust agricultural economies and have low per capita GDP, reflecting weak internal economies, limited productivity, and overall poverty.

The second group, comprising ten countries, obtains 15–25% of GDP from agriculture. In this category, dependence on agriculture and, to a considerable extent, on the rural economy is evident. However, these countries still cannot be regarded as economically strong or productive on a global scale—or even within the Islamic world. A key

feature of this group is the presence of some populous Muslim countries, such as Pakistan and Nigeria, that exhibit notable capacities for agricultural production and food security.

The third group includes sixteen countries with relatively high capacities in agricultural production, food security, and per capita GDP. Within this group, large-population Islamic countries such as Indonesia, Egypt, Turkey, and Iran are the most prominent examples.

Finally, the fourth group consists of sixteen countries in which the agricultural sector contributes less than 5% to the national GDP. These countries are generally characterized by high urbanization rates, scarcity of water and soil resources, or, conversely, wealth generated from non-agricultural sectors, such as the oil-rich Gulf states and others lacking structured agricultural systems.

Overall, a review of the agricultural sector's contribution to GDP in Islamic countries indicates that the location of many of these nations within the global dry and desert belt—from West Africa to Central Asia—has posed significant challenges to their effective agricultural production (see [Table 6](#)).

Table 5. Classification of Islamic Countries by Per Capita Gross Domestic Product (2019)

No.	GDP per Capita Group	Islamic Countries
1	Group 1 – Countries with per capita GDP above USD 9,000	United Arab Emirates, Bahrain, Brunei Darussalam, Turkey, Saudi Arabia, Oman, Kazakhstan, Qatar, Kuwait, Maldives
2	Group 2 – Countries with per capita GDP between USD 5,000 and 9,000	Albania, Iran, Bosnia and Herzegovina, Turkmenistan, Iraq, Lebanon, Libya
3	Group 3 – Countries with per capita GDP between USD 1,300 and 5,000	Azerbaijan, Jordan, Uzbekistan, Algeria, Indonesia, Bangladesh, Tunisia, Djibouti, Côte d'Ivoire, Senegal, Sudan, Syria, Palestine, Kyrgyzstan, Guinea, Malaysia, Mali, Morocco, Egypt, Mauritania, Nigeria
4	Group 4 – Countries with per capita GDP below USD 1,300	Ethiopia, Afghanistan, Burkina Faso, Pakistan, Tajikistan, Tanzania, Chad, Somalia, Sierra Leone, Niger, Madagascar, Malawi, Yemen

Source: [The Global Economy, employment in agriculture, Country Ranking, 2020](#); [The World Bank, employment in agriculture, 2020](#)

Table 6. Classification of Islamic Countries by Agricultural Share of GDP (2019)

No.	Group	Islamic Countries
1	Group 1 – Countries where agriculture accounts for more than 25% of GDP	Ethiopia, Uzbekistan, Tanzania, Chad, Sudan, Sierra Leone, Malawi, Mali, Niger
2	Group 2 – Countries where agriculture accounts for 15–25% of GDP	Albania, Burkina Faso, Tajikistan, Pakistan, Côte d'Ivoire, Senegal, Guinea, Madagascar, Mauritania, Nigeria
3	Group 3 – Countries where agriculture accounts for 5–15% of GDP	Azerbaijan, Afghanistan, Jordan, Algeria, Indonesia, Iran, Bosnia and Herzegovina, Bangladesh, Turkey, Tunisia, Kyrgyzstan, Lebanon, Malaysia, Maldives, Morocco, Egypt
4	Group 4 – Countries where agriculture accounts for less than 5% of GDP	United Arab Emirates, Bahrain, Brunei Darussalam, Turkmenistan, Djibouti, Syria, Somalia, Iraq, Saudi Arabia, Oman, Palestine, Kazakhstan, Qatar, Kuwait, Libya, Yemen

Source: [The Global Economy, employment in agriculture, Country Ranking, 2020](#); [The World Bank, employment in agriculture, 2020](#)

4.3. Classification of Islamic Countries by Agricultural Employment Capacity in Gross Domestic Product

In relation to the food security capacity of Islamic countries, one of the most significant indicators is the employment rate in the agricultural sector and its comparison with the share of agriculture in the Gross Domestic Product (GDP) of these countries. For this purpose, official international data from 2019 and 2020 have been used. It is evident that the employment rate in the agricultural sector alone does not necessarily indicate a country's capacity for food security unless it is assessed alongside other qualitative indicators. According to 2020 United Nations international data, the global average rate of employment in the agricultural sector is approximately 26 percent. Based on this criterion, Islamic countries can be classified into the following groups:

The first group includes African countries where more than 50 percent of the workforce is employed in agriculture. In some of these countries, such as Somalia (83%) and Niger (75%), the rate is particularly high. These nations are generally poor and less developed, with a low per capita GDP. The second group consists of Afghanistan, Sudan, Malawi, and Tajikistan, where more than 40 percent of total employment is concentrated in the agricultural sector. The third group includes countries with between 30 and 40 percent of their workforce in agriculture. Among these, Pakistan, Nigeria, and Bangladesh are notable due to their large populations. The fourth group comprises seven countries—such as Indonesia and Egypt—where the share of agricultural employment ranges from 20 to 30 percent. The fifth group includes countries with 10 to 20 percent of total employment in agriculture, among which Iran, Iraq, Turkey,

Algeria, and Malaysia are the most significant. Finally, countries with less than 10 percent agricultural employment—such as Saudi Arabia and the Gulf states—form the sixth group (see [Table 7](#)). Based on data regarding the agricultural share of GDP, Islamic countries can also be classified into three main categories:

1. The first group includes countries where there is a clear gap between the share of agricultural employment and the agricultural share in GDP. This indicates that the agricultural economy and environmental resources of these nations are insufficient to ensure sustainable or even relative food security. Twelve countries fall into this category: Ethiopia, Tanzania, Afghanistan, Madagascar, Côte d'Ivoire, Niger, Chad, Mauritania, Guinea, Azerbaijan, Somalia, and Djibouti, with a combined population of approximately 356 million people.
2. The second group consists of countries where the structure of agricultural employment and agricultural GDP share is relatively acceptable, though the quality of this relationship is not ideal. This group includes 16 countries (see [Table 8](#)), with a combined population exceeding 1.5 billion. Thus, it may be inferred that out of the roughly two billion inhabitants of Islamic countries (not including all Muslims worldwide), around 1.5 billion people enjoy at least a relatively adequate level of food security.
3. The third group comprises countries where the agricultural economy and, consequently, agricultural employment are marginal. These nations are largely dependent on external sources for their food security. This group primarily includes the oil-rich Gulf states, with an estimated total population of about 150 million ([Table 8](#)).

Table 7: Classification of Islamic Countries by Share of Employment in Agriculture (2020)

No.	Group	Islamic Countries
1	Group 1 – Employment share above 50%	Ethiopia, Tanzania, Chad, Somalia, Sierra Leone, Guinea, Madagascar, Mali, Mauritania, Niger
2	Group 2 – Employment share between 40% and 50%	Afghanistan, Sudan, Malawi, Tajikistan
3	Group 3 – Employment share between 30% and 40%	Azerbaijan, Albania, Bangladesh, Pakistan, Djibouti, Côte d'Ivoire, Morocco, Nigeria
4	Group 4 – Employment share between 20% and 30%	Uzbekistan, Indonesia, Burkina Faso, Senegal, Kyrgyzstan, Egypt, Yemen
5	Group 5 – Employment share between 10% and 20%	Algeria, Iran, Bosnia and Herzegovina, Turkmenistan, Turkey, Tunisia, Syria, Iraq, Kazakhstan, Lebanon, Libya, Malaysia
6	Group 6 – Employment share below 10%	Jordan, United Arab Emirates, Bahrain, Brunei Darussalam, Saudi Arabia, Oman, Palestine, Qatar, Kuwait, Maldives

Source: [The Global Economy, employment in agriculture, Country Ranking, 2020](#); [The World Bank, employment in agriculture, 2020](#)

Table 8: Classification of Islamic Countries by Level of Food Security (2020)

No.	Group	Islamic Countries	Approximate Population (Million)
1	Group 1 – Countries with unstable food security	Azerbaijan, Ethiopia, Afghanistan, Tanzania, Djibouti, Chad, Côte d'Ivoire, Somalia, Guinea, Madagascar, Mauritania, Niger	356
2	Group 2 – Countries with dependent food security	Jordan, Uzbekistan, United Arab Emirates, Bahrain, Brunei Darussalam, Tajikistan, Turkmenistan, Sudan, Syria, Sierra Leone, Saudi Arabia, Oman, Palestine, Kyrgyzstan, Qatar, Kuwait, Lebanon, Libya, Malawi, Mali, Morocco, Yemen	150
3	Group 3 – Countries with relatively stable food security	Albania, Algeria, Indonesia, Iran, Bangladesh, Burkina Faso, Bosnia and Herzegovina, Pakistan, Turkey, Tunisia, Senegal, Iraq, Kazakhstan, Nigeria, Maldives, Malaysia, Egypt	1,500

Source: [The Global Economy, employment in agriculture, Country Ranking, 2020](#); [The World Bank, employment in agriculture, 2020](#)

4.4. Agricultural Production and Food Security Indicators in Islamic Countries

In this section, official international data in three areas are examined: the percentage of arable land in Islamic countries, the food production index, and the average value added per farmer (in U.S. dollars) in Islamic countries. Accordingly, the average percentage of arable land in Islamic countries is 12.3 percent, which is lower than the global rate (14.3 percent). Among them, Bangladesh, Pakistan, Malawi, and Nigeria, with more than 35 percent of their total land area being arable, are considered exceptional cases, while 26 Islamic countries have less than 5 percent arable land (see [Table 9](#)). According to official data from 2016, Bahrain, Kuwait, and Sierra Leone were among the leading countries, whereas Sudan, Syria, Lebanon, Palestine, and the Maldives were among the weakest countries in terms of the Food Production

Index (total volume of production compared to the previous period). Also, based on official data from the same year, the average value added per farmer in Islamic countries was 9,524 U.S. dollars, which is significant when compared to the global average rate (3,500 U.S. dollars). In this context, the United Arab Emirates and Brunei Darussalam, which have exceptional rates, should be considered separately from other Islamic countries, because the share of employment in agriculture and the arable land in these two countries is negligible, and their average value-added index per farmer has little effect on the overall trend among Islamic countries. Apart from these two countries, Lebanon, Saudi Arabia, Malaysia, and Turkey fall into the category of countries with high indices; Iran, Algeria, Bahrain, Qatar, and the Maldives fall into the medium category; and the remaining Islamic countries are classified as low-index countries (see [Table 10](#)).

Table 9. Classification of Islamic Countries Based on the Percentage of Arable Land (2020)

No.	Group	Islamic Countries
1	Group One – Share above 35%	Bangladesh, Pakistan, Malawi, Nigeria
2	Group Two – Share between 25–35%	Turkey, Syria
3	Group Three – Share between 15–25%	Azerbaijan, Ethiopia, Burkina Faso, Bosnia and Herzegovina, Tanzania, Tunisia, Senegal, Sierra Leone, Morocco
4	Group Four – Share between 5–15%	Uzbekistan, Afghanistan, Indonesia, Iran, Côte d'Ivoire, Iraq, Kazakhstan, Guinea, Lebanon, Niger
5	Group Five – Share below 5%	Albania, Jordan, Algeria, United Arab Emirates, Bahrain, Brunei Darussalam, Tajikistan, Turkmenistan, Djibouti, Chad, Sudan, Somalia, Saudi Arabia, Oman, Palestine, Kyrgyzstan, Qatar, Kuwait, Libya, Maldives, Malaysia, Madagascar, Mali, Egypt, Mauritania, Yemen

Source: [The Global Economy, employment in agriculture, Country Ranking, 2020](#); [The World Bank, employment in agriculture, 2020](#)

Table 10. Classification of Islamic Countries Based on the Average Value Added per Farmer (in U.S. Dollars, 2016)

No.	Group	Islamic Countries
1	Group One – Above 100,000 USD	United Arab Emirates, Brunei Darussalam
2	Group Two – Between 15,000–25,000 USD	Turkey, Saudi Arabia, Lebanon, Malaysia

No.	Group	Islamic Countries
3	Group Three – Between 10,000–15,000 USD	Jordan, Algeria, Iran, Bahrain, Qatar, Maldives
4	Group Four – Between 5,000–10,000 USD	Albania, Bosnia and Herzegovina, Tanzania, Turkmenistan, Tunisia, Oman, Kazakhstan, Kuwait, Madagascar, Egypt, Nigeria, Yemen
5	Group Five – Below 5,000 USD	Azerbaijan, Ethiopia, Uzbekistan, Afghanistan, Indonesia, Bangladesh, Burkina Faso, Pakistan, Tajikistan, Djibouti, Chad, Côte d'Ivoire, Senegal, Sudan, Syria, Somalia, Sierra Leone, Iraq, Palestine, Kyrgyzstan, Guinea, Libya, Malawi, Mali, Morocco, Mauritania, Niger

Source: [The Global Economy, employment in agriculture, Country Ranking, 2020](#); [The World Bank, employment in agriculture, 2020](#)

4.5. Agricultural Potential, Production, and Imports in Islamic Countries

According to reports published by the World Bank and its affiliated organizations, in terms of the total area of arable land, only seven Islamic countries possess more than 100,000 square kilometers of cultivable land. Regarding the production of seven major grains - including wheat, rice, maize, barley, and millet - which serve as globally recognized indicators of food security and are characterized by

their high nutritional value, only nine countries among the Islamic nations demonstrate a relatively favorable status in terms of production. Based on available 2023 data, wheat import statistics have been recorded for 25 Muslim countries. Among these, Egypt, Indonesia, Turkey, Algeria, Morocco, Nigeria, and Bangladesh are listed among the top ten wheat-importing countries in the world, collectively importing over 61 million tons of wheat (see [Table 11](#)).

Table 11. Volume of Wheat Imports in Islamic Countries, 2023

No.	Group	Islamic Countries
1	Group One – More than 5 million tons	Egypt (12), Indonesia (11), Turkey (10), Algeria (8.7), Morocco (7.8), Nigeria (6), Bangladesh (5.8)
2	Group Two – Between 2 and 5 million tons	Saudi Arabia (4.9), Iran (4), Yemen (4), Afghanistan (3.9), Uzbekistan (3.5), Pakistan (3), Iraq (3), Sudan (2.6), Syria (2.3), Tunisia (2.3), Kazakhstan (2)
3	Group Three – Between 1 and 2 million tons	Malaysia, United Arab Emirates, Azerbaijan, Libya, Jordan, Tanzania, Tajikistan
4	Group Four – Less than 1 million ton	Albania, Bosnia and Herzegovina, Turkmenistan, Oman, Kuwait, Madagascar, Ethiopia, Burkina Faso, Djibouti, Chad, Côte d'Ivoire, Senegal, Somalia, Sierra Leone, Palestine, Kyrgyzstan, Guinea, Malawi, Mali, Mauritania, Niger, Brunei Darussalam, Lebanon, Bahrain, Qatar, Maldives

- The numbers in parentheses indicate each country's wheat import volume (in million tons). Countries are listed in order of their total import volume.

Source: [World Grain.Com](#), The International Business Magazine for Grain, Flour and Feed, December 2024.

5. Discussion and Conclusion

The analysis of official international data in this study indicates that Islamic countries are primarily rural in structure, and secondarily characterized by a predominantly young population. Processes such as urbanization and demographic transition (including aging) have, thus far, not significantly altered these two major structural features — rural settlement patterns and youthful population composition. Moreover, although a rapid trend of urbanization is evident across Islamic countries, the rate of rural settlement remains relatively high. However, this high rate of rurality has not translated into enhanced agricultural productivity or improved food security. In particular, in countries such as Ethiopia, Afghanistan, Burkina Faso, Tajikistan, Malawi, and Niger, where more than 70 percent of

the population resides in rural areas and is mostly employed in the agricultural sector, there has been little success in increasing agricultural output per capita or improving GDP contributions from agriculture. Similarly, in other countries such as Uzbekistan, Bangladesh, Bosnia and Herzegovina, Pakistan, Tanzania, Chad, Sudan, Somalia, Sierra Leone, Kyrgyzstan, Guinea, Madagascar, Maldives, Mali, and Yemen, where more than 50 percent of the population lives in rural regions and is engaged in farming, the situation remains comparable. In fact, in 21 Islamic countries where the rural population still exceeds the urban population, the indicators related to the share of agricultural employment in GDP and other components influencing food security remain weak. In contrast, in countries such as Algeria, Iran, Brunei

Darussalam, Turkey, Iraq, Saudi Arabia, Oman, Palestine, Libya, Malaysia, and Morocco, a rapid urbanization trend has been observed, leading to a sharp decline in rural population rates. The results indicate that this trend has had distinct impacts on rural economies and agricultural production structures.

Overall, based on official data, it can be stated that the most populous Islamic countries tend to have rural-based structures, while the Gulf Cooperation Council (GCC) states are predominantly urban-centered societies. Out of the total 1.984 billion people living in Islamic countries (not the total number of Muslims worldwide), approximately 1.011 billion people — or 51 percent — reside in rural areas.

Furthermore, the findings reveal a significant imbalance in settlement systems among Islamic countries. Roughly 60 percent of the total rural population of the Islamic world is concentrated in six countries: Pakistan, Indonesia, Bangladesh, Nigeria, Ethiopia, and Egypt. Conversely, in six other countries — Kuwait, Bahrain, Qatar, Djibouti, Maldives, and Brunei Darussalam — the total rural population does not exceed one million people. In 2019, sixteen countries recorded negative rural population growth, whereas among the eighteen Islamic countries with populations exceeding 30 million, the average rural population growth rate was 1.6 percent, reflecting the persistence of rural settlement patterns in these nations. Apart from fourteen Islamic countries where the elderly population exceeds 7 percent, the remaining, particularly the eighteen most populous Islamic countries, exhibit youth-dominant demographic structures.

On the other hand, serious concerns can be raised regarding the performance of agricultural economies (or rural economies) and the share of agriculture in GDP, which reflects the capacity for agricultural production and food security. The study demonstrates that among the nine countries where agriculture accounts for more than 25 percent of GDP, most are not economically strong either in terms of agricultural productivity or per capita GDP, highlighting weaknesses in both domestic economic capacity and agricultural production systems. Even in relatively stronger economies such as Pakistan and Nigeria, or in large-population Islamic countries like Indonesia, Egypt, Turkey, and Iran, agricultural production capacity and food security

remain fragile. Undoubtedly, the scarcity of environmental resources such as water and arable soil, along with the fact that significant portions of the Islamic world lie within the global arid and semi-arid belt stretching from West Africa to Central Asia, plays a critical role in the vulnerability of these countries in achieving sustainable food security.

Accordingly, in response to the first research question, the following conclusions can be drawn:

- Islamic countries with a high share of employment in agriculture generally lack efficiency in their agricultural economies, and food security in these countries is unstable.
- Islamic countries with a moderate agricultural employment rate (10–30%), and relatively efficient agricultural production and GDP contribution, can be classified as having partial or relative food security.
- Twenty-six Islamic countries with less than 5 percent arable land are effectively food-insecure and depend on agricultural imports, while twenty-seven Islamic countries with an average value added per farmer below USD 5,000 face unstable or externally dependent food security.
- In terms of arable land area, only seven Islamic countries possess significant agricultural potential to ensure food security, and in terms of production of the seven major cereal crops, only nine countries demonstrate a relatively favorable status.
- Official data from 2023 show that at least 25 Muslim countries import wheat in large quantities; among them, seven countries — Egypt, Indonesia, Turkey, Algeria, Morocco, Nigeria, and Bangladesh — rank among the world's top ten wheat importers, with a combined import volume of approximately 61 million tons.

The global classification of food security, as defined by international organizations, is based on 18 parameters (see [Table 13](#)). These indicators are categorized into three main dimensions:

1. Legal–Political,
2. Agricultural–Economic/Household, and
3. Production–Nutritional.

According to these indicators, the food security classification of 113 countries worldwide — including 32 of the 51 Islamic countries examined

in this study — was published in 2022 (the most recent global ranking available).

Based on this data, Finland, Ireland, Norway, France, and the Netherlands ranked first globally, each scoring above 80. Among Islamic countries, the United Arab Emirates, Qatar, Kazakhstan, Oman, Bahrain, Saudi Arabia, Malaysia, Turkey, and Kuwait were placed among the top ten Islamic nations, ranking between 23rd and 50th globally. Following these, Morocco, Tunisia, Indonesia,

Azerbaijan, Algeria, Uzbekistan, Pakistan, Mali, Senegal, Burkina Faso, Tanzania, Malawi, Côte d'Ivoire, Niger, and Guinea ranked 57th to 99th globally.

At the lower end of the spectrum, Guinea, Ethiopia, Chad, Sudan, Nigeria, Sierra Leone, Yemen, and Syria were among the lowest-ranked Islamic countries, positioned between 100th and 113th globally (Source: [Wikipedia.org](https://en.wikipedia.org/wiki/Global_Food_Security_Index), 2022).

Table 12. Key Components Influencing the Global Food Security Ranking of Countries

No.	Category	Indicators
1	Legal–Political	Food safety, administrative corruption, political stability risk, urban absorption capacity, proportion of population below the global poverty line, food security program network
2	Agricultural Economy–Household	Share of food expenditure in household spending, import tariffs on agricultural products, agricultural production volatility, per capita GDP, farmers' access to financial resources, agricultural R&D expenditures
3	Production–Nutritional	Agricultural infrastructure, nutritional standards, dietary diversity, protein quality, food loss, adequacy of food supply

Source: [Wikipedia.org/Global_Food_Security_Index](https://en.wikipedia.org/wiki/Global_Food_Security_Index), 2022.

Previous domestic and international studies have typically classified food security levels of countries or regions based on the general parameters provided by international organizations. However, the present study focuses on a new combined framework of indicators for food security classification. In response to the second research question, a critical assessment of the conventional classification emerges. Although the global classification system is based on 18 indicators, it overlooks fundamental contextual variables such as countries' natural characteristics, rural settlement patterns, agricultural capacity, agricultural production indices, and the volume of agricultural

food imports. These omissions create significant limitations in the accuracy of global food security assessments.

Therefore, the present study emphasizes that indicators directly affecting food production and food imports — including arable land, water resources, per capita agricultural production, the share of the agricultural sector in GDP, average agricultural productivity, and the capacity of governments to import and provide food — should be incorporated into a **composite index of food security**. Based on this composite approach, the Islamic countries are classified into four distinct groups according to per capita cereal production and import capacity.

Table 13. Classification of Islamic Countries Based on Composite Food Security Indicators (Per Capita Cereal Production and Imports)

No.	Group	Islamic Countries	Per Capita Cereal Production (kg/person)	Number of Countries	Approximate Population (million)
1	Group I – Moderate Food Security	Uzbekistan, Bosnia and Herzegovina, Mali	Over 400 kg	3	55
2	Group II – Weak Food Security	Azerbaijan, Turkey, Guinea	300–400 kg	3	108
3	Group III – Very Weak Food Security	Albania, Ethiopia, Bangladesh, Pakistan, Iran, Burkina Faso, Tanzania, Turkmenistan, Syria, Senegal, Kyrgyzstan, Niger	200–300 kg	12	745
4	Group IV – Food Insecure	Jordan, Afghanistan, Algeria, United Arab Emirates, Indonesia, Bahrain, Brunei Darussalam, Tajikistan, Tunisia, Djibouti, Chad, Côte d'Ivoire, Sudan, Somalia, Sierra Leone, Iraq, Saudi Arabia, Oman, Palestine, Kazakhstan, Qatar, Kuwait, Lebanon, Libya, Madagascar, Malawi, Maldives, Malaysia, Morocco, Egypt, Mauritania, Nigeria, Yemen	Less than 200 kg	33	1,078

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Authors contributions

The authors equally contributed to the preparation of this article.

Conflict of interest

The authors declare no conflict of interest.

References

1. Afarakhteh, H., & Hajipour, M. (2024). *Food self-sufficiency and water resources: Returning to Iran's future challenge*. *Green Management and Development*, 3(6), 43-57. [In Persian] <https://doi.org/10.22077/jgdms.2024.3114>
2. Baqerzadeh Azar, F., Ranjpour, R. & Karimi -Takanloo, Z. (2017). Estimating the national food security level using the Global Food Security Index (GFSI). *Journal of Health System Research*, 13(2), 236–243. [In Persian] <http://dx.doi.org/10.22122/jhsr.v13i2.2961>
3. Economist Group. (2022). *Global Food Security Index 2022: Global report on food crises (published 2024)*. [In Persian]
4. FAO, A commodity system assessment methodology, (1992). <http://openknowledge.fao.org/items/4eb58361-7b17-4f95-8691-c1f507bf0706>
5. FAO, Food and Agriculture Organization, Corporate Statistical Database, (2023). <https://openknowledge.fao.org/server/api/core/bitstreams/28cfd24e-81a9-4ebc-b2b5-4095fe5b1dab/content/cc8166en.html>
6. Ghadari, R. (2024, Spring). A study of food security and analysis of its challenges in rural areas of Urmia County. *Land Geographic Engineering Journal*, (19), 189–202. [In Persian] <https://doi.org/10.22034/jget.2024.178354>
7. Ghorbani, Z., Alimoradi Afshar, P. & Fegheh Majidi, A. (2025). The Impact of Macroeconomic Uncertainty on Food Security in Iran Using a Structural Vector Autoregression Approach (SVAR). *Economic Policies and Research*, 3(4), 88-125. [In Persian] <https://doi.org/10.22034/jepr.2025.142244.1178>
8. Hoghooghi, M. (1998). *Food security*. *Journal of Water and Development*, (2–3), 47–57. [In Persian]
9. Jafarvand, E., Abdollahi, Z., Edalati, S., Niknam, M.H. & Jalali, M. (2022). *Global and Iranian food security threats*. *Culture and Health Promotion Journal*, 6(3), 443–451. [In Persian] <http://dx.doi.org/10.22034/6.3.9>
10. Kalantari, E. (1994, Autumn). Research and Development: Food Resources and Population Growth, the Necessity of Harmonized Growth. *Agricultural Economics and Development Journal*, 2(6), 6-15. [In Persian] <https://www.noormags.ir/view/fa/articlepage/714883/>
11. Kavene, Z. (2023). *What is food security?* Retrieved from *Behsite.ir* and *FAO (1996)*. [In Persian]
12. Latifmanesh, H. (1403). Food security and resource management in Iran: challenges and solutions based on sustainable technologies. The First National Conference on the Civilizational Governance Model of Science and Technology, Tehran: Supreme Council of the Cultural Revolution. [In Persian] <http://igc.sccr.ir/paper>
13. Mehr News Agency. (n.d.). *Report No. 5491608: Food security in the world and Iran*. [In Persian]
14. Momeni, M. (2010). *The Islamic World: A reference book*. Based on the article *The Islamic World* in *Encyclopedia of the Islamic World*. Tehran. [In Persian]
15. Mosley, M. H. (2009). *Rural development: Principles and operations* (M. Ghadiri Masoum & A. Azmi, Trans.). University of Tehran Press. [In Persian]
16. Nikbakht Dehkordi, A., & Zeinalipour, N. (2024). *Proceedings of the First National Conference on the Civilizational Governance Model of Science and Technology* (pp. 141–149). [In Persian] <https://www.noormags.ir/view/fa/articlepage/2245890/>
17. Organization of Islamic Cooperation (OIC). (2024). *List of 57 member countries of the Organization of Islamic Cooperation (OIC)*. [In Persian]
18. Riahi, V., & Seyadati, S. A. (2022, Spring). *Risk management in livestock farming in rural areas*. *Economic Geography Research Journal*, 3(7), 1-19. [In Persian] https://jurs.znu.ac.ir/article_251271.html
19. Safari, Y. (2023, August). *A review of food security measurement indicators in Iran and the missing role of soil*. *Land Management Journal*, 11(1), 15-29. [In Persian] <https://doi.org/10.22092/lmj.2022.127441>
20. Sardouyi Nasab, S. (2024). Food availability and access: Challenges and solutions. In *Proceedings of the First National Conference on the Civilizational Governance Model of Science and Technology* (pp. 857–864). [In Persian] <http://igc.sccr.ir/paper?manu=77985>
21. The Global Economy, employment in agriculture, Country Ranking, (2020). https://www.theglobaleconomy.com/rankings/employment_in_agriculture/
22. The Global Economy, Food production index, Country Ranking. (2016). <https://data.worldbank.org/indicator/AG.PR.D.FOOD.XD>

23. The World Bank, employment in agriculture, (2020). <https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS>
24. United nation, population division. Department of economic and social affairs. (2018). <https://www.un.org/development/desa/pd/>
25. Veysi, H. (2024). Evaluating the self-sufficiency strategy and its impact on territorial governance and environmental sustainability in Iran. *Journal of Geography and Environmental Sustainability*, (53), 53–67. [In Persian] <https://doi.org/10.22126/ges.2024.10844.2770>
26. Wikipedia.org/Global_Food_Security_Index, (2022). https://en.wikipedia.org/wiki/Global_Food_Security_Index
27. World Grain.Com, The International Business Magazine for Grain, Flour and Feed, (2024). <https://www.world-grain.com/>



روستا نشینی، ساختارهای تولید کشاورزی و امنیت غذایی در کشورهای اسلامی

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چکیده مبسوط

۱. مقدمه

بسیاری از کشورها و نیز برخی کشورهای اسلامی، برنامه های گوناگونی برای تامین امنیت غذایی دارند که در دهه های اخیر، توسعه فعالیت های کشاورزی، تهیه برنامه توسعه روستایی، برنامه ریزی تولید محصولات استراتژیک و اجاره بین المللی زمین های قابل کشت، تنوع کشت، تامین منابع آب، برنامه های تامین پروتئین و بهره وری در تولید کشاورزی مهمتر به شمار می رود کشور های اسلامی، کشورهایی با ساختار زندگی روستایی، و البته کشورهایی جوان شمرده می شوند و تغییرات گسترده و شتابان شهرنشینی و سالمندی جهانی، نتوانسته ساختار روستا نشینی را در کشورهای اسلامی، دگرگون نماید. استراتژی توسعه بسیاری از کشورهای جهان بر کیفیت، کارایی و نحوه توزیع و پراکندگی جمعیت روستایی استوار است. تناسب میزان جمعیت روستایی با شاخص های توزیع اشتغال در بخش های مختلف اقتصادی، و تولید ناخالص ملی برای بسیاری از برنامه ریزان کشورهای توسعه یافته و در حال توسعه اهمیت حیاتی دارد.

۲. روش تحقیق

تحقیق حاضر با هدف بررسی ساختارهای موثر در امنیت غذایی کشورهای اسلامی، به میزان و پراکندگی جمعیت روستایی به عنوان گروههای تامین کننده امنیت غذایی و برخی از کیفیت های ترکیب جمعیت و ساختارهای محیطی در کشورهای اسلامی پرداخته است. روش تحقیق توصیفی - تحلیلی بوده و داده های مورد نیاز با استفاده از منابع رسمی قابل استناد در مقیاس بین المللی و سازمان های جهانی فراهم شده است. جامعه آماری تحقیق، ۵۱ کشور اسلامی بوده و طبقه بندی داده ها بر اساس ویژگی و صفت جامعه آماری در موضوع صورت گرفته است.

۳. یافته های تحقیق

الف) توزیع و طبقه بندی جمعیت روستایی در کشورهای اسلامی - در بین کشورهای اسلامی، چهار کشور پاکستان، اندونزی، بنگلادش و نیجریه بالغ بر ۴۵ درصد از جمعیت روستایی کشورهای اسلامی را در خود جای داده اند و اگر اتیوپی و مصر به اینها اضافه شود این نسبت

به حدود ۶۰ درصد می رسد. به عبارتی، حدود ۶۰ درصد از جمعیت روستانشین کشورهای اسلامی در همین شش کشور زندگی می کنند. بر عکس این کشورها، در شش کشور کویت، بحرین، قطر، جیبوتی، مالدیو و برونی دارالسلام مجموع تعداد جمعیت روستایی به یک میلیون نفر نمی رسد.

ب) سهم اقتصاد کشاورزی در سرانه تولید ناخالص داخلی کشورهای اسلامی - در زمینه سهم کشاورزی در تولید ناخالص داخلی کشورهای اسلامی که بیانگر توانایی اقتصاد کشاورزی در تولید و امنیت غذایی است، کشورهای اسلامی را می توان در چند گروه طبقه بندی کرد. بررسی داده ها نشان می دهد کشورهای گروه نخست شامل ۹ کشور عموماً کشورهایی هستند که بیش از ۲۵ درصد از تولید ناخالص داخلی را از بخش کشاورزی تامین می کنند. در گروه دوم ۱۰ کشوری قرار دارند که ۱۵ تا ۲۵ درصد از سرانه تولید ناخالص داخلی کشور از بخش کشاورزی تامین می شود. ویژگی عمده در این گروه توانایی برخی از کشورهای پرجمعیت مسلمان مانند پاکستان، و نیجریه در تامین امنیت غذایی و تولید کشاورزی است. در گروه سوم، ۱۶ کشور قرار دارند که توانایی قابل توجهی در تولید کشاورزی، امنیت غذایی و سرانه تولید ناخالص داخلی دارند. در این گروه نیز کشورهای پرجمعیت اسلامی، مانند اندونزی، مصر، ترکیه و ایران بارز ترین کشورها به شمار می رود. در نهایت در گروه چهارم، ۱۶ کشوری قرار دارند که کمتر از ۵ درصد از سهم تولید ناخالص داخلی آنها متأثر از بخش اقتصاد کشاورزی است.

ج) طبقه بندی کشورهای اسلامی در توانایی اشتغال کشاورزی در تولید ناخالص داخلی - مجموع تقریبی جمعیت دو میلیارد نفری کشورهای اسلامی (نه جمعیت مسلمان)، بالغ بر یک و نیم میلیارد نفر از حداقل نسبی تامین امنیت غذایی برخوردارند. در گروه سوم، کشورهایی قرار می گیرند که ساختار اقتصاد کشاورزی، و به تبع آن سهم اشتغال در بخش کشاورزی ناچیزی دارند و عموماً می توان گفت این کشورها از نظر امنیت غذایی به سایر کشورها وابسته هستند. در این گروه کشورهای نفت خیز حاشیه خلیج فارس دیده می شود و شاید بتوان جمعیت این گروه را حداکثر تا ۱۵۰ میلیون برآورد کرد.

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اندونزی، ترکیه، الجزایر، مراکش، نیجریه، و بنگلادش جزو ۱۰ کشور مهم وارد کننده گندم در جهان هستند که در مجموع بالغ بر ۶۱ میلیون تن گندم وارد کرده اند.

۴. بحث و نتیجه گیری

شاخص های موثر در تولید و واردات محصولات کشاورزی موثر در امنیت غذایی مورد توجه قرار گرفته و به عنوان شاخص ترکیبی مورد بررسی قرار گیرد، می توان گفت در مجموع، مولفه های موثر در امنیت غذایی، مانند زمین قابل کشت، منابع آب، سرانه تولید، سهم بخش کشاورزی، و متوسط ارزش تولید کشاورزان، و نیز توانایی دولت ها در خریداری و تامین نیازهای غذایی لحاظ شده است و بر این اساس، طبقه بندی کشورهای اسلامی از نظر شاخص های ترکیبی امنیت غذایی و جمعیت دارای امنیت غذایی با در معرض تهدید امنیت غذایی در چهار گروه قابل ارایه است.

کلیدواژه ها: امنیت غذایی، کشورهای اسلامی، جمعیت روستایی، اقتصاد کشاورزی، اقتصاد روستایی.

تشکر و قدرانی

پژوهش حاضر حامی مالی نداشته و حاصل فعالیت علمی نویسندگان است.

د) شاخص های تولید کشاورزی و امنیت غذایی کشورهای اسلامی - بر این اساس متوسط درصد زمین های قابل کشت در کشورهای اسلامی ۱۲.۳ درصد است که کمتر از نرخ جهانی (۱۴.۳ درصد) است. در این بین، کشورهای بنگلادش، پاکستان، مالاوی و نیجریه با بیش از ۳۵ درصد از مساحت قابل کشت، ویژه شمرده می شوند و ۲۶ کشور اسلامی، زمین های کمتر از ۵ درصد دارند. بنا بر داده های رسمی در سال ۲۰۱۶، کشورهای بحرین، کویت و سیرالئون جزو کشورهای پیشتاز و کشورهای سودان، سوریه، لبنان، فلسطین و مالدیو جزو کشورهای ضعیف در شاخص تولید مواد غذایی (حجم کل تولید در مقایسه با دوره قبل) به شمار می رفته اند.

بنا بر گزارش های بانک جهانی و سازمان های وابسته به آن، در زمینه مساحت زمین قابل کشت در کشورهای اسلامی تنها ۷ کشور بیش از ۱۰۰ هزار کیلومتر مربع زمین کشاورزی قابل کشت دارند و در زمینه تولید غلات هفت گانه (از جمله شامل گندم، برنج، ذرت، جو، ارزن) که معیار قابل ذکر جهانی در تامین امنیت غذایی بوده و با ارزش غذایی بالا شناخته می شود، تنها ۹ کشور وضعیت نسبتاً مناسبی در تولید دارند. داده های موجود از سال ۲۰۲۳، اطلاعات واردات گندم ۲۵ کشور مسلمان به ثبت رسیده و از بین این کشورها، هفت کشور مصر،



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داوران این شماره به ترتیب حروف الفبا

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- ۳.۹. انواع نقل قول‌ها (مستقیم و غیر مستقیم)، نقل به مضمون و مطالب به دست آمده از منابع و مآخذ، با حروف نازک و استفاده از نشانه‌گذاری‌های مرسوم، مشخص شود و نام صاحبان آثار، تاریخ و شماره صفحات منابع و مآخذ، بلافاصله در میان پرانتز نوشته شود.
۱۰. مقالات برگرفته از رساله و پایان‌نامه دانشجویان با نام استاد راهنما، مشاوران و دانشجو به صورت توأمان و با مسؤولیت استاد راهنما منتشر می‌شود.
۱۱. چنانچه مخارج تحقیق یا تهیه مقاله توسط مؤسسه‌ای تأمین مالی شده باشد، باید در بخش تشکر و قدردانی مشخص گردد.
۱۲. شیوه ارزیابی مقالات: مقالات ارسالی که شرایط پذیرش را احراز کنند، برای داوران خبره در آن موضوع ارسال می‌شوند. داوران محترم، جدای از ارزشیابی کیفی مقالات، راهبردهای سازنده‌ای پیشنهاد می‌کنند. پیشنهادهای داوران محترم به طور کامل، اما بدون نام و نشان داور، برای نویسنده مقاله ارسال خواهد شد.
۱۳. مجله حق رد یا قبول و نیز ویراستاری مقالات را برای خود محفوظ می‌دارد و مقالات مسترد نمی‌گردد. اصل مقالات رد یا انصراف داده شده پس از سه ماه از مجموعه آرشیو مجله خارج خواهد شد و مجله پژوهش و برنامه‌ریزی روستایی هیچ مسؤولیتی در این ارتباط نخواهد داشت.
۱۴. مسؤولیت ارائه صحیح مطالب مقاله بر عهده نویسنده‌گان مقاله است. از این‌رو، نسخ‌های از مقاله آماده چاپ برای انجام آخرین تصحیحات احتمالی به نشانی الکترونیکی نویسنده ارسال خواهد شد. چنانچه ظرف مدت یک هفته پاسخی از سوی نویسندگان واصل نگردید به معنای موافقت آنها با اصلاحات انجام شده تلقی و نسبت به چاپ آن اقدام می‌شود.
۱۵. دریافت مقاله صرفاً از طریق سامانه مجله (<http://jrnp.um.ac.ir>) خواهد بود و مجله از پذیرش مقالات دستی یا پستی معذور خواهد بود.
۱۶. نویسندگان گرامی، مقالاتی که مطابق فرمت مجله تهیه نشده باشند به نویسنده بازگردانده شده و در فرآیند ارزیابی قرار نخواهد گرفت.
۱۷. فایل‌های ضروری برای ارسال از طریق سامانه عبارتند از:
- الف) فایل مشخصات نویسندگان: در محیط word شامل اسامی و مشخصات نویسندگان به فارسی و انگلیسی.
- ب) فایل اصلی مقاله بدون مشخصات: در محیط word شامل متن اصلی مقاله بدون اسامی و مشخصات نویسندگان.
- ج) فایل چکیده مبسوط (مکمل) مقاله: شامل چکیده مبسوط فارسی در قالب یک فایل در محیط Word.
۱۸. شرایط جزئی تر و دقیق تر نیز در فایل راهنمای نگارش و ارسال مقاله توسط نویسندگان ارائه شده است.
۱۹. مقاله پس از ارزیابی علمی به زبان انگلیسی برگردانده شده و نویسنده(گان) موظف به ترجمه آن در مراکز ویراستاری معتبر خواهند بود و تا قبل از انجام ترجمه، امکان ارسال گواهی پذیرش مقدور نمی‌باشد. لذا پیشنهاد می‌شود فارسی زبانان مقاله خود را به زبان فارسی تهیه و ارسال نموده و پس از طی فرآیند ارزیابی علمی و پذیرش نسبت به ترجمه آن اقدام شود.
- آدرس پستی: مشهد- میدان آزادی- پردیس دانشگاه فردوسی مشهد- دانشکده ادبیات و علوم انسانی- دفتر مجله پژوهش و برنامه‌ریزی روستایی.
- کد پستی: ۹۱۷۷۹۴۸۸۸۳ تلفن و نمابر: ۰۵۱-۳۸۷۹۶۸۴۰ پست الکترونیکی Rplanning@um.ac.ir
- وب سایت: <http://jrnp.um.ac.ir/>

فرم اشتراک (یک ساله / دوشماره) مجله پژوهش و برنامه‌ریزی روستایی

این جانب شغل با ارسال فیش بانکی به مبلغ ریال به حساب جاری شماره ۴۲۵۲۹۹۶۳۸ بانک تجارت شعبه دانشگاه مشهد کد ۴۲۵۰ به نام عواید اختصاصی دانشکده ادبیات و علوم انسانی، متقاضی اشتراک فصلنامه از شماره هستم. چنانچه صاحبان مقالات منتشر شده متقاضی دریافت مجله و تیراژی آن از طریق پست پیشتاز باشند، باید هزینه‌ی آن را به شماره حساب مذکور واریز و اصل فیش پرداختی را به نشانی دفتر مجله ارسال کنند.

نشانی: کد پستی:

شرایط پذیرش مقاله

برای سرعت بخشیدن به امر داوری و چاپ مقالات، از همه پژوهشگرانی که مایل به چاپ مقالات علمی خود در این نشریه هستند، درخواست می‌شود به نکات زیر توجه کافی داشته باشند:

۱. مقاله ارسال شده نباید قبلاً در هیچ نشریه داخلی یا خارجی چاپ شده باشد. هیئت تحریریه انتظار دارد نویسندگان محترم تا هنگامی که جواب پذیرش از نشریه نرسیده است، مقاله خود را به مجله دیگری برای چاپ ارسال نفرمایند.

۲. مقالات انگلیسی با قلم نازک Times New Roman 11 با نرم افزار Word تهیه شود. مقالات، روی کاغذ A4 (با حاشیه از بالا ۳ و پایین ۲ و راست ۲ و چپ ۲ سانتی متر) تایپ شود. متن به صورت دو ستونی با رعایت فاصله ۱ سانتی متر بین دو ستون و فواصل بین خطوط به صورت single باشد. ۳. حجم مقاله نباید از حدود ۹۵۰۰ کلمه و یا حداکثر ۱۵ صفحه چاپی به قطع نشریه بیشتر باشد (با در نظر گرفتن محل جداول، اشکال، خلاصه فارسی و فهرست منابع).

۴. عنوان مقاله با در نظر گرفتن فواصل بین کلمات نباید از ۶۰ حرف تجاوز کند و با قلم Times New Roman 14 سیاه تایپ شود.

۵. نام نویسنده مقاله با قلم سیاه Times New Roman 10 عنوان علمی یا شغلی او با قلم Times New Roman 10 در زیر عنوان مقاله ذکر شود. ضمناً آدرس الکترونیکی و شماره تلفن نویسنده مسؤول در پاورقی آورده شود.

۶. چکیده مقاله ساختاریافته با قلم نازک Times New Roman 11 به صورت تک ستونی باشد.

۷. شکل‌ها و نمودارهای مقاله حتماً اصل و دارای کیفیت مطلوب باشد. فایل اصلی اشکال (تحت Word، Excel، PDF) و با دقت ۳۰۰ dpi ارائه شود. اندازه قلم‌ها خصوصاً در مورد منحنی‌ها (legend) به گونه‌ای انتخاب شوند که پس از کوچک‌شدن مقیاس شکل برای چاپ نیز خوانا باشند.

۸. ساختار مقاله شامل عناصر زیر است:

۱.۸ صفحه عنوان: در صفحه شناسنامه باید عنوان مقاله، نام و نام خانوادگی نویسنده (نویسندگان)، درجه علمی، نشانی دقیق (کد پستی، تلفن، دورنگار و پست الکترونیکی)، محل انجام پژوهش، مسؤول مقاله و تاریخ ارسال) درج شود. عهده‌دار مکاتبات باید با علامت ستاره مشخص شود.

۲.۸ چکیده: شامل چکیده‌های فارسی ساختار یافته (شامل هدف، روش؛ یافته‌ها؛ محدودیت‌ها؛ راهکارهای عملی؛ اصالت و ارزش و واژگان کلیدی (۳ تا ۶ کلمه)) است. تا حد امکان چکیده مقاله از ۳۰۰ کلمه تجاوز نکند. علاوه بر چکیده ساختار یافته، لازم است چکیده مبسوط فارسی بین ۷۵۰ تا ۱۰۰۰ کلمه نیز حاوی مقدمه، مبانی نظری، روش، نتایج و بحث، نتیجه‌گیری و کلیدواژه‌های مقاله تهیه شود، به طوری که حاوی اطلاعاتی از کل مقاله باشد و بتوان جداگانه آن را چاپ کرد. با توجه به این که مقاله بعداً به صورت کامل به انگلیسی برگردانده خواهد شد، نیازی به ترجمه چکیده مبسوط به انگلیسی نیست.

۳.۸ مقدمه: شامل ۱- طرح مسئله؛ ۲- اهمیت و ضرورت؛ ۳- اهداف و سوالات اصلی تحقیق.

۴.۸ ادبیات نظری تحقیق: شامل ۱- تعاریف و مفاهیم؛ ۲- دیدگاه‌ها و مبانی نظری؛ ۳- پیشینه نظری تحقیق و ...

۵.۸ روش‌شناسی تحقیق: در برگیرنده ۱- محدوده و قلمرو پژوهش؛ ۲- روش تحقیق و مراحل آن (روش تحقیق، جامعه آماری، روش نمونه‌گیری، حجم نمونه و روش تعیین آن، ابزار گردآوری داده‌ها و اعتبارسنجی آن‌ها)؛ ۳- سؤال‌ها و فرضیه‌ها؛ ۴- معرفی متغیرها و شاخص‌ها؛ ۵- کاربرد روش‌ها و فنون.

۶.۸ یافته‌های تحقیق: ارائه نتایج دقیق یافته‌های مهم با رعایت اصول علمی و با استفاده از جداول و نمودارهای لازم.

۷.۸ بحث و نتیجه‌گیری: شامل آثار و اهمیت یافته‌های پژوهش و یافته‌های پژوهش‌های مشابه دیگر با تأکید بر مغایرت‌ها و علل آن، توضیح قابلیت تعمیم‌پذیری و کاربرد علمی یافته‌ها و ارائه رهنمودهای لازم برای ادامه پژوهش در ارتباط با موضوع، نتیجه‌گیری و توصیه‌ها و پیشنهادها احتمالی.

۸.۸ تشکر و قدردانی: قبل از منابع مورد استفاده ارائه شود و از ذکر عناوین دکتر و مهندس خودداری شود.

۹. نحوه ارجاعات: منابع و مآخذ باید به صورت درون‌متنی و همچنین در پایان مقاله ذکر شود.

۱۰.۹ ارجاعات در متن مقاله باید به شیوه داخل پرانتز (APA) نسخه ۶ باشد؛ به گونه‌ای که ابتدا نام مؤلف یا مؤلفان، سال انتشار و صفحه ذکر شود. شایان ذکر است که ارجاع به کارهای چاپ شده فقط به زبان فارسی بوده و در اسامی لاتین معادل آن در زیر نویس همان صفحه ارائه شود. به عنوان نمونه: (شکوئی، ۱۳۸۷، ص. ۵۰) یا (وودز، ۲۰۰۵، ص. ۲۷).

۲.۹ در پایان مقاله، منابع مورد استفاده در متن مقاله، به ترتیب الفبایی نام خانوادگی نویسنده بر اساس الگوی فهرست نویسی APA تنظیم گردد. نمونه فارسی:

- رضوانی، م. ر. (۱۳۹۰). *برنامه‌ریزی توسعه روستایی در ایران*. چاپ چهارم. تهران: نشر قومس.

- عنایستانی، ع. ا.، شایان، ح.، و بنیادداشت، ا. (۱۳۹۰). بررسی نقش اعتبارات بر تغییر الگوی مسکن در نواحی روستایی (مطالعه موردی: شهرستان بهمنی). *مجله برنامه‌ریزی فضایی*، ۱ (۳)، ۸۰-۶۳.

نمونه انگلیسی:

- Bourne, L. S. (1981). *The geography of housing*. London: Edward Arnold.

- Turgat, H. (2001). Culture, continuity and change: Structural analysis of the housing pattern in squatter settlement. *Global Environment Research (GBER)*, 1(1), 17-25.

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



دانشکده ادبیات و علوم انسانی

مجله پژوهش و برنامه‌ریزی روستایی

سال چهاردهم، شماره ۳، تابستان ۱۴۰۴، شماره پیاپی ۵۰

صاحب امتیاز: دانشگاه فردوسی مشهد

مدیر مسئول: دکتر حمید شایان

سرمدیر: دکتر علی اکبر عنابستانی

هیئت تحریریه (به ترتیب حروف الفبا):

کریستوفر برایانت	استاد برنامه‌ریزی روستایی و توسعه (دانشگاه مونترال کانادا)
خدیجه بوزرجمهری	دانشیار جغرافیا و برنامه‌ریزی روستایی (دانشگاه فردوسی مشهد)
سعید پیراسته	دانشیار جغرافیا و مدیریت محیطی (دانشگاه واترلو کانادا)
جعفر جوان	استاد جغرافیای روستایی (دانشگاه فردوسی مشهد)
محمدرضا رضوانی	استاد جغرافیا و برنامه‌ریزی روستایی (دانشگاه تهران)
عبدالرضا رکن‌الدین افتخاری	استاد جغرافیا و برنامه‌ریزی روستایی (دانشگاه تربیت مدرس)
عباس سعیدی	استاد جغرافیای روستایی (دانشگاه شهید بهشتی)
حمید شایان	استاد جغرافیای روستایی (دانشگاه فردوسی مشهد)
خدیجه شکرالله	دانشیار جغرافیا (کالج مسیحی فورمن/پاکستان)
سید اسکندر صیدایی	دانشیار جغرافیا و برنامه‌ریزی روستایی (دانشگاه اصفهان)
علی عسگری	استاد مدیریت بحران (دانشگاه یورک کانادا)
علی اکبر عنابستانی	استاد جغرافیای انسانی و آمایش (دانشگاه شهید بهشتی)
آنا فرمینو	استاد جغرافیا و برنامه‌ریزی منطقه‌ای (دانشگاه لیسبون جدید پرتغال)
ماريجا ماسکین	استاد موسسه معماری و شهرسازی و برنامه‌ریزی فضایی صربستان
مجتبی قدیری معصوم	استاد جغرافیای روستایی (دانشگاه تهران)
دو-چول کیم	استاد مدیریت محیط زیست روستایی (دانشگاه اوکایاما ژاپن)
سیدحسن مطیعی لنگرودی	استاد جغرافیای روستایی (دانشگاه تهران)

مقالات نمودار آرای نویسندگان است و به ترتیب وصول و تصویب درج می‌شود.

مدیر اجرایی: زهرا بنی‌اسد
دستیار سردبیر: مهدی جوانشیری
حروف‌نگاری و صفحه‌آرایی: معصومه ایرانپاک
ویراستار انگلیسی: مرکز ویراستاری ادبیات

شمارگان: ۵۰ نسخه

نشانی: مشهد، دانشگاه فردوسی مشهد، دانشکده ادبیات و علوم انسانی دکتر علی شریعتی، کد پستی ۹۱۷۷۹۴۸۸۳، نمابر: ۳۸۷۹۶۸۴۰ (۰۵۱)
بها: داخل کشور: ۲۰۰۰۰۰ ریال (تک‌شماره) خارج کشور: ۲۵ دلار (آمریکا- سالانه)، ۲۰ دلار (سایر کشورها- سالانه)

درگاه الکترونیکی: <http://jrpp.um.ac.ir/> E-mail: Rplanning@um.ac.ir

* این مجله در جلسه کمیسیون بررسی نشریات علمی کشور مورخ ۱۳۹۲/۲/۲۵ رتبه علمی- پژوهشی دریافت و طی نامه شماره ۳۵۷۲۸/۱۸/۳ در تاریخ ۱۳۹۲/۳/۱۳ ابلاغ گردیده است.

این مجله در پایگاه‌های زیر نمایه می‌شود:

- پایگاه استنادی علوم جهان اسلام (ISC)
- پایگاه اطلاعات علمی جهاد دانشگاهی (SID)
- پایگاه بانک اطلاعات نشریات کشور (Magiran)
- فهرست دسترسی آزاد مجلات (Doaj)

• Index Copernicus- RICeST- ISI-Noormags- Google Scholar- Civilica- Oaji



مجله پژوهش و برنامه ریزی روستایی

سال چهاردهم، شماره ۳، تابستان ۱۴۰۴، شماره پیاپی ۵۰

- ۱ **■** فراتحلیل کیفی عوامل موثر بر توانمندسازی زنان روستایی
سعیده رشیدی - مجید یاسوری - سمیرا محمودی
- ۲۳ **■** سایه تمرکزگرایی: بررسی چالش‌های سوءمدیریت و حکمرانی روستایی در ایران
ذبیح‌الله ترابی - مختاری کرچگانی - مهدی پورطاهری
- ۴۱ **■** سنجش اکوتوریسم پایدار در پایکوه جنوبی البرز با استفاده از چهارچوب DPSIR
اسماعیل قادری - سید سپهر اعرابی - غلامرضا کاظمیان - احمد پوراحمد
- ۶۱ **■** استراتژی‌های نوآورانه بازاریابی دیجیتال در گردشگری روستایی: بهره‌گیری از واقعیت افزوده و الگوریتم‌های هوشمند در اکوسیستم‌های فناوری
محسن آرمان - داود فیض - الهام سادات کیا
- ۸۳ **■** تأثیر گردشگری بر دگرگونی روابط فضایی جغرافیایی (مطالعه موردی: بخش بالا طالقان، ایران)
معصومه رفیعی - آئیژ عزمی
- ۱۰۱ **■** روستا نشینی، ساختارهای تولید کشاورزی و امنیت غذایی در کشورهای اسلامی
وحید ریاحی