



# Ecotourism: Between Economic Importance and Environmental Sustainability Challenges in Najaf Governorate-An analytical study in tourism geography

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## ABSTRACT

This study deals with the reality of ecotourism in Najaf Governorate, with a focus on the Najaf Sea Low as an applied model that combines geographical importance and investment opportunities. The researcher aims to prove the role of ecotourism in achieving economic and social integration to a sustainable environment. The study revealed through the analytical method and fieldwork that the Najaf Sea region has unique natural, geological and climatic elements that qualify it to be a tourist pole that supports the local economy and provides diverse job opportunities. Despite this high awareness of economic importance, the results showed serious environmental challenges represented by high levels of pollution, waste accumulation and poor environmental and service planning in tourist sites. The study indicates the need to adopt a comprehensive planning vision that adopts green tourism standards, and enacts environmental laws and control, while enhancing community awareness to ensure the investment of these resources without compromising the rights of future generations.

**Keywords:**

## Section One: Theoretical Framework of the Research

### First: Introduction:

Tourism currently forms the economic foundation upon which many countries around the world rely, as it is an economic activity that rivals other economic activities such as industry, commerce, and agriculture, and in many countries even surpasses them. Therefore, many countries have focused on introducing beneficial types of tourism, such as ecotourism, and working to develop and sustain this type in all its forms This is reflected in the development of public life in tourist countries in all its fields, whether directly because it is linked to it in a way that serves tourism, or indirectly because it is a primary source that works to increase financial revenues and thus develop all aspects of life. However, the process of creating and maintaining ecotourism requires coordination between ecotourism investments and the preservation of the ecosystem from pollution in all its forms, Therefore, ecotourism has a major role in achieving economic and social integration, as well as political and cultural integration. Consequently, these resources must be subject to programmed and precise planning to reach the desired goals while ensuring their sustainability.

**Second: The research problem: The main problem was represented by the following question:**

(Does the economic and social importance of ecotourism have an impact on achieving a sustainable environment?)

**Third: Research hypothesis:**

(Ecotourism plays a major role in achieving economic and social goals, ultimately leading to a sustainable environment).

**Fourth: Research Objectives:** The research objectives are as follows:

1. Highlighting the role of ecotourism in achieving economic integration.
2. Identifying the different types of ecotourism and explaining the importance of each.
3. Understanding the optimal use of ecotourism, which positively impacts achieving sustainable tourism and mitigating various forms of pollution.
4. Raising awareness of the importance of ecotourism and its role in utilizing open spaces and reducing environmental phenomena such as desertification and salinization, as well as contributing to economic integration.

**Fifth: The importance of the research:**

The importance of this research stems from its focus on an environment of significant importance to religious tourism. This aspect is further enhanced by the availability of this natural environment, represented by the Najaf Sea Depression, which serves as a geographical resource that can be utilized to develop sustainable ecotourism and promote economic diversification in Najaf Governorate. The research also contributes to highlighting the natural and environmental potential of the various sites and resources within the study area, which can be developed for tourism according to scientific planning principles that minimize environmental degradation. The research also presents an applied vision for linking tourism development with the protection of natural resources and the achievement of sustainability. In addition, it provides a planning framework that can be relied upon by the competent authorities in developing different environmental tourism sites in Iraq in general.

**Sixth: Research Methodology:**

The research relied on the descriptive approach to study the reality of ecotourism and its development potential in Najaf Governorate by analyzing the natural and human characteristics of tourist sites, as well as the analytical approach to identify the components of sustainable tourism development. The field method was employed through the questionnaire form and the statistical analysis of its results to reach accurate indicators that support the scientific interpretation.

**Seventh: Concepts included in the research:**

#### 1. Tourism:

Tourism is defined as the set of activities resulting from travel or the movement of individuals from their original place of residence, as long as this movement does not fall within the scope of profitable activity (Houria Slimani, p7).

#### 2. The Environment

The environment, in its general sense, is the medium or spatial area in which humans live, influencing and being influenced by it. This area may expand to encompass a very large region or shrink to a very small area, not exceeding the size of the house in which one lives (Khalif Mustafa Gharaibeh, p17).

The natural environment, on the other hand, is that environment in whose existence and use humans have no part. The natural environment consists of four systems, closely interconnected: the atmosphere, the hydrosphere, the lithosphere, and the biosphere. These natural elements are in a state of constant change (Suhair Ibrahim Hajim Al-Hiti, p17).

#### 3. Ecotourism

The term ecotourism emerged in the early 1980s to describe a new type of environmentally friendly tourism activity (Mohsen Ahmed Al-Khudairi, p42). It is defined as the result of utilizing and enjoying natural phenomena on Earth. Therefore, ecotourism has been defined in many ways. In its simplest definition, it is tourism related to peaceful, undisturbed places for the purpose of enjoying the surrounding nature (Mohsen Ahmed Al-Khudairi, p8). The World Wildlife Fund defines it as natural areas that have not been polluted and whose natural balance has not been disrupted, for the purpose of enjoying their scenery, plants, wildlife, and past and present civilizations (Ahsan Al-Aib and Aboud Zarqeenm p146).

**4. The ecotourist:**

This is someone who can enjoy nature without contributing to any form of pollution, meaning they adhere to the regulations set by the tourism authorities responsible for this type of tourism.

**5. Natural Ecological Factors:**

It includes the living elements and systems, and those provided entirely by nature, such as the Earth's surface and its mountains, valleys, forests, caves, and deserts (Hussein Qasim Muhammad Al-Yassiri, p206).

**6. Climatic Factors:**

The climatic seasons and the elements, possibilities, and transformations they offer in summer, winter, spring, or autumn transform these elements into major tourist attractions, from watching the sunset on the beach to skiing in the mountains (Hashim Jaafar Abdul Hassan, p304).

**7. Biological Factors:**

It consists of plant resources such as flowers, trees, plants and mineral water, as well as animal and fish resources such as various birds and fish.

**Section Two The Economic and Social Importance of Ecotourism****First: The Economic Importance of Ecotourism**

The economic importance of ecotourism lies in its role as a key tool and means for achieving sustainable development, through its role in developing and supporting other economic activities such as agriculture, industry, and commerce, etc., and what is reflected in the arrangement and growth of the country's economic life, due to its contribution to creating many related economic sectors, such as the service system it depends on, such as accommodation centers represented by hotels of different types and categories, restaurants, and various traditional means. This has contributed to creating many job opportunities and thus attracting most segments of society, whether educated or uneducated, as this activity depends primarily on the service provided by human personnel, which cannot be replaced by using machines. This, in turn, positively affects the increase in individual income and then the increase in the national income of the tourist country, and thus the possibility of increasing economic investments or continuing to develop existing ones (Mohsen Al-Khudairi, p56). In addition to its economic role in attracting foreign currency, ecotourism is of great importance to the balance of payments and contributes to supporting sustainable development.

**Secondly: The social importance of ecotourism:**

Tourism relies on the natural environment, which can only be accessed and utilized by humans. Humans are the central figures from whom the process originates and to whom it returns. Ecotourism is considered community-friendly, as it utilizes available resources and individuals within the community. It fosters social relationships, promotes and enhances community modernization, transforms isolated communities into more open ones, keeps the community functioning continuously, and mitigates seasonal risks. Tourism acts as a bridge between communities, leading to the exchange of cultures, knowledge, values, and traditions among nations and peoples, thus strengthening social bonds.

Direct contact between tourists and the residents of tourist cities or countries facilitates social change, leading to the adoption of new habits that can modify negative ones among tourists (Mustafa Youssef Kafi Wahba Kafi, p23).

**Third: Sustainable Tourism**

Some call it continuous tourism, meaning the necessity of achieving harmony and continuity between the past, present, and future without diminishing opportunities for future generations. Sustainable tourism can be managed by not exceeding the carrying capacity of the environment and minimizing environmental costs (Zainab Jawad Shukr, p211)

It has been defined as the optimal utilization of tourist sites in terms of the balanced number of tourists visiting these sites, provided they are aware of the importance of these areas and interact with them respectfully, thus preventing harm to both parties (Salem Hamid Salem and Tariq Salman, p95).

The process of utilizing natural sites for tourism requires employing and relying on all means of development and direct and indirect connections between different aspects of life. This inevitably leads to the introduction of new elements that, over time, will have their effects on the environment. Furthermore, attempting to restore the environment to its natural state afterward will be virtually impossible. Therefore, the planning process for establishing sustainable ecotourism must adhere to fundamental principles, the most important of which are:

1. Enacting laws that serve the environment and preserve its natural state, including plants, animals, and even the preservation of landforms and the excessive waste of water
2. Establishing a programmed tourism system with a specific number of tourists and imposing conditions that they must respect and implement meticulously.
3. Raising cultural awareness among local populations, especially in pastoral and rural areas, to encourage them to abandon harmful practices in these areas in order to preserve and maintain them.

### **Third Section: A Model for the Possibility of Investing in Sustainable Ecotourism in the Najaf Sea Depression**

It is one of the most important geomorphological features in Najaf Governorate. It is a tectonic depression with an area of 366 km<sup>2</sup>, located west of the city of Najaf, approximately 5 km away (Ghadir Fahim Muhammad Ali Al-Kasoub, p24). Historical and geographical sources refer to Najaf as a "sea," and this term has become associated with names and locations near or close to Najaf, such as "Sea of Najaf," "Sea of Hira," "Sea of Banqiya," and "Sea of Salt " (Hassan Issa Al-Hakim, p8)

**The tourism potential of the Sea of Najaf depression** can be studied as follows:

#### **1. Geographical Location:**

The Najaf Sea Depression is geographically located in the eastern and northeastern part of the northern desert of the western plateau of Iraq. Within the Najaf Governorate, it lies to the south and southwest of the city of Najaf and on the right side of the main road connecting Najaf and Hira. It represents a natural extension of the alluvial plain, forming a tongue-like shape that stretches across the western plateau from south to north, near the Al-Manadhira district (Ali Sahib Talib Al-Mousawi, p36).

#### **2. Geological situation of the Najaf Sea Depression:**

Geologically, the Najaf Sea lies on the eastern edge of the western plateau and within the stable platform area represented by the Salman zone. The type of sediments and rocks that make it up can be described, according to age, as formations dating back to the Tertiary geological period, specifically the Lower Miocene epoch, which includes several formations such as the Dammam Formation, the Euphrates Formation, the Fatha Formation, and the Zahra Formation. It also consists of Quaternary deposits, namely alluvial deposits, aeolian sand deposits, and gypsum deposits (Ali Sahib Talib Al-Mousawim p41).

#### **3. Surface characteristics:**

The Najaf Sea depression forms a natural topographic feature extending alongside the Euphrates River, separated from it by only fifteen kilometers. It is of varying width, with an average width of 16 km at its southeastern end, but it narrows in the middle to reach (10 km), cutting (40 km) from northwest of Najaf to southwest of the city of Hira on the side of the road that connects the two cities (Alia Hussein Salman, p275).

#### **4. Surface water resources feeding the Najaf Sea Depression:**

The water sources in the Najaf Sea Depression consist of surface and groundwater, replenished by rainwater, in addition to a number of streams branching off from the Euphrates River. When the Euphrates enters the Kufa district, it is named after the cities it passes through and branches into numerous streams, including those that flow southwest, passing through the city of Abu Sukhair, located 16 km south of Kufa. These include the Abu Jadhoul' stream, the Al-Badiriya stream, and the Al-Hashimi stream. The Al-Sudair stream is one of the oldest of these streams, having been dug and

opened in 1932. It became a source of drinking water and irrigation for agricultural lands in the area surrounding the Najaf Sea, as well as for agricultural areas north of the Al-Hira district (Ali Sahib Talib Al-Mousawi, p44)

### **5. Climatic Characteristics:**

The Najaf Sea Depression area shares the same climatic characteristics as the rest of the governorate, characterized by a desert climate with hot, dry summers and mild winters. Rainfall is scarce and fluctuates, with the average annual rainfall in the Najaf Sea not exceeding 102.2 mm. This classifies it as an arid climate. Rainfall causes runoff outside the study area, which then collects to form seasonal wadis (valleys) that flow into the Najaf Sea during the winter, such as Wadi Abu Khamsat, Wadi Al-Malh, and Wadi Hasab. This results in water accumulating year-round in the Najaf Sea Depression (Mahmoud Abdul Hassan Juheil and Ayed Jassim Hussein, p310).

### **6. Natural Vegetation:**

The study area is characterized by a diverse natural vegetation, which is linked to soil type and moisture availability. This diversity is a result of the arid climate prevalent in the area. Natural vegetation helps protect the soil from erosion and soil degradation. Among the most important of these plants are seasonal marsh plants, found in areas where drainage and rainwater collect in depressions. Locally, these are called "Hor al-Tawq" and "Hor al-Jabsa." They grow in low-lying areas and include reeds and papyrus. Also included are wadi plants, which are found at the ends of seasonal wadis, such as thorn and camelthorn. Other plants, like wormwood, saltwort, and desert vegetation, are found in the upper reaches of the wadis. Desert plants, which are adapted to harsh arid environments, include wild wormwood and sagebrush. Finally, there are sand dune plants, which are found on sandy surfaces and dune edges, such as tamarisk, desert vegetation, wild wormwood, and camelthorn.

### **7. Archaeological sites:**

Numerous ancient ruins can be found in the low-lying areas of the Najaf Sea, as well as landforms shaped by the wind, as shown in Figure.

### **8. Sustainable Tourism Planning in the Najaf Sea Depression:**

Tourism planning in the Najaf Sea Depression can be achieved through the following:

- a. Adopting a comprehensive strategic plan to transform the Najaf Sea Depression into a sustainable ecotourism site within a long-term development vision linked to the Najaf Governorate's development plans.
- b. Establishing a specialized administrative body to manage the Najaf Sea site from a tourism and environmental perspective, responsible for planning, organization, oversight, and coordination between tourism, environment, municipal, and investment authorities.
- c. Determining the site's environmental carrying capacity and regulating visitor numbers to prevent environmental pressure and natural degradation of the depression.
- d. Protecting environmentally sensitive areas within the depression and preventing haphazard activities such as overgrazing, waste dumping, and unregulated extraction of raw materials.
- e. Adopting green tourism standards in all proposed tourism projects within the depression, including the use of solar energy and environmentally friendly materials.
- f. Developing tourism infrastructure gradually and thoughtfully, in a manner consistent with the area's environmental characteristics without causing significant morphological changes.
- g. Enhancing continuous environmental monitoring of the site through field monitoring systems and remote sensing technologies to track environmental changes.
- h. Supporting local community participation in the management and operation of tourism activities to achieve local economic development and promote the preservation of environmental resources.
- i. Including the Najaf Sea Depression in the national ecotourism map and linking it to religious tourism routes in Najaf Governorate.

- j. Establishing a comprehensive digital geographic database for the site, updated regularly, to support planning and investment decisions. g- Providing transportation, health services, rest areas, electricity, tourist guidance, enhancing specialized security aspects, as well as expanding green areas.

#### Section Four: The Practical Aspect (Analyzing the Questionnaire Form)

The researcher relied on a questionnaire as a field tool to uncover the reality of ecotourism in the study area and identify its economic dimensions and associated environmental challenges. The research can also be enhanced and supported by direct data from the target groups to bolster geographical analysis and arrive at accurate results that contribute to developing sustainable planning strategies.

One hundred and fifty questionnaires were distributed to various segments of Najaf society, including tourists and visitors of both genders. Only 120 questionnaires were collected, as some were not returned or were incomplete, as follows:

The results in Table (1) indicate a higher percentage of males in the sample (65%) compared to females (35%). This is attributed to the higher participation of males in tourism activities and employment in the service and tourism sectors within Najaf Governorate, as well as the nature of tourism related to religious pilgrimages, which is predominantly male-dominated in terms of work and organization.

**Table (1): Gender in the Research Sample**

Gender	Frequency	Percentage%
Males	78	65%
Females	42	35%
Total	120	100%

**Source: Results of the first section of the questionnaire.**

Table (2) shows that the age group (25–35 years) ranked first with a percentage of (38.3%), and it is the most active group in tourism and service work, followed by the group (36–45 years) with a percentage of (26.7%), which reflects the participation of economically productive groups in tourism activity. As for the older groups, they came with lower percentages, which indicates that interest in ecotourism is linked to the young and middle age groups.

**Table (2) Age group of the research sample**

Age Group	Frequency	Percentage%
Under 25 years	22	18.30%
35–25years	46	38.30%
45–36years	32	26.70%
Over 45 years	20	16.70%
Total	120	100%

**Source: Results of the first section of the questionnaire.**

The data indicates a high level of education among the sample, with 60% holding bachelor's or postgraduate degrees. This reinforces the reliability of the responses and the respondents' awareness of the importance of ecotourism and its associated challenges. It also reflects a high level of economic and environmental understanding of tourism in the governorate.

**Table (3) Educational Level of the Research Sample**

Educational Level	Frequency	Percentage(%)
Secondary	28	23.30%
Diploma	20	16.70%
Bachelor's	54	45%
Postgraduate	18	15%
Total	120	100%

**Source: Results of the first section of the survey.**

The results showed professional diversity, with government employees constituting the highest percentage (28.3%), followed by those working in the tourism and service sectors (25%).

This lends the study field credibility, as a large proportion of the sample is directly linked to economic and tourism activity.

**Table (4) Occupation of the research sample**

Occupation	Frequency	Percentage%
Government Employee	34	28.30%
Tourism and Services Sector	30	25%
Earnership	26	21.70%
Student	18	15%
Other	12	10%
Total	120	100%

**Source: Results of the first section of the questionnaire.**

The results indicate that the majority of the sample are residents of Najaf Governorate (68.3%), which gives the study spatial accuracy in assessing the current state of ecotourism.

Furthermore, the presence of a percentage from outside the governorate (31.7%) reflects the opinions of visitors and tourists, which is an important element in evaluating the quality of tourism services.

**Table (5) Place of Residence of the Research Sample**

Place of Residence	Frequency	Percentage%
Inside Najaf	82	68.30%
Outside Najaf	38	31.70%
Total	120	100%

**Source: Results of the first section of the survey.**

The sample was distributed among local residents, tourists, and tourism business owners, providing a comprehensive view of the reality of ecotourism in the governorate.

The opinions of residents (41.7%) represent an indicator of the local impact of tourism, while the opinions of tourists reflect the level of satisfaction with services, and tourism business owners provide a direct economic perspective.

**Table (6) Respondent Characteristics in the Research Sample**

Attribute	Frequency	Percentage%
Of Najaf residents:	50	41.70%
Tourist/Visitor:	40	33.30%

Tourism Business Owner:	30	25%
Total:	120	100%

**Source: Results of the first section of the questionnaire.**

The results indicate that the reality of ecotourism in Najaf Governorate is characterized by the presence of natural resources suitable for tourism investment. The item regarding the availability of natural sites suitable for investment recorded the highest average (4.10), demonstrating a clear awareness of the potential for ecotourism.

Conversely, the evaluation of cleanliness and services was low, with cleanliness recording the lowest average (2.96). This reflects the presence of service and environmental problems that limit the efficiency of ecotourism investment.

Overall, it appears that the resources are available, but environmental and service management remains below the required level for achieving integrated ecotourism.

**Table (7) Measurement of the Reality of Ecotourism in Najaf Governorate**

s	Item	Mean	Standard Deviation	Relative Importance%	Rank
1	Availability of ecotourism resources	3.92	0.88	78.4	2
2	Presence of natural tourist sites	4.1	0.81	82	1
3	Good level of cleanliness	2.96	1.02	59.2	5
4	Adequate tourist services	3.21	0.94	64.2	4
5	Presence of directional signs	3.4	0.9	68	3

**Source: Results of the second section of the questionnaire.**

The results showed a high level of awareness of the economic importance of ecotourism in Najaf, with the overall average exceeding 4.00, a strong indicator of its role in stimulating the local economy.

The "Supporting the Local Economy" item recorded the highest average (4.22), confirming that tourism represents a significant financial resource. The results also demonstrated tourism's ability to create job opportunities and stimulate markets, particularly in the service and commercial sectors. These results indicate that developing ecotourism can contribute to diversifying the economic base and reducing reliance on traditional activities.

**Table (8) Measuring the Economic Importance of Ecotourism**

s	Item	Mean	Standard Deviation	Relative Importance%	Rank
1	Supporting the local economy	4.22	0.76	84.4	1
2	Providing job opportunities	4.05	0.83	81	2
3	Stimulating markets	3.98	0.85	79.6	3
4	Supporting small businesses	3.74	0.91	74.8	4
5	An important economic resource	4.11	0.79	82.2	2 redundant

**Source: Results of the third section of the questionnaire.**

This section shows that environmental challenges represent a major obstacle to the development of ecotourism in Najaf, with the overall average score registering a high level (4.07).

Environmental pollution ranked first with an average of (4.30), reflecting its direct impact on the quality of tourist sites. The problem of waste and weak urban planning also emerged as factors putting pressure on the tourism environment.

These results indicate that the success of ecotourism in Najaf is linked to addressing environmental problems and establishing sustainable management plans.

**Table (9) Measuring the Environmental Challenges of Tourism in Najaf**

s	Item	Mean	Standard Deviation	Relative Importance%	Rank
1	Environmental pollution	4.3	0.72	86	1
2	Waste	4.18	0.79	83.6	2
3	Poor planning	4.05	0.83	81	3
4	Human pressure	3.88	0.88	77.6	5
5	Lack of environmental awareness	3.96	0.86	79.2	4

**Source: Results of the third axis of the survey data.**

The results of the sustainability axis indicate a gap between available resources and the actual level of environmental management. The item regarding the need for better environmental planning recorded the highest average score (4.28), demonstrating a clear awareness of the weakness of current planning.

In contrast, indicators for government efforts and environmental oversight were at average levels, reflecting the limited implementation of sustainability measures.

The results confirm the potential for developing sustainable ecotourism in Najaf if environmental planning, community awareness, and the enforcement of environmental laws are strengthened.

**Table (10) Measuring the Environmental Sustainability of Tourism in Najaf Governorate**

s	Item	Mean	Standard Deviation	Relative Importance%	Rank
1	Government efforts for protection	3.1	0.96	62	5
2	Environmental monitoring	3.25	0.92	65	4
3	Visitor awareness	3.34	0.9	66.8	3
4	The need for environmental planning	4.28	0.73	85.6	1
5	Potential for developing sustainable tourism	4.12	0.8	82.4	2

**Source: Results of the fifth axis of the survey.**

The survey results showed that ecotourism in Najaf Governorate possesses clear potential but faces environmental and administrative challenges that limit its efficiency. The axis of the state of ecotourism recorded an overall average of (3.52 out of 5) with a relative importance of (70.4%), indicating the availability of natural tourism resources suitable for investment. The item "Availability of Natural Tourist Sites" received the highest average (4.10) at (82%), while the item "Level of Cleanliness" received the lowest average (2.96) at (59.2%), indicating the inadequacy of environmental services.

As for the axis of economic importance, it achieved the highest overall average of (4.02) with a relative importance of (80.4%). (84.4%) of the sample confirmed that tourism contributes to supporting the local economy, while (81%) indicated its role in providing job opportunities. This reflects a clear understanding of the importance of tourism as an economic resource supporting local development. In contrast, the environmental challenges axis showed a high level of importance, with an average of

4.07 and a relative significance of 81.4%. 86% of respondents considered environmental pollution to be among the most prominent problems affecting tourism, and 83.6% confirmed that waste represents a major challenge at tourist sites. The results also indicated that weak environmental planning constitutes a significant obstacle to the development of sustainable tourism.

As for the environmental sustainability axis, it recorded an overall average of 3.62 and a relative significance of 72.4%. 85.6% of respondents emphasized the need to improve environmental planning, and 82.4% indicated the possibility of developing sustainable ecotourism in the governorate. Thus, the overall average for the survey was 3.81 out of 5, reflecting a positive trend towards developing ecotourism, while acknowledging the existence of challenges that require planning and environmental solutions.

### **Conclusions**

1. Najaf Governorate possesses natural and geographical resources suitable for developing ecotourism. This was confirmed by the survey results, which showed that 82% of respondents affirmed the availability of natural sites in Najaf suitable for ecotourism investment.
2. Ecotourism clearly contributes to supporting the local economy and stimulating commercial activity. The overall average for the state of ecotourism was 3.52, indicating a moderate level that leans towards positive.
3. Job creation is one of the most prominent economic impacts of tourism in the governorate. 84.4% of respondents confirmed that tourism contributes to supporting the local economy, while 81% indicated that tourism provides direct and indirect job opportunities.
4. The ecotourism sector suffers from problems related to cleanliness, pollution, and waste accumulation. 86% of respondents considered environmental pollution to be one of the most prominent challenges facing ecotourism, and 83.6% indicated that the waste problem affects the quality of tourist sites.
5. Weak environmental and tourism planning is one of the most significant obstacles to sustainable tourism development. The environmental sustainability axis scored an average of 3.62, reflecting a moderate level of current efforts to protect the tourism environment.
6. The level of environmental awareness among some visitors remains below the required standard. This is evidenced by the fact that 82.4% of respondents affirmed the possibility of developing sustainable ecotourism in Najaf with improved environmental planning and management.

### **Recommendations :**

1. Develop a strategic plan for ecotourism development in Najaf Governorate, leveraging the natural resources identified by 82% of respondents. This will enhance investment in natural sites and rehabilitate them for tourism based on environmental principles.
2. Strengthen the economic role of tourism as a vital local resource, as indicated by 84.4% of respondents.
3. Support small tourism projects to increase job opportunities, as noted by 81% of respondents.
4. Improve the level of services and cleanliness in tourist areas and implement programs to address environmental pollution, which 86% of respondents considered the biggest challenge.
5. Develop waste management systems at tourist sites, as indicated by 83.6% of participants.
6. Improve environmental planning, as requested by 85.6% of respondents.
7. Enhance environmental awareness programs to improve the behavior of visitors and local residents through educational initiatives and the preservation of tourist sites.
8. Adopt a sustainable ecotourism strategy, based on the confirmation by 82.4% that it can be developed further.
9. Enforce environmental laws and regulations to reduce pollution and waste.
10. Adopt environmental sustainability principles in all future tourism development projects.

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