Provide optimal strategies in coastal architecture of Kish island to deal with future environmental consequences

Proporcionando estrategias óptimas en la arquitectura costera de la isla de Kish para hacer frente a futuras consecuencias ambientales

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ABSTRACT

The purpose of this study is to design and explain a prospective model for measuring tourism sustainability in Kish Island. Accordingly, the conceptualization of coastal architecture or tourism, the identification of influential factors and operational strategies for improving the tourism industry, especially on the coastal dimensions of the island, have been considered. Due to the exploratory nature of the research, the strategy used in this research is Grounded theory. The sampling used in this study was theoretical sampling. The main basis for gathering information has been to conduct in-depth interviews with managers and senior experts in coastal tourism to reach theoretical saturation. A total of 13 interviews were conducted. After gathering information, the written interview codes were analyzed. The findings were coded according to the paradigmatic pattern of Strauss and Corbin. Therefore, after performing the three steps of open, axial and selective coding, final modeling was achieved. The model consists of 6 general categories (causal, contextual, interventionist, pivotal, strategies and consequences) and 12 subcategories and 36 semantic concepts and data.

Keywords: Grounded theory, Kish Island, Coastal Architecture (Coastal Tourism)

RESUMEN

El propósito de este estudio es diseñar y explicar un modelo prospectivo para medir la sostenibilidad del turismo en la isla de Kish. En consecuencia, se ha considerado la conceptualización de la arquitectura costera o el turismo, la identificación de factores influyentes y estrategias operativas para mejorar la
industria turística, especialmente en las dimensiones costeras de la isla. Debido a la naturaleza exploratoria de la investigación, la estrategia utilizada en esta investigación es la teoría fundamentada. El muestreo utilizado en este estudio fue un muestreo teórico. La base principal para la recopilación de información ha sido la realización de entrevistas en profundidad con gestores y expertos senior en turismo costero para alcanzar la saturación teórica. Se realizaron un total de 13 entrevistas. Después de recopilar la información, se analizaron los códigos de entrevista escritos. Los hallazgos se codificaron según el patrón paradigmático de Strauss y Corbin. Por lo tanto, luego de realizar los tres pasos de codificación abierta, axial y selectiva, se logró el modelado final. El modelo consta de 6 categorías generales (causal, contextual, intervencionista, fundamental, estrategias y consecuencias) y 12 subcategorías y 36 conceptos y datos semánticos.

**Palabras clave:** Teoría fundamentada, Isla Kish, Arquitectura costera (Turismo costero)

1. **INTRODUCTION**

If environmental sustainability is one of the objectives goals of this era of the tourism industry, then performance measuring and its impact on tourism destinations is also a necessity (Moshabaki and Mojahed, 2019). Sustainable development in an effort to meet the needs of present and future generations, act as short-term profit balancers with environmental sustainability in the long run (Hall & Lew, 1999). Sustainable development is a trend that has existed in human societies for a long time. It has been so influential in the economic, social and cultural development of countries that economists have called it "invisible exports " (Kostas E. Sillignakis, 2010). Tourism is one of the most dynamic economic activities of the modern era, playing an important role in local sustainable development. The industry pursues social, economic, environmental and cultural benefits through combining and using of internal and external resources (Ibrahimzadeh and Aghassizadeh, 2010). Therefore, tourism, when accompanied with planning, improves all indicators of sustainable development including employment, economic development indicators, cultural promotion through cultural exchanges, protection of historical, cultural, natural heritage and environmental protection of communities without having to much investment (Urtasun and Guittierrez, 2006). Without any doubt, Kish Island, due to its natural and ecological position in the Persian Gulf waters as the only coral reef in Iran, having unique natural phenomena and environmental and maritime conditions could be a good platform for the development of tourism and tourism projects. The country's economy plays a significant role, but neglecting these sensitive areas can eventually waste it and reduce investment in the island, so this will require targeted and sustainable planning. (Moshabaki and Mojahed, 2019). There have been numerous studies, researches and reports on environmental issues on the island so far. Also, Saze Pardaz Iran Consulting Engineers (2007) have implemented a project entitled "Master Plan of Kish Island Environment and Beach Management". GNU Consulting Engineers (1994) has also been studying the Kish Island master plan. In an article titled "Measuring the Sustainability of Tourism Development in Kish Island", Boroujeni and Nick Bin (2012) refer to indicators regarding coastal tourism. Nick Bin and Karami (2013), in an article entitled Socio-Cultural Sustainability of Tourism Development in Kish Island, made suggestions for further stabilizing the socio-cultural benefits of tourism development for the island. Hosseinzadeh and Erfanian (2015), in an article entitled "Determining the Capacity of Coastal Tourism in Kish Island", examined the capacity of the board in accordance with the usual international standards and specific political and ideological criteria of Iranian society.

In this regard, the main research questions might be presented as follows:

- What are the factors affecting the quality promotion of sustainable tourism in Kish Island?
- How can these factors be used together to "design a prospective model for measuring the sustainability of Kish Island tourism"?
2. RESEARCH LITERATURE

2-1. Sustainable Tourism and Coastal Tourism

Sustainable development is a type of development that meets the current needs of the present generation without compromising the ability of future generations to meet their needs (WCED, 1987) or a process of change that improves the quality of people's lives while preserving the natural and human resources needed for future generations. (UNCSD, 1999) One of the sustainable development measures is tourism. Today the tourism industry is considered to be the largest and most diverse industry in the world. Many countries regard this industry as part of their main source of income, employment, private sector growth and development and infrastructure development. Out of the ordinary tourist environment takes place and the tourist does not last more than one year and is intended for recreation, trade or other activities (UNWTO, 2013). If considered for tourism, coastal areas and the marine environment, it is called Coastal tourism. (Sarabi, 1999). Coastal tourism requires traveling from a place of residence and focusing on marine environments (Sharpley, 1997).

<table>
<thead>
<tr>
<th>Goals</th>
<th>Dimensions</th>
<th>Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Developing awareness and understanding of tourism cooperation and assistance to the environment</td>
<td>- Environment (natural and handmade)</td>
<td>- Sustainable resource utilization</td>
</tr>
<tr>
<td>- Promote equality and development</td>
<td>- The economic life of host communities and tourism companies</td>
<td>- Reduce wastage of resources and overuse</td>
</tr>
<tr>
<td>- Provide a lean experience to visitors</td>
<td>- Social aspects of tourism (effects on host culture and tourists);</td>
<td>- Maintain diversity</td>
</tr>
<tr>
<td>- Maintaining the quality of the environment (Mason, 2011).</td>
<td>(Swarbrooke, 1998).</td>
<td>- Planning to evolve the tourism industry</td>
</tr>
<tr>
<td>- Maximize the positive effects and minimize the negative effects on the three main dimensions of sustainable tourism(Swarbrooke, 1998).</td>
<td></td>
<td>- Supporting the local economy - Involvement of local communities in administrative tasks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Holding consultations and negotiations between people, officials and investors in the tourism sector</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Training people working in the tourism sector, a credible, reliable and committed tourism market, conducting research related to the tourism sector (Oladi Ghadikla'í, 2003).</td>
</tr>
</tbody>
</table>
Figure 1. Dimensions of Sustainable Development in Tourism, (Swarbrooke, 1998)

Coastal tourism is dependent on nature (climate, landscape, ecosystem) and culture (historical and cultural heritage, art and crafts, traditions, etc.). This includes activities that could only be done in private areas and under special conditions (UNEP, 2009). Coastal tourism based on the combination of unique land and sea resources, amenities such as water, beaches, beautiful scenery and it has a variety of activities, both in the coastal area and in the coastal areas, including the development of tourism capacities (hotels, resorts, second homes, Restaurant, and others) and support infrastructures (ports, docks, localities and diving shops and other facilities). From the perspective of urban planning, tourism development in coastal areas has different economic, social, cultural, physical and environmental impacts and consequently, the tourism environment also receives many impacts from this development (dinari, 2005).

2-2. Scope of Study- Kish Island

Kish Island According to the national divisions, is the center of Kish part of Bandar Lengeh county, with an area of 90.5 square kilometers located 18 kilometers south of Iran (Figure 2). The island, with an area of forty-three kilometers, is almost oval and its highest point is forty-five meters above sea level. In general, the island has a very hot climate - warm temperate, with high relative humidity, low rainfall and tropical air mass spread and dominance for most of the year. The proximity to the Tropic of Cancer, the influence of monsoon flows and the high humidity of air have played a decisive role in building ecological performance and ecology in Kish Island. The winds on Kish Island have an annual order and average speeds are 1.5 m / s in all directions (Hosseinzadeh & Erfanian, 2015).
2-3 Coastal Architecture on Kish Island

Historic and cultural attractions, the island's coral structure, the ability to do water sports all year round, rich underwater life, native vegetation, suitable coastal topography, island position relative to the main body of the island and so on, are the facilities of the island. Given the sensitive ecosystem of Kish Island, any development and proposal for any tourism development project needs to be carefully scrutinized and implemented in an environmental impact assessment process (Nizamand, 1999). Accommodation centers in Kish Island (Hotel and Facilities) have been affected on land use, beauty and attractiveness of landscapes, (Facilities and waste), soil (Erosion and reduction), contamination (water and wastewater) and surface water. Also business centers have been affected on surface waters, beauty and attractiveness of landscapes, soils, environmental pollution, culture and economy of the area. Finally recreational-tourist and sports centers, especially the facilities provided on the beaches, have been affected on land use, surface water and groundwater, beauty and attractiveness of landscapes, Soil, environmental pollution and wildlife in the area. In the present situation, vast lands and numerous patches at the island level, especially in sensitive and fragile coastal areas, have been constructed without any environmental justification. (Heydari, 1999).
3. RESEARCH METHOD

The present study seeks to present a prospective model for measuring tourism sustainability in Kish Island. The purpose of this study is fundamental-applied and it is also classified as non-experimental in terms of data collection. Qualitative research method was used to answer the main research problem and formulate the model. The strategy used in this study, as no basic model for measuring sustainability of tourism in Kish Island, is of the type of "grounded theory". The approach to research questions for a prospective model requires a method that is capable of producing an innovative relationship between concepts and themes in the subject literature. This type of research involves an active, adaptive, and inductive approach to searching for several effective strategies to guide research (Strauss and Corbin, 1990).

This strategy has three characteristics (Figure 3). The first feature is a systematic approach identified by Strauss and Corbin (1998) (open coding, axial coding, selective coding). The second characteristic is also an emerging approach to Glazer's (1992) work (open coding, selective coding, theoretical coding). Finally, the third feature is the constructivist approach advocated by Charmaz (1990) (initial coding, centralized coding, final coding). In this regard, the data are first collected through library studies and interviews with practitioners, and throughout the research process through interactions with data and Evolutionary-developmental analysis, along with continuous comparisons, are necessary steps to achieve the specific theory that have to be taken. In this study, interviews were conducted with 13 managers and senior experts in coastal tourism. All of the points discussed in the interviews were analyzed in a roundabout manner. In this study, data were collected using survey methods, especially in-depth and semi-structured interviews. It has also been instrumental in gathering this information through notes. This research uses a set of pre-designed and relevant research questions to advance the interview and information gathering process. Also, in order to analyze the collected qualitative data, three open, axial, and selective coding steps were carried out to finally provide an objective picture of the obtained theory.

![Figure 3. Early Paradigm Patterns (Strauss & Corbin, 1990) and (Creswell, 2005)](image)

3-1 Statistical population

In qualitative research sampling they are called purposive sampling or theoretical sampling (Creswell, 2007). Here, the researcher intends to select samples that are rich in information according to the expression of the problem and the purpose of the research and help the researcher to identify the factors
that influence the formation of the research model. This will continue until the classification of the collected data is saturated and the theory is accurately explained (Creswell, 2007).

The statistical communities of this research are: managers and senior experts of coastal tourism. The statistical sample of managers is purposely or theoretically selected and the statistical sample of senior coastal tourism experts is selected through snowball sampling. The interviews include the following three areas:
- social - cultural and political;
- economic-productive;
- environmental.

<table>
<thead>
<tr>
<th>Row</th>
<th>Statistical population</th>
<th>number of samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Managers</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Senior Coastal Tourism Experts</td>
<td>10</td>
</tr>
</tbody>
</table>

**4. DATA ANALYSIS**

Data analysis process with Grounded Theory strategy based on analysis of research literature, open coding (creation of concepts and categories), axial coding (axial category identification, causal conditions, intervention and intermediate conditions, context conditions, Strategies, and consequences), and ultimately, selective coding is at the stage of theory creation. This process is consistent with the systematic approach of Strauss and Corbin (1998) in grounded theory theorizing (Creswell, 2005).

**4-1 Open coding**

Open coding is a type of analytical process through which concepts can be identified and further explored in their features and dimensions in data and information (Strauss & Corbin, 1998) and (Lee, 2001). At this stage, the basic categories are derived from the intersection of information. The categories are based on all the data collected, interviews and notes. In fact, the initial encoding of the text is done after several detailed scrutiny of the various parts of the text. At this point, semantic data must be introduced, explained, and named. These data can be words, sentences, or larger portions of a text that can be considered categories. During the open coding phase, all interviews with senior executives and experts were implemented separately and all keywords related to the main research topic were fully recorded and coded. It should be noted that qualitative reliability and validity methods have also been used to assure the coding process by the researcher.

**4-2 Axial Coding**

According to Strauss and Corbin, axial coding is the second stage in the Grounded theory analysis, at which point the main categories derived from open coding relate to each other (Strauss and Corbin, 1998). In fact, there is an intrinsic relationship between the basic categories of open coding at this point. At this stage, all open source code that has been identified and extracted in the first stage is summarized based on the relevance of the main concepts of the research in the form of main axes (contextual, causal, interventionist, axial phenomenon, strategies, consequences). The output of this step is the pivotal codes, their corresponding codes and the number of duplicates. In the process of axial coding, the categories, features and dimensions of open coding are formulated and put into a basic diagram to build on the relationships gained (Lee, 2001). The categories of axial coding are as follows:
4-2-1 Causal conditions:

The categories or conditions that affect the main category lead to the occurrence or development of the phenomenon. In this study, the causal conditions in accordance with Table 3 in economic sectors (including infrastructure development, economic development and employment) and tourism quality (including goods and services and transportation) and eco-system quality (including natural habitat, waste disposal and transportation).

Table 3. Causes and Concepts Related to Causal Conditions (Source: Authors)

<table>
<thead>
<tr>
<th>General category</th>
<th>Subcategory</th>
<th>Basic concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>Infrastructure Development</td>
<td>Build or improve infrastructure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Balanced regional development</td>
</tr>
<tr>
<td></td>
<td>Economic Development</td>
<td>Economics General Health of Host Communities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Access to goods and services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of economic activities compatible with the environmental capacities of coastal areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The increasing impact of tourism on other industries</td>
</tr>
<tr>
<td></td>
<td>Employment</td>
<td>Income generation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employment</td>
</tr>
<tr>
<td>Quality of tourism</td>
<td>goods and services</td>
<td>Quality of tourist attractions</td>
</tr>
<tr>
<td>Quality of tourism</td>
<td>goods and services</td>
<td>Quality of tourism information</td>
</tr>
<tr>
<td>Quality of tourism</td>
<td>goods and services</td>
<td>Quality of tours</td>
</tr>
<tr>
<td>Quality of tourism</td>
<td>goods and services</td>
<td>Quality of accommodation centers</td>
</tr>
<tr>
<td>Quality of tourism</td>
<td>goods and services</td>
<td>Quality of catering units</td>
</tr>
<tr>
<td>Quality of tourism</td>
<td>goods and services</td>
<td>Quality of shopping malls</td>
</tr>
<tr>
<td>Transportation</td>
<td>Transportation</td>
<td>Quality of transport and creation of new transport routes</td>
</tr>
<tr>
<td>Natural habitat</td>
<td>Natural habitat</td>
<td>Damage to the landscape</td>
</tr>
<tr>
<td>Ecosystem quality</td>
<td>Waste disposal</td>
<td>Water quality (in terms of pollution)</td>
</tr>
<tr>
<td>Ecosystem quality</td>
<td>Waste disposal</td>
<td>Prevention of environmental degradation and pollution of coastal areas</td>
</tr>
<tr>
<td>Ecosystem quality</td>
<td>Waste disposal</td>
<td>Conservation and revitalization of coastal and marine ecosystems</td>
</tr>
<tr>
<td>Ecosystem quality</td>
<td>Waste disposal</td>
<td>Damage to rare native biodiversity</td>
</tr>
<tr>
<td>Transportation</td>
<td>Transportation</td>
<td>Performance in the field of wastewater treatment</td>
</tr>
<tr>
<td>Transportation</td>
<td>Transportation</td>
<td>Control of carbon emissions of tourism industry</td>
</tr>
<tr>
<td>Transportation</td>
<td>Transportation</td>
<td>Encourage modes of transport with minimum pollution (such as bicycles, carriages and trails, etc.)</td>
</tr>
<tr>
<td>Transportation</td>
<td>Transportation</td>
<td>Infrastructure and pavement operations (e.g. asphalt, paving)</td>
</tr>
</tbody>
</table>
4-2-2 Pivotal category:

The central issue is the phenomenon that is the Skeleton of the whole process. This category should be abstract enough to relate to other main categories. In this study, the axial category in accordance with Table 4 is observed.

<table>
<thead>
<tr>
<th>General category</th>
<th>Subcategory</th>
<th>Basic concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>The pivotal phenomenon</td>
<td>Assessing the sustainability of tourism in Kish Island</td>
<td>Designing a prospective model for measuring tourism sustainability in Kish Island</td>
</tr>
</tbody>
</table>

4-2-3 Contextual conditions

Contextual conditions imply specific contexts or conditions in which processes and interactions occur to control, respond to, and influence strategies. The context conditions are listed in Table 5 in terms of socio-cultural (including tourism, social structure, participation) and environmental (including plant and animal species, biodiversity and resources).

<table>
<thead>
<tr>
<th>General category</th>
<th>Subcategory</th>
<th>Basic concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio-cultural</td>
<td>Tourism</td>
<td>Tourism facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Native community access to tourism facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consequences of tourism in the island’s cultural heritage and customs</td>
</tr>
<tr>
<td></td>
<td>Social structure</td>
<td>Loss of privacy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Changes in social structures</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social tensions or conflicts</td>
</tr>
<tr>
<td></td>
<td>participation</td>
<td>Creating a framework for public participation in the organization of coastal areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outside field socio-cultural learning opportunities</td>
</tr>
<tr>
<td></td>
<td>plant species</td>
<td>Damage to vegetation</td>
</tr>
<tr>
<td>Environmental</td>
<td>Animal species</td>
<td>The effect of disturbing and anxious behaviors on animals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Changes in the behavioral pattern of animals (getting used to tourists)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Damage to the ecosystem of animals by selling land to various sectors of the tourism industry</td>
</tr>
<tr>
<td></td>
<td>Biodiversity and Resources</td>
<td>Expansion of non-native biological species</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Water Resource Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overall changes in ecosystems as a result</td>
</tr>
</tbody>
</table>
4-2-4 Interventionist conditions

General conditions that affect how processes and strategies are implemented. In fact, conditions that aggravate or weaken phenomena. In this study, the intermediary and interventionist conditions are presented in Table 6 in the political (Including rules control, integrated management, security) and environmental sectors (including noise pollution and environmental pollution).

Table 6. Categories and Concepts Related to Intervention and Intermediate Conditions (Source: Authors)

<table>
<thead>
<tr>
<th>General category</th>
<th>Subcategory</th>
<th>Basic concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political</td>
<td>Rules control</td>
<td>Laws and regulations and control by the public sector</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stimulation and promotion of tourism by the private sector</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coordination between public or private sectors</td>
</tr>
<tr>
<td>Integrated</td>
<td>management</td>
<td>Integration of management and vision of tourism planning and development</td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td>Opportunity for public participation in the decision-making process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public sector tourism management and planning</td>
</tr>
<tr>
<td>Environmental</td>
<td>Noise pollution</td>
<td>Tourist security</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Political stability</td>
</tr>
<tr>
<td></td>
<td>Environmental</td>
<td>Traffic congestion</td>
</tr>
<tr>
<td>pollution</td>
<td></td>
<td>Noise</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Congestion And bustle</td>
</tr>
<tr>
<td></td>
<td>Environmental pollu-</td>
<td>Production of hazardous substances</td>
</tr>
<tr>
<td></td>
<td>tion</td>
<td>Wastewater</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Garbage and wastage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The emission of gas from the transit of tourist vehicles</td>
</tr>
</tbody>
</table>

4-2-5 Strategies

There are certain actions or interactions that are resulted from the central category. Strategies related to the research pattern are presented in accordance with Table 7 in the form of environmental (including education, energy efficiency optimization, resource recycling, human resources, technology, environmental inspection, coastal improvement and waste disposal) and economic (including capital capture measures, Infrastructure and Tourism Development) and Socio-Cultural-Political Development (including strengthening the prevailing cultural structure to attract tourists, Development of culture of participation and political security).
<table>
<thead>
<tr>
<th>General category</th>
<th>Subcategory</th>
<th>Basic concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>Education</td>
<td>Public education about the value of the natural environment</td>
</tr>
<tr>
<td></td>
<td>Energy efficiency</td>
<td>Efficient use of resources (such as water and energy) and coordination between relevant agencies in providing infrastructure services (water, gas, etc.)</td>
</tr>
<tr>
<td></td>
<td>Recycle Resources</td>
<td>Reuse and recycle resources (such as water and energy) and expand native non-native biodiversity</td>
</tr>
<tr>
<td></td>
<td>Communication to the people</td>
<td>Communicate environmental messages to tourist staff and customers for a variety of sustainable uses</td>
</tr>
<tr>
<td></td>
<td>Technology</td>
<td>Applying technology with less damage to natural resources</td>
</tr>
<tr>
<td></td>
<td>Environmental inspection</td>
<td>Conduct environmental inspection on a regular basis</td>
</tr>
<tr>
<td></td>
<td>Improvement of coastal areas</td>
<td>Regulate the way of operation, deployment of activities and construction in coastal areas along with the necessary legal frameworks</td>
</tr>
<tr>
<td></td>
<td>Disposal of contaminating resources</td>
<td>Identification of sources of pollutants in coastal areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Responsible waste disposal is inevitable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expansion of municipal, industrial and agricultural wastewater collection and treatment systems, in accordance with specific standards and standards.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consider the climate to create an adequate surface water disposal system.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Careful in locating tourist facilities to prevent damage to the environment.</td>
</tr>
<tr>
<td>Economic</td>
<td>Measures to attract capital</td>
<td>Attract private sector investors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Establishment of special legal and financial systems in coastal areas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>To guide development activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tax exemptions from legal authorities</td>
</tr>
<tr>
<td>Infrastructure Development</td>
<td>Creating infrastructure facilities for the well-being of citizens</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Providing suitable conditions for the development of transport and infrastructure of the island</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Development of public and infrastructure services at island level</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Tourism Development</td>
<td>Providing the necessary conditions for sustainable economic and social development through proper utilization of the island's capacities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Development of agricultural and rural tourism</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Necessity to study and develop tourist poles through national and regional industry master plan</td>
<td></td>
</tr>
<tr>
<td>Cultural - social - political</td>
<td>Rehabilitation and reconstruction of traditional homes of old locals in the style of coastal and island architecture and adding to the visual appeal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Strengthening the culture of passenger acceptance among indigenous people and institutionalizing it with stakeholders in the public sector with proper education and appropriate incentive policies and then guiding tourism to indigenous areas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Raising the skills and expertise of indigenous people, especially young people, to prepare them for the jobs of the tourism industry and to provide more sustainable services to tourists</td>
<td></td>
</tr>
<tr>
<td>Development of culture of participation</td>
<td>Creating a platform for public participation - indigenous people-tourists</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adoption of Community-Based Tourism Development Policies by the Public Sector (Kish Free Zone Organization) to actively engage the host community in the Kish Island Tourism Development Process</td>
<td></td>
</tr>
<tr>
<td>Political Security</td>
<td>Political stability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tourist security</td>
<td></td>
</tr>
</tbody>
</table>

4-2-6 consequences

Outputs are the result of applying the strategies. The relationships between the categories derived from overlap and interaction of the data show that the model fits in well with the original paradigmatic model of Strauss and Corbin (1990). That is, the pivotal phenomenon, itself is influenced by causal conditions and affects strategies as well. In addition, strategies under the influence of interventionist and contextual conditions lead to the formation of consequences related to the phenomenon. In Table 8, the categories of output implications can be found in the areas of environmental sustainability, economic sustainability, social and cultural sustainability.
Table 8. Outcome categories and concepts (Source: Authors)

<table>
<thead>
<tr>
<th>General category</th>
<th>Subcategory</th>
<th>Basic concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Environmental sustainability</td>
<td>Modification of agricultural, industrial and water consumption processes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development and organization of surface water collection network and improvement of water supply management</td>
</tr>
<tr>
<td>Consequences</td>
<td></td>
<td>Development of urban, industrial and agricultural wastewater collection and treatment systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improved energy use status</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creation of terms and conditions for energy use</td>
</tr>
<tr>
<td></td>
<td>Economic Sustainability</td>
<td>Employment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Attract private sector investors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creating infrastructure facilities for the well-being of citizens</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sustainable socio-economic development through proper exploitation of the island's capacities</td>
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<tr>
<td></td>
<td></td>
<td>Island transportation development and infrastructure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduce administrative bureaucracy in issuing various permits required by the investor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coordinate across levels of management and executive to minimize costs</td>
</tr>
<tr>
<td></td>
<td>Social stability</td>
<td>Increased incentives for the private sector to promote tourism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increasing the amount of tourism facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Native community access to tourism facilities</td>
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<tr>
<td></td>
<td></td>
<td>Coordination between public or private sectors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduce social conflicts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promoting the country's effective role in regional and international cooperation based on national interests</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modifying social structures</td>
</tr>
<tr>
<td></td>
<td>Cultural sustainability</td>
<td>Increase learning opportunities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training tourists and increasing tourist information</td>
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<tr>
<td></td>
<td></td>
<td>Strengthening and developing tourism services in addition to engaging with indigenous customs</td>
</tr>
</tbody>
</table>

4-3 Selective coding (selective-theorizing)

The last part of the data Grounded Theory is selective coding operations. At this point the analyst explicitly selects and focuses on a central category of data as the "core category". That is to say, the central category that other categories are centered on and constitute as a whole is systematically selected.
and associated with the other categories of theory. Selective coding then uses the same methods used in open and axial coding. The paradigm model of this study is based on the Strauss and Corbin paradigm model, as shown in Figure 4.

Figure 4. Paradigm Research Model Based on Strauss and Corbin Theory (Source: Authors)

5. VALIDATION OF GROUNDED THEORY

While some qualitative researchers have argued that the validity and reliability of research data and results have traditionally been related to quantitative approach research (Johnson & Christensen, 2008), the reality is that in qualitative research Reliability and validity of research data and findings are also important issues in the research process (Creswell, 2012). Cases such as researcher sensitivity, coherence of research methodology, adequacy and appropriateness of samples, simultaneous collection and analysis of information can greatly reduce the amount of qualitative research error. In this study, two methods of participant review and review of three non-participating experts (one of the tourism managers and two Senior experts in the field of tourism) would be used in the final section. Content validity ratio (CVR) and content validity index (CVI) would be also used in the validity section. At this process, some data and concepts would be removed or merged with other components due to lower validity. Finally, after receiving corrective comments, the necessary edits would be made and the final model would be presented.

6. DISCUSSION

In this research, in order to design a perspective model to measure the sustainability of tourism on Kish Island, qualitative methodology based on the Grounded Theory strategy has been used. Data were collected and analyzed based on in-depth interviews with managers and senior experts in the field of
coastal tourism based on purposeful (theoretical) sampling. By examining and analyzing the details of interviews and studies conducted in the field of research literature and social, cultural, political, economic and environmental fields of the region, the first stage of coding (open coding) was done and accordingly the Axial coding and finally the selective coding that was formed in the form of research paradigm model. In the field of tourism sustainability on Kish Island, limited research has been conducted with minor approaches. In this study, a comprehensive and holistic model of influential factors along with its consequences was presented, which largely eliminates the shortcomings of the past. Based on the paradigmatic model of research (Figure 3), in addition to causal conditions (consisting of 1. economic category including infrastructure development, economic development, employment, 2. tourism quality category including goods and services, transportation, 3. ecosystem quality category including natural habitat, Disposal of waste and transportation), pivotal phenomenon (measuring the sustainability of tourism on Kish Island), strategies (consisting of 1. environmental issues including education, energy efficiency, resource recycling, communication to individuals, technology, environmental inspection, Improvement of coastal areas, waste disposal, 2. Economic category including capital absorption measures, infrastructure development and tourism development, 3. Community-cultural-political category includes strengthening the dominant cultural structure in order to attract tourists, developing a culture of participation and political security), consequences (including categories of economic, social, cultural and environmental sustainability), contextual conditions (consisting of 1. socio-cultural category Includes tourism, social structure, participation, 2. Environmental category including plant and animal species and biodiversity and resources) and intermediary-interventionist (consisting of 1. political category including control of laws, integrated management, security, 2. category Environmental pollution (noise pollution and environmental pollution) is also considered.

7. CONCLUSION

Tourism industry is one of the high-paying jobs in Iran's contemporary era. In countries where the economy is based on petroleum products and single-product, tourism can be one of the most viable solutions for achieving an economy, given the budget deficit and the lack of capital to build large industries that require high costs. Focus on development. Therefore, tourism development can be considered as a roadmap for the management and guidance of all resources (human, financial, facilities, etc.) so that in addition to meeting the aesthetic needs, it can be used to meet the needs related to cultural, social, political, economic, and environmental scopes also took effective action. Accordingly, tourism can be seen as a viable option to reduce dependence on oil revenues in single-product economies.

Kish Island is one of the most suitable areas for tourism, recreation and economic potential that due to the many attractions in the field of tourism, especially in the areas of historical, human, environmental, natural and various economic dimensions can be infrastructure. Provide a favorable environment for job creation and attraction of domestic and foreign capital so that it can be approached over time with the high goals of sustainable development in the field of tourism. In coastal tourism, with the growth of the tourism industry, the coastal environment has been affected by more variables and unpredictable fluctuations in this process must be borne in mind. Therefore, this requires more vigilance, so that targeted planning along with quantitative growth in this area can lead to qualitative development to attract effective resources in attracting tourists.

8. REFERENCES


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