OVERVIEW OF APPROACHES TO THE RELEASE OF 60-METER FRONTLINE TO CASPIAN SEA VIA THE APPROACH 'USABILITY'(CASE STUDY: FARAHABAD, SARI)

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ABSTRACT
Caspian Sea Coasts have been regarded as the advantages in Mazandaran province. With regard to 468 km coasts in Mazandaran province, it seems that it can provide the opportunity for job creation in coastal tourism industry. Yet, the necessity to implement such an approach lies on proper usability of Caspian Sea Coasts that it has faced problem due to intrusions of water from the Caspian Sea and access by legal and natural persons to parts of coasts. Hence, it requires providing the areas for release of coasts by creation of suitable infrastructures so as to provide the infrastructures for sustainable jobs via the approach 'usability'. Using the approach 'usability', the present research aims to examine approaches to the release of 60-meter frontline to Caspian Sea via the approach 'usability'. The present research has been considered as an applied research type, categorized as a descriptive survey. In this study, statistical population consists of 15 experts and tourists at coastal regions. Due to unlimited statistical population, the statistical formula was used to determine sample size. Hence, the sample size (162) was determined via statistical formula, and the questionnaire at Likert scale was organized to collect data, whereby it was analyzed via descriptive and inferential statistics. Findings indicate that four factors including 1-rules and regulations, 2- management agent, 3-financial agent and 4- cultural/social agent can be effective approaches in the release of 60-meter frontline to Caspian Sea via the approach 'usability'. Further, with regard to usability of Caspian sea, the contributing factors in design of Caspian sea coasts include: 1. The safety of users of the coast and sea, 2. Create attractive place for tourists and travelers, 3. The creation of a permanent marina, 4. Meet leisure needs, 5. Meet Sports and recreational needs.

Keywords: Usability, Release, Marina, Satisfaction

INTRODUCTION
Mazandaran province as one of the most beautiful areas in southern zone (Mazandaran Sea) with beautiful coast due to having a specific geographical location and natural position and enormous potential of tourism such as forest parks, caves, waterfalls, hot mineral waters, international wetlands and so forth, better access than Tehran and central regions of the country by road axes such as Haraz road (Amol-Rudehen, Kandovan road and Firoozkooh road), air connections via international and national airports and rail lines and seaports (Noshahr, Fereidoon'kenar, AmirAbad), neighboring coastal countries (Russia - Azerbaijan - Turkmenistan, Kazakhstan, etc.) as well as having a special position in economy, trade and tourism from the east to the west, enjoying appropriate tourism resources and the construction and operation of residential facilities, represents an appropriate hospitality and leisure with a high capacity for tourism at this province, under which tourism in Mazandaran province can come to realize as the result of sustainable development. Coastal tourism is accounted as one of the rapidest variety of tourism. Coastal cities can exploit from tourism facilities and conditions in line with improvement of economic status (increasing income, employment) and improvement of image of regions, whereby these conditions and facilities can firstly lead to improvement in tourists' mental image and secondly lead to improvement in urban infrastructures (roads, parking lot and residential areas). In addition, awareness from the concept of quality of services and an attempt to improve it have resulted in supply of high-quality services, under which it can witness increasing satisfaction among tourists. On the other hand, today 54% of the world population lives in cities, expecting this figure reaches to 66% by 2050. Despite welfare facilities in urban life, there would be also problems and issues in urban life. Physical and mental
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exhaustion due to urban life restrictions such as staying away from nature, long-term exposure to noise pollution and so forth in low area of residential areas in cities persuade the citizens to travel and tourism for physical and mental retrieval.

With regard to adjacency of Mazandaran with Tehran as the most populated province, it is expected employing a proper planning at coasts of Mazandaran province including 14 km to Farahabad, Sari to develop tourism in this province. On the other hand, tensions and stresses due to the complicatedness in urban life in a long period will result in emotional exhaustion. Hence, displacement for individuals' mental and physical reconstruction plays a major role in removal of emotional exhaustion. Displacement occurs out of cities, because mechanical life in cities, noise and pollution in cities intensify the imposed pressured. This is in a situation that advancement of technology has raised the leisure time for humans and provided the opportunity for new jobs including tourism. With this approach, it requires paying attention to economic aspects in design of outdoor recreation environments so as to provide the areas for sustainable jobs. The release of 60-meter frontline to Caspian Sea to which a particular attention must be paid has been asked by people and authorities. On the other hand, the related works at the area of outdoor recreation environments indicate that just the contributing factors in outdoor recreation environments were taken into account and the users were considered without attention to the diversity of these factors.

Yet, the related works are of a great importance indicating us to which extent extensiveness of contributing factors is in outdoor recreation environments, however, various theories have been represented regarding importance of the contributing factors. On the other hand, coastal regions have been regarded as the most productive and dynamic ecological resources and the area for huge economic and social activities across the world.

Valuable ecological resources, biodiversity and rich reserves of oil and gas have transformed huge economic activities at these regions to one of the most valuable regions worldwide. This study intends to examine approaches to the release of 60-meter frontline to Caspian Sea via the approach 'usability', thus the most important questions include: what are approaches to the release of 60-meter frontline to Caspian Sea?, how it can use the capacities of approaches to the release of 60-meter frontline to Caspian Sea to raise usability of sea coasts?

Hence, the present research aims to examine approaches to the release of 60-meter frontline to Caspian Sea via the approach 'usability', which the research questions include:

- What are approaches to the release of 60-meter frontline to Caspian Sea?
- what are the design approaches to increase satisfaction and usability in recreation sites within Caspian Sea coasts?
- how is the proposed pattern for design of recreation site in Farahabad, Sari?

Theoretical Background

Recreation implies assessment of leisure time to reconstruct and retrieve person's mental and physical status. This term has been originated from release of frustration and involvement in happiness that has been emerged as travel. Recreation has been developed from suffix 're' meant repetition and word 'creation' meant construction and creation, that both represent the person's mental and physical reconstruction to start a new job activity. Recreation has been constantly accounted as an activity to reduce tensions and comfort the spirit, with an inevitable role to comfort natural scenes. Studies indicate that observation of natural scenes in reduction of mental pressures derives from daily frustrations (Chang et al., 2006). Yet, increasing accumulation of urban population, changing the pattern of settlement, a wide range of environmental and social problems in urban areas and substantial share of leisure time in everyday life have been regarded as the factors which represent attention to recreation and planning in urban area as a serious issue[2]. Today, with advancement of knowledge and technology, the man's involvement in environment has increased, under which various problems have emerged in natural resources. Landscape architecture and intelligent design of urban scenes can be a proper solution for this problem, because such a design with an emphasis on natural elements, considers social, economic and environmental problems (Feizi and Azemati, 2009). On the other hand, World Tourism Organization has elaborated the contributing factors in modern tourism in table 1 as follow (Sadiq, 2010).
Table 1: Contributing factors in modern tourism

<table>
<thead>
<tr>
<th>Political changes, legislation and regulations</th>
<th>Financial Development</th>
<th>Social and demographic changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology development</td>
<td>Exogenous factors</td>
<td>Structure of transport</td>
</tr>
<tr>
<td>Security in travel</td>
<td></td>
<td>Business development</td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
<td>Product development in the travel destination</td>
</tr>
<tr>
<td>Computerized reservation system and databases for destinations</td>
<td>Market force</td>
<td>Development of services and suppliers</td>
</tr>
<tr>
<td>Human Resource Development</td>
<td></td>
<td>business structure of Travel</td>
</tr>
</tbody>
</table>

Source: Sedigh, 2010

With regard to the aforementioned components, it requires providing the areas for allocation of resources through integrative management at coastal areas. Integrative management refers to a specific process with dynamic and complicated aims for planning which focuses on the junction of the land and sea and emphasizes some fixed and changing concepts including protection from environment, social and economic aims and participatory management methods for problems resolving, for which it uses strong scientific backgrounds. Integrative management aims to build balance between the benefits from economic development and the man's use from coasts, protection, maintenance and reconstruction of coasts, minimization of financial and safety losses at coasts and acquisition of benefits for access to the coasts.

Climatic and Environmental Features

Farahabad-Sari recreational site has been located in coastal region, with the moderate and humid and temperate features as follows:

Climate Status

Climate studies concerning tourism studies aim to recognize environmental features influenced of climatic features in environment. Climatic features enjoy quantitative and qualitative features, because climate elements in sake of their quantitative and qualitative changes influenced environmental status. Although these effects may be slow and gradual, they can be followed by sustainable outcomes. Influence of geographical agents including latitude, altitude and direction of the roughness, the type of vegetative, proximity to the sea and other factors such as atmospheric centers of action in the Atlantic, Mediterranean, Black Sea, Central Asia, the cold air flows and waves at west has caused on Mazandaran province has raised emergence of climatic conditions and climate variability including temperate climate, such that there will be ice in short period during cold months and light rain will be in summer[5].

Environmental Features

The environment around the man refers to a system with sustainable coordination and balance in its all non-live and biological components, providing the possibility for living for the man. The man, as masterpiece of nature, has influenced the relations governing the nature more than any other organisms in the land and built balance.

As the region under study has been located in a coastal nature identified by the tourists, this has caused a majority of people travel to this region at various seasons especially summer. Arrival of tourists to this region has been followed by negative outcomes from environmental perspective, so that arrival of tourists
has caused release of their wastes in the environment, whereby this provides the area for growing diseases in addition to deteriorating landscape. Further, invasion to arrival of tourists and deterioration of coasts at this region have been regarded as the other environmental problems threatening natural and water ecosystems (Green Consulting Engineers, 2006). Hence, it can reduce negative effect due to arrival of tourists by organizing tourist at the region and disposal of wastes, wastewaters.

On the other hand, protection from environment has been regarded as the key pillar in sustainable development which has been proposed since many decades ago and drawn into attention by the planners in developing countries. This increasing attention has been derived from the man's experience in the last century, extended to the coastal areas. Rapid development of industry, extensive use of resources and biological and non-biological reserves, creation of tourism and industrial zones, expansion of urban areas and human settlements as well as development in industrial and agricultural dimensions have been followed by tangible environmental outcomes in coastal environment.

On the other hand, protection from environment at coastal region requires formulation of Environmental Management Plan (EMP) at these regions, which is dependent on recognition and awareness from chains of ecology, environment, actions and patterns and aims of organizations.

**Type of Research in Sake of Aim and Nature of Method**

The present research has been regarded as an applied research in sake of aim, i.e. the present research intends to design a tourism and recreation unit at Farahabad, Sari through approaches to the release of 60-meter frontline to Caspian Sea.

On the other hand, this research has been categorized as a descriptive survey in sake of nature, attempting to investigate approaches to the release and usability of of 60-meter frontline to Caspian Sea.

**Statistical Population**

Statistical population consists of 15 experts and tourists at coastal regions. Table 2 represents the number of individuals at any executive body.

<table>
<thead>
<tr>
<th>Row</th>
<th>Executive Body</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>governor general of Mazandaran</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Province Roads and Urbanization</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Province regional water</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Cultural Heritage Handicraft and Tourism Organization</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>province Environmental Agency</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Coastal mayors</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>Chairman of Islamic Council of coastal cities</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Sum</td>
<td>15</td>
</tr>
</tbody>
</table>

It should be noted that census was used after collecting data due to limited statistical population.
Research Article

Users of sea coasts (tourist): due to lack of tracking this group of individuals, it requires determining the sample group through sampling and selecting proper sample size via confidence distance. For this purpose, sample size was calculated via pre-test information and formula below.

\[ n = \left( \frac{S \cdot Z^2}{e} \right)^2 \]

\[ Z_{\alpha/2} \]: The considered value in table per confidence coefficient (95%) which is equal to 1.96.

\[ s \]: The standard deviation of the characteristic under study (satisfaction and usability of sea) based on pre-test information.

\[ e \]: Maximum standard error for the characteristic under study based on pre-test information.

After determination of sample size, the individuals were selected via simple random sampling method.

\[ = \frac{0}{0.02} \times \frac{106}{8} \], \[ s = e \]

\[ = 162 \left( \frac{13/9\times1/96}{0.02\times106/8} \right)^2 = n \]

Data Collection Instruments

- Note taking: library study was used and note taking was formulated via books, databases and research questions.

- Researcher-made closed-ended questionnaire: to identify approaches to the release of 60-meter frontline to Caspian Sea, a questionnaire consisting of 18 items in form of four factors including 1-rules and regulations, 2-management agent, 3-financial agent and 4-cultural/social agent was determined.

Then, to measure each of approaches, some indicators were organized in measurement instruments in Likert scale and given to the experts.

Further, to design a tourism and recreation unit, 22 indicators were organized in second questionnaire in Likert scale and distributed among the individuals in sample group.

Validity and Reliability of Measurement Instruments

Validity

Validity implies that the scale and content of instruments or the questions in the instruments measure the variables and subject under study, that is, the data collected through instruments do not exceed the research need and a part of required data associated to the measurement of variables had not been removed from the content of instruments; in other words, it represents the reality (Hafez, 2005).

For this purpose, firstly library studies have been conducted.

Then, questionnaires 1 & 2 were organized in Likert scale and given to supervisor and experts.

They evaluated face validity of measurement instruments after studying the content and announced their views, whereby the face validity was confirmed followed by modifying the measurement instruments.

Reliability

Reliability which refers to validity, accuracy and trust implies that if a measurement instrument which is developed for measurement of a variable and characteristic is used under the same conditions in other time or place, it will represent the same results. In other words, reliable instruments refer to those instruments which enjoy the measurement of the same results (Hafez, 2005).

For this purpose, 15 questionnaires (1) and 33 questionnaires (2) were given to the statistical population. Then, Cronbach's alpha coefficient was calculated for the measurement instruments.

Table 3 represents the calculations for Cronbach's alpha.
Research Article

Table 3: Results of Cronbach's alpha

<table>
<thead>
<tr>
<th>Row</th>
<th>Questionnaire</th>
<th>Result First stage</th>
<th>Second stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>no 1</td>
<td>0 / 652</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>no 2</td>
<td>0 / 888</td>
<td>0 / 867</td>
</tr>
</tbody>
</table>

Results of Cronbach’s Alpha Indicate that Measurement Instruments Enjoy a High Internal Consistency.

Statistical Methods for data Analysis

Two statistical methods including descriptive and inferential statistics were used to analyze data. Concerning descriptive statistics, the statistical data were analyzed via frequency tables and percents, mean, variance and standard deviation, and then Binomial test was used to generalized data to the statistical population and Friedman test was used to rank variables.

MATERIALS AND METHODS

Findings of Research

- The first question of research: what are approaches to the release of 60-meter frontline to Caspian Sea? Findings from library studies and experts' view indicate that four factors including 1-rules and regulations, 2-management agent, 3-financial agent and 4-cultural/social agent can be effective approaches in the release of 60-meter frontline to Caspian Sea via the approach 'usability'.

Rules and Regulations

Table 4 represents role of rules and regulations as one of approaches in the release of 60-meter frontline to Caspian Sea via the approach 'usability'.

Table 4: Frequency distribution of rules and regulations

<table>
<thead>
<tr>
<th>Items</th>
<th>Frequency</th>
<th>Frequency percent</th>
<th>Cumulative frequency percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low</td>
<td>2</td>
<td>13 / 3</td>
<td>13 / 3</td>
</tr>
<tr>
<td>Low</td>
<td>1</td>
<td>6 / 7</td>
<td>20</td>
</tr>
<tr>
<td>Average</td>
<td>6</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>High</td>
<td>6</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td>Very high</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sum</td>
<td>15</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

With regard to the mean calculated for rules and regulations (3.06) which is greater than 3, it can deduce that rules and regulations affect the release of 60-meter frontline to Caspian Sea via the approach 'usability' with the influence of 40%.

Management Agent

Table 5 represents role of management agent as one of approaches in the release of 60-meter frontline to Caspian Sea via the approach 'usability'.

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Table 5: Frequency distribution of management agent

<table>
<thead>
<tr>
<th>Items</th>
<th>Frequency</th>
<th>Frequency percent</th>
<th>Cumulative frequency percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Low</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Average</td>
<td>3</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>High</td>
<td>9</td>
<td>60</td>
<td>80</td>
</tr>
<tr>
<td>Very high</td>
<td>3</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Sum</td>
<td>15</td>
<td>100</td>
<td>-</td>
</tr>
</tbody>
</table>

With regard to the mean calculated for management agent (4) which is greater than 3, it can deduce that management agent affects the release of 60-meter frontline to Caspian Sea via the approach 'usability' with the influence of 80%.

Financial Agent
Table 6 represents role of financial agent as one of approaches in the release of 60-meter frontline to Caspian Sea via the approach 'usability'.

Table 6: Frequency distribution of management agent

<table>
<thead>
<tr>
<th>Items</th>
<th>Frequency</th>
<th>Frequency percent</th>
<th>Cumulative frequency percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low</td>
<td>7</td>
<td>6/7</td>
<td>6/7</td>
</tr>
<tr>
<td>Low</td>
<td>1</td>
<td>6/7</td>
<td>6/7</td>
</tr>
<tr>
<td>Average</td>
<td>2</td>
<td>13/3</td>
<td>20</td>
</tr>
<tr>
<td>High</td>
<td>6</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Very high</td>
<td>6</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td>Sum</td>
<td>15</td>
<td>100</td>
<td>-</td>
</tr>
</tbody>
</table>

With regard to the mean calculated for financial agent (4.13) which is greater than 3, it can deduce that financial agent affects the release of 60-meter frontline to Caspian Sea via the approach 'usability' with the influence of 80%.

Cultural/Social Agent
Table 7 represents role of cultural/social agent as one of approaches in the release of 60-meter frontline to Caspian Sea via the approach 'usability'.

Table 7: Frequency distribution of cultural/social agent

<table>
<thead>
<tr>
<th>Items</th>
<th>Frequency</th>
<th>Frequency percent</th>
<th>Cumulative frequency percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very low</td>
<td>1</td>
<td>6/7</td>
<td>6/7</td>
</tr>
<tr>
<td>Low</td>
<td>3</td>
<td>20</td>
<td>26/7</td>
</tr>
<tr>
<td>Average</td>
<td>5</td>
<td>33/3</td>
<td>60</td>
</tr>
<tr>
<td>High</td>
<td>5</td>
<td>33 / 3</td>
<td>93 / 3</td>
</tr>
<tr>
<td>Very high</td>
<td>1</td>
<td>6 / 7</td>
<td>100</td>
</tr>
<tr>
<td>Sum</td>
<td>15</td>
<td>100</td>
<td>-</td>
</tr>
</tbody>
</table>

With regard to the mean calculated for financial agent (3.13) which is greater than 3, it can deduce that financial agent affects the release of 60-meter frontline to Caspian Sea via the approach 'usability' with the influence of 40%.

-what are the design approaches to increase satisfaction and usability in recreation sites within Caspian sea coasts?
To identify the approaches of design to increase satisfaction and usability in recreation sites at coasts of Mazandaran, 22 questions were organized in measurement instruments, that were defined and categorized in SPSS after receiving the respondents’ data. To generalize data, needing to performing statistical tests was required, for which firstly data distribution in sake of normality was examined. Then, findings of Kolmogorov-Smirnov test indicated have indicated that significance value calculated in test above (sig=0.000) is under 0.05 for all the research variables, thus it can reject $H_0$ and say that data distribution is not normal. Hence, it can use Binomial and Friedman test. Table below represents results of binomial test.

<table>
<thead>
<tr>
<th>Row</th>
<th>Item</th>
<th>Error level(5%)</th>
<th>Sig</th>
<th>Result of $H_0$</th>
<th>Confirm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Saviors of life</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sand-Coated Coast</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>security guards and police</td>
<td>*</td>
<td>0 / 0 1 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Receive entry-pay</td>
<td>*</td>
<td>0 / 12 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Develop Canopies and Awnings</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Develop a space for parking lot</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>A variety of entertainment complexes</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Alarming signs</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Transparency of sea water and seeing depth of sea</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Green space</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>marine and water park games</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Use of standard and local materials at the pedestrians</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Regulating constructions</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Provide easy access to coastal and recreational facilities</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>The pristine nature of the sea and the silence at the sea</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Enclosing space</td>
<td>*</td>
<td>0 / 0 0 sig=</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>
As observed in table above, it can observe that except for receiving tourists’ pay entry, rest of variables enjoy significance value under 0.05, indicating influence of the aforementioned factors in satisfaction and usability of sea in point of view of respondents.

On the other hand, with regard to Friedman test, ranking the contributing factors in satisfaction and usability of sea is as follow:

1 - Environmental requirements
2. Green space along the coast
3. The pristine nature of the sea and the silence away from the populations and crowds
4. regulating construction in the coastal areas of the Caspian Sea
5. Transparency of seawater and see the sea bed and depth
6. The provision of easy access to recreational facilities at coasts
7 - marine and water park games
8. formation of marine tourism and The relationship between the recreational and coastal sites
9. Parking space at coasts
10. The use of lightweight and local materials well suited with safety standards
11 warning signs at coasts
Research Article

12. moving paths with sands at coasts
13. enclosing The space beside the green space next to coast for seating
14. saviors of life on the coasts of the Caspian Sea
15. Create pavilions and tents on the coasts
16. creation of the independent offshore plans separately for ladies and gentlemen
17 - variety of entertainment on the coasts of the Caspian Sea
18. Creating outdoor pool on the coasts of the Caspian Sea
19. The assembly hall to hold cheerful celebrations
20 - presence by guards and police on the coasts of the Caspian Sea
21 – receive pay entry for providing high-quality services on the coasts of the Caspian Sea

Further, with regard to inequality of meeting the leisure needs, meeting Sports and leisure needs, Create an attractive place for tourists and travelers, safety of users of the coasts of the Caspian Sea and The formation of a permanent marina, results of Friedman test in design of coasts will be as follow:

-Safety of users of the coasts of the Caspian Sea
-Create an attractive place for tourists and travelers
-The formation of a permanent marina
-Meet the needs of leisure
- Meet the Sports and leisure needs

Suggestions and Approaches

The First Finding: Effect of environmental requirements on usability of recreational sites at the coasts on Caspian Sea within Mazandaran province

As the environmental requirements affect usability of recreational sites at the coasts on Caspian Sea within Mazandaran province, the approaches below are recommended:
First approach: Organizing health construction to conduct the principles of wastes and effluents at the space far from the coasts on Caspian Sea
Second Approach: Use of the materials consistent with climatic conditions
Third approach: use of concepts of sustainable architecture in design
Fourth Approach: Installing rubbish bin at the recreational spaces and sites

The Second Finding: Building green space at the coasts

Since the relationship between man and nature is in line with taking actions to protect the nature. Indeed, the relationship between man and nature associates to design of vegetation which can increase safety and usability of coastal marina. Hence, it is suggested performing the approaches as follows:
First approach: using single trees
Second approach: using tall plants that their crown is seen at the height above the vision
Third approach: using plant shrubs and hedges at cozy spaces
Fourth approach: using beautiful flowers

Third Finding: To use silence in a pristine nature, it is suggested considering the approaches below:
First approach: using local materials such as wood and stone
Second approach: using horizontal elements in design of landscapes
Third approach: using wooden structures
Fourth approach: using beautiful landscapes with specific elements

Fourth Finding: To use coasts on Caspian Sea and regulate the constructions, it is suggested considering the approaches below:
First approach: Using exact, continuous and technical mechanism and supervision of construction
Second approach: Create a unique typology for the constructions nearby sea
Third approach: Using state's macro policies properly and efficiently to have a full vision to the sea from the main street

Fifth Finding: Transparency of seawater and seeing the sea bed and its depth
As the seabed is a contributing factor in usability of recreational and coastal sites nearby Caspian sea, it is suggested to design the platforms at the middle of water to see the water bed so as to build a relationship between the addressee and nature, so that no damage occurs at the water bed. Further, it is suggested conducting the approaches below:

First Approach: Setting suspended particulate separator filters on the sea surface

Second approach: Embed glass spaces in deep sea sites and display the deep sea creatures at the depth of water

**Sixth Finding:** Provide the easy access to the facilities at coast on Caspian Sea

Since the most important executive approach at each region lies on communications between the spaces, thus it requires considering some facilities for easy access to the marine facilities. In this regard, it is suggested performing the approaches below:

First Approach: using local materials such as wood and stone

Second Approach: Beautiful entrance with broadband in order not to face problem during traffic

Third Approach: Reaching to all the areas of the site at the lowest possible time

Fourth Approach: Design a direct path

**Seventh Finding:** Recreational and marine games

Setting marine games and water-park is a way to attract tourists and use the coasts on Caspian Sea, for which observance of safety points and implementation of them are required. Hence, it is suggested performing the approaches below:

First Approach: Improve sense of safety

Second Approach: Easy access to reach to a complex

Third Approach: Being close to a parking lot

Fourth Approach: Not being at the blind spots around site

**Eighth Finding:** Formation of marine tourism and the connection between coastal and recreational site

As settlement of places is in a direct relationship with attraction of tourists and coast, thus it is suggested considering recreational attraction at the coasts on Caspian Sea in order to develop marine tourism.

First Approach: Tourism sites must be considered at the areas to display the vision horizon to Fanous port and ship at the water and specific elements at the sea

Second Approach: Boats' movement at water, that Jet Ski can be a stimulant to attract the tourists

Third Approach: Conduct seawater to the coast and develop island or specific pools to develop a proper place for family swimming and display an attractive scene

Fourth Approach: Design and embed a permanent and temporary exhibition for the fisheries and aquaculture nearby the coast

Fifth Approach: Design and embed the platforms to lend Jet Ski and boat

Sixth Approach: Consider the sites to lend ferryboat from the site to the surrounding ports

**Ninth Finding:** Creation of parking space at the coasts on Caspian Sea

The most important reason for traffic in case of growing population lies of lacking a suitable parking and easy access to parking. For this purpose, it is suggested conducting the approaches as follows:

First Approach: Suitable use of site area and transfer of vehicles to the parking lot

Second approach: suitable use of the number of vehicles that are supposed to be inside the parking

Third Approach: Consider entry and exit in the parking and enclose them among the green space

Fourth Approach: Consider several parking lots at different points of the sites

Fifth approach: avoidance from growing the number of vehicles and traffic

Sixth Approach: considering the space for parking lot nearby the entry of site

**Tenth Finding:** Use of standard and local materials

For Selection of proper materials and their separation and suitable color, the approaches below are considered:

First Approach: Sense of safety due to proper materials
Second Approach: Use of climatic materials at each region concerning the high moisture at the region
Third Approach: Use of specific sand at the moving path
Fourth Approach: Use of dark color in flooring
Fifth Approach: Separation of various functional areas through flooring
Sixth approach: use of opaque materials for flowing to avoid reflection of solar radiation
Seventh Approach: Flooring without pores at pedestrians
 Eighth Approach: Use of soft edges
Ninth Approach: Use of wood for seating sites
Tenth Approach: Use of the materials on which sea weed does not grow

Eleventh Finding: Warning signs on coasts
To increase sense of safety and attract tourism and use the coasts on Caspian Sea, it requires installing the signs. Hence, it is suggested to consider the following points:

First Approach: Use of audio or video symptoms which have educational aspects.
Second approach: Use of graphical elements which are alarming and displaying the artwork.
Third Approach: Use of advertising billboards which separate the space for swimming of men and women
Fourth Approach: Separation of the space for swimming at the disaster-prone areas

Twelfth Finding: Moving paths with the sands moving on the coast
Since the sands on the costs increase the sense of safety, thus it is suggested considering the approaches below:
First Approach: Placing sand on the coasts
Second Approach: Considering the places to seat on the sands

Thirteenth Finding: Enclosing the space nearby the green space at the coast for seating
As enclosing the site by the green space results in improvement of sense of safety, it is suggested performing the approaches as follow:
First Approach: Creation of green barriers against annoying noise out of the site
Second approach: build a visual barrier and provide a way to be deprived to see the site

Third Approach: Build sense of place
The Fourteenth Finding: Saviors of life
Presence of saviors causes increasing sense of safety at swimming zone. As the result this approach will increase usability in this site. For this purpose, it is suggested allocating a suitable place at the middle of swimming space especially at the end of swimming area.

The Fifteenth Finding: Creating pergola and canopy
With regard to the climatic conditions at the region and climatic diversity, it is suggested conducting the approaches below:

First Approach: Use indoor porches in moving path via traditional elements
Second Approach: Considering a space for dining for travelers
Third Approach: Meet the travelers' needs
Fourth Approach: Avoiding environmental degradation
Fifth Approach: Use open and closed umbrellas in a traditional way to exploit from sun and avoidance of rainy

Sixteenth Finding: Establish an independent marine pans separately for ladies and gentlemen
With regard to the cultural conditions prevailing in the community, it requires developing the facilities concerning the marine plans separately for men and women. Hence, it is suggested considering the factors below in design of the site.
First Approach: Passengers' use without any boundaries for the two groups
Second Approach: Ensuring the privacy of the families
Third Approach: Sense of place in the passengers.

Seventeenth Finding: Hosting complexes
The issue of nutrition for the travelers with different cultures has been regarded as a key point at any rest space, for which hosting complexes must be taken into account, thus it is suggested:

First Approach: Food stalls for local and traditional foods with different tastes
Second Approach: Security of users in food stalls
Third approach: observing hygienic points in foods and services

The Eighteenth Finding: Establish outdoor pool
As the outdoor pool has a huge usage in three months of summer, it is suggested:
First Approach: Improve sense of safety
Second Approach: provide privacy for the travelers
Third Approach: Observing hygienic points

Nineteenth Finding: Establish community halls

Holding cheerful ceremonies is a point to attract tourism which can result in welcoming by people. Hence, it is suggested:
First Approach: Develop a proper infrastructure for use of travelers
Second Approach: Making motivation in the singers to perform the ceremonies
Third Approach: Develop entry and exist space
Fourth Approach: Develop a proper acoustic space
Fifth Approach: Avoid environmental deterioration after ending the hosting

Twentieth Finding: Presence of guards

Presence of guards and polices causes building sense of security for the families and users, thus it is suggested:
First Approach: employing the trained individuals in young age group with specific clothes well suited to the coast and sea raises social, cultural and moral security at coasts
Second approach: using Closed-circuit television (CCTV) cameras

CONCLUSION

With regard to the findings, it can indicate that four factors including 1-rules and regulations, 2-management agent, 3-financial agent and 4-cultural/social agent can be effective approaches in the release of 60-meter frontline to Caspian Sea via the approach 'usability', so that the indicators associated to rules and regulations indicated that monitoring and amending laws and regulations as well as heavy duty levied on constructions around Caspian Sea can be effective approaches in the release of 60-meter frontline to Caspian Sea via the approach 'usability'.

On the other hand, the indicators associated to management agent indicated that integration of decisions by state institutions and integrated management can be effective approaches in the release of 60-meter frontline to Caspian Sea via the approach 'usability'.

This is in a way that agreement with the owners of coastal lands, change in land use out of bounds, and military and police cooperation can be effective approaches in the release of 60-meter frontline to Caspian Sea via the approach 'usability' concerning management agent. Further, findings of research indicate that
funding from national and provincial funds, investment by the private sector, funded through internal and external debts can be effective approaches in the release of 60-meter frontline to Caspian Sea via the approach 'usability'.

Further, with regard to influence of socio-cultural agent in the release of 60-meter frontline to Caspian Sea via the approach 'usability', it can say that use of experiences by international organizations and their participation in projects and advertisements through mass media concerning negative environmental outcomes and notification to people concerning progressive hazard at sea and employing non-governmental association can be regarded as the effective approaches in the release of 60-meter frontline to Caspian Sea via the approach 'usability'.

On the other hand, findings of research indicated that The pristine nature of the sea and the silence at the sea, green space nearby coast, environmental requirements, regulating constructions at coastal areas nearby Caspian sea have had the highest effect on usability of sea.

Yet, the factors including receiving entry-pay for providing high-quality services at the coasts on Caspian sea, presence of guards and polices at the coasts on Caspian sea, community halls to hold cheerful ceremonies, develop outdoor pools at the coasts on sea and hosting complexes at the coasts have had the lowest effect on usability of sea.

REFERENCES


Sadiq M (2010). Developing criteria for the design of coastal recreational sites based on promoting usability. Doctoral thesis from the faculty of architecture and urbanization, Iran University of Science


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