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LANDSCAPING POTENTIAL FOR DEVELOPING ECOTOURISM IN THE EASTERN PART OF LAKE ALAKOL: ATTITUDES AS WELL AS INTENTIONS OF GUESTHOUSE OWNERS (MANAGERS) IN THE ECOLOGICAL ADVANCEMENT OF THE DESTINATION

Gulnur RAKHIMZHANOVA [1], Kamshat MUSSINA [1*]

[1] L.N. Gumilyov Eurasian National University, Department of Tourism, Astana, Kazakhstan, gukakumarovna@gmail.com (G.R.); mussina_kp@enu.kz (K.M.)

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Abstract: This study focuses on assessing the water balance along the Tasty River in the eastern part of Lake Alakol. The research area represents a geographically significant zone with potential for ecological and economic development. Particular attention is given to the hydrological characteristics of the river system and its surrounding landscape. The study aims to evaluate water availability and its suitability for vegetation growth and land-use planning. Remote sensing data were applied to ensure spatial accuracy and analytical consistency. Specifically, satellite imagery from Landsat 9 was utilized for environmental assessment. The data were processed using specialized software, including QGIS, SNAP, and Google Earth. An optimal combination of spectral bands, particularly the thermal channel SWIR1, was applied to enhance feature detection. This approach enabled the identification of colder spectral responses corresponding to water bodies. As a result, the water surface of the Tasty River was clearly delineated. In addition, the spatial extent of the associated alluvial fan was determined to be approximately 100 km². The analysis demonstrates that the study area possesses a sufficient water balance to support planting activities. This includes the cultivation and breeding of tree seedlings under suitable environmental conditions. The findings also highlight the presence of favorable conditions for landscape development. In this context, the area shows significant potential for ecotourism development. Furthermore, a field-based survey was conducted to complement the geospatial analysis. The survey results indicate a positive relationship between environmental awareness and ecological outcomes. A moderate regression coefficient (0.5) suggests that increasing awareness among guesthouse owners contributes to environmental improvement. This relationship underscores the importance of community engagement in sustainable development. Overall, the study identifies key opportunities for ecological restoration and greening initiatives. It also emphasizes the role of integrated environmental management in strengthening local resilience.

Keywords: Lake Alakol, water balance, environmental awareness, availability of green area, landscaping, ecological advancement, sustainable development of destination

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INTRODUCTION

The article describes the eastern part of Lake Alakol (hereinafter– The Destination), located in the Abay region of Kazahstan. Alakol has remarkable underground water sources, comprising ground and artesian waters originating from mountainous areas and river basins (Figure 1).

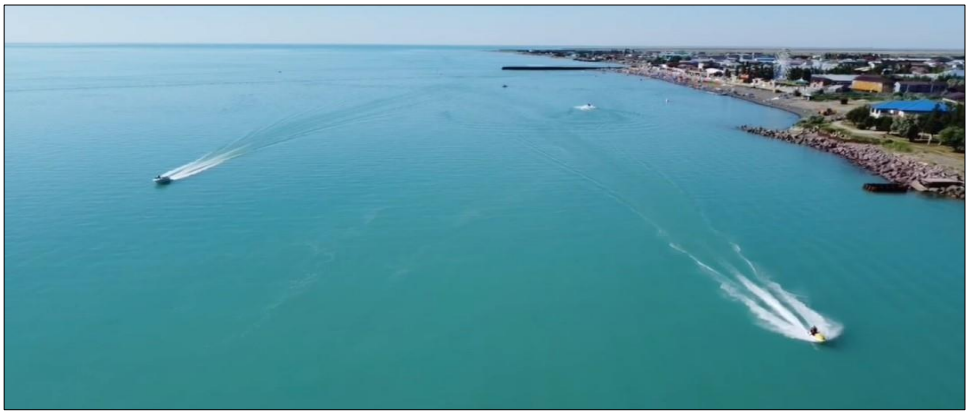

Figure 1. Coastal area - Alakol lake (eastern part), captured by the authors, Drone DJI Mini 2, June 22, 2023

Corresponding author

Lake Alakol is one of the largest hydrologically closed lakes within the Balkash-Alakol Basin. According to Freshwater Ecoregions of the World the Balkash-Alakol Basin are xeric freshwaters and endorheic (closed) basins, belongs to the ecoregion 624. And the climate of the lake area is sharply continental in the semi-desert zone of East Kazakhstan (Jiyenbekov et al., 2019). We can underline the research work of Mukaev et al. (2020), where was described that the most appropriate for tourism and recreation, are intermontane lake–alluvial plains adjacent to the lake Alakol and it is relating to the favorable areas, which have major functional variety of recreational activities. There is recreational potential for the development of therapeutic, recreational and sports activities due to favorable climatic conditions. Nowadays, in the area of the Destination is mainly developed the construction of guest houses and hotels (Figure 2). There are 208 accommodation facilities and in comparison, 2023 the number facilities were decreased to 5, 45 % (Number of accommodation places in resort areas, Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan). The only small artificially made park is located near the center of Kabanbay village. And there are *Elaeagnus* trees (Figure 3) which can be seen, also singularly, on the seacoast. The Destination is sparsely greened, it needs to be landscaped. During the past decade, recreational areas and agricultural lands have been intensively developed in the Alakol lakes basin. This impact is being influenced by anthropogenic load, and there is pollution of the Alakol lakes with heavy metals. Also, the Destination has faced significant climat and anthropogenic impacts in recent decades, extensive flooding, a coastal system marked by ongoing surface transformations and unstable environmental conditions (Valeyev et al., 2019; Mamilov et al., 2021; Seitova et al., 2023). Moreover, the Destination experiences strong winds during the autumn-spring period, leading to soil erosion. Moreover, tourists swimming in the lake during the summer are prone to severe sunburn due to the lack of green spaces. Consequently, the main services offered to tourists in the Destination are primarily Aquatic Ecosystem services, with a lack of alternative Ecosystem services, including Forest Ecosystem services.

Figure 2. Infrastructure of the Destination, captured by Drone DJI Mini 2, June 26, 2023 (Source: compiled by authors)

Figure 3. Tree - Elaeagnus (Elaeagnaceae family), June 22, 2023 (Source: compiled by authors)

Additionally, the agricultural ecosystem is managed without considering the ecological and geomorphological characteristics, resulting in annual economic losses and social tension among the local population. Sustainable development and environmental condition of each destination has an overall impact on the development of the country's tourism industry. Further, over the last four years, the contribution of tourism in the economic structure has decreased from 3.7% to 3.2%. This is almost 3 times lower than the world average. Moreover, by this indicator we are inferior to neighboring countries with similar climate and cultural heritage. It is obvious that immediate systemic measures are required for a qualitative advance in the development of the tourism industry (Tokayev, 2023). Sustainable development in eco-tourism relies on ecological risk mitigation and destination quality, integrating key dimensions such as safety, authenticity, and environmental management. Ensuring ecosystem health, particularly in sensitive landscapes, supports ecological advancement and balanced landscaping practices. Effective strategies include community engagement, high quality services, and environmental protection, while technology serves as a critical driver for addressing environmental challenges. Additionally, strategic resource allocation and

biodiversity conservation approaches contribute to long-term sustainability, linking eco-tourism development with broader ecological and socio-economic progress (Mason et al., 2023; Shams et al., 2023; Wei et al., 2024; Habibulloev et al., 2024; Yuxi et al., 2024; Wang et al., 2025; Nizamiev et al., 2025; Vargova & Matusikova, 2025).

METHODOLOGY AND TOOLS

Methods used: Combination the Satellite Landsat 9 (displaying colors for recognition by the human eye). In order to describe the polygon of interest, there were used downloaded images of Satellite Landsat 9 dated from May 15, 2022 from the Earth explorer.usgs.gov source (The Earth explorer). Task for carrying out: Showing on the territory of the Destination the riverbed of the Tasty River (Alluvial fans) as well as the absence of FES. Used Software: QGIS 3.28.2 (hereinafter-QGIS), SNAP, Google Earth. Performed work: For unpacking the Satellite Landsat 9 archive, we create folders with Landsat 9 imagery bands on the QGIS open access software. We have load the channels B2, B3, B4 into QGIS, then by using the "Raster-Others-Merge Result" panel, we combined three channels with the sequence "Red channel 3, Green channel 2, Blue channel 1", in addition, during digitizing in the parameters we indicated at least - 5000, maximum - 10,000. The selected image itself had been chosen as a "Multichannel color" (Figure. 4). According to the obtained mask, in blue color we review Alakol Lake, in light green color are displayed the Alluvial fans and the coverage of the Tasty River (Figure 5). By combination of channels B2, B3, B4, we have noticed pastures for grazing, fields and the absence of Forest cover.

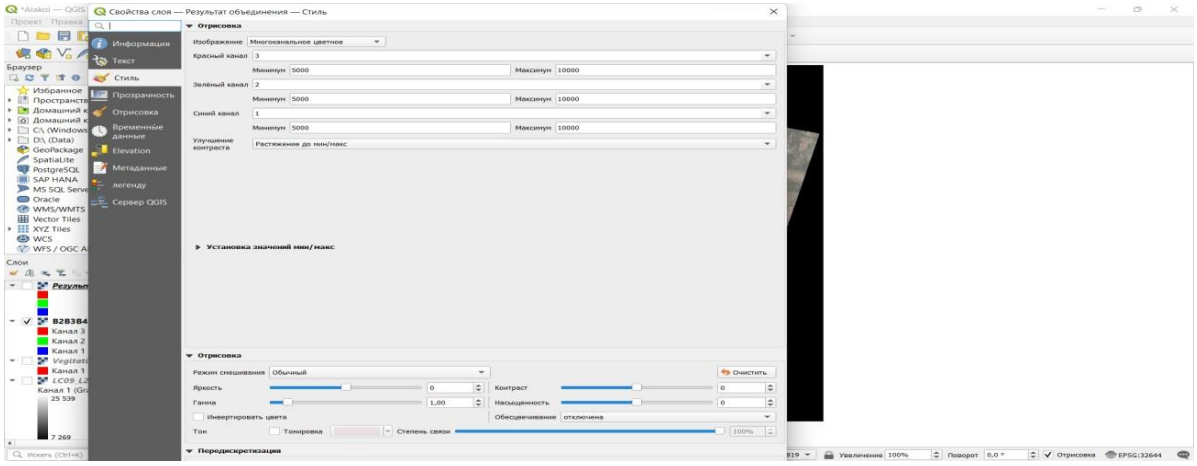

Figure 4. Combination of the channels B2, B3, B4 (Landsat 9) on the QGIS (Source: compiled by authors)

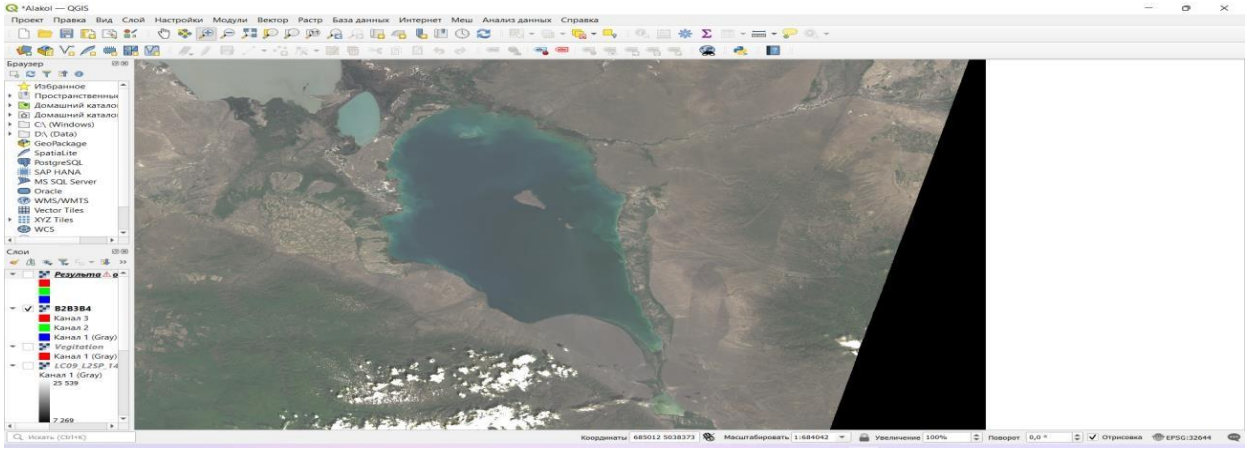

Figure 5. Displaying channel bonding B2, B3, B4 (Landsat 9) in natural colors RGB on the QGIS (Source: compiled by authors)

Moreover, we continued to combine raster layers. We are interested in channels B2 (cold blue channel) and B6 (warm channel). The channels had been loaded into the QGIS by selecting the operation "Layer - Add raster layer" and from the created folder with the channels of Landsat 9 images we selected the channels B2 and B6. Conducting work with creating masks by using the "Raster Calculator" panel. We applied thermal B6 channel on the blue background B2.

Following formulas was used for combining layers: NDVI (index) = (RED-NIR) / (RED + NIR)

Water (index) = (Blue- SWIR 1) / (Blue+SWIR 1) During digitizing was selected "Single-channel color".

In order to obtain the best combination based on the thermal channel, we showed the cold channel. Therefore, a water body (cold channel) the Tasty River is displayed, a composition of natural colors is displayed. Vegetation masks are formed due to the field of vegetation coverage - a warm zone, a blue cold zone and finally getting colors that the human eye can distinguish.

On the background of dry soil cover, the Tasty River has a wetted environment, so moisture absorbs heat, therefore, relief areas that do not have a river network are heated more strongly. The combination of the SWIR1 thermal channel and the cold blue channel depicts the river system and the area of the alluvial fan of the Tasty River (Figure 6).

Further, to measure the area of stream bed of the Tasty river and the area of the Alluvial fans, it was used the radar image Satellite the Sentinel-1A from the resource of the European Space Agency Copernicus Open Hub (Copernicus Open Access Hub). The snapshot below GRDH_1SDV_20221204T122734_20221204T122759_046182_058778_1953, georeferenced L2 level, was processed on the SNAP open access software, dated from April 12, 2022 (Figure 7).

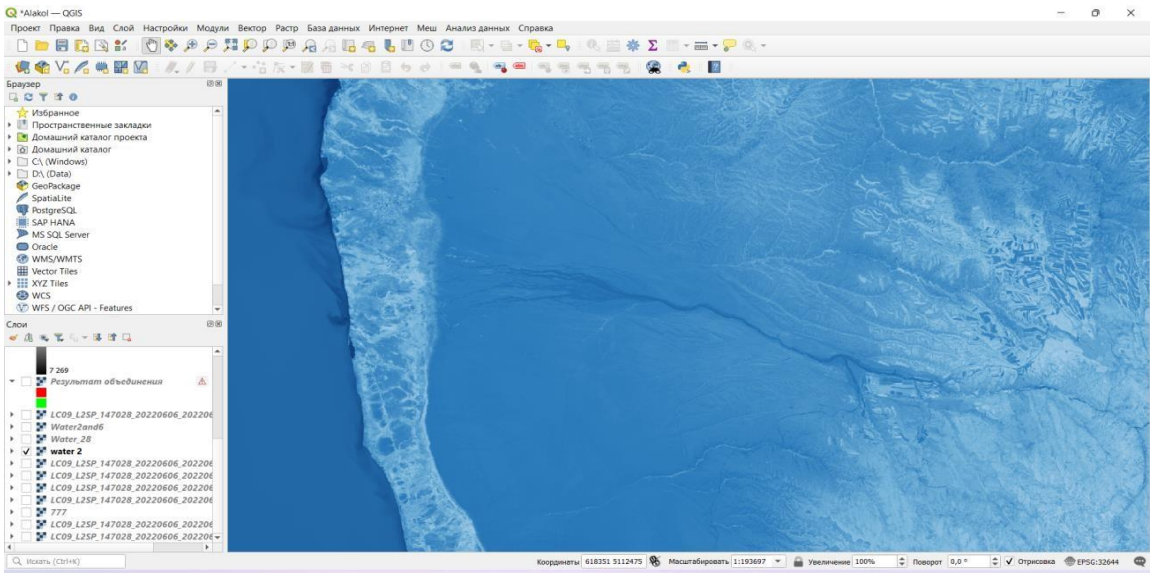

Figure 6. Combination of the channels blue B2 and extreme thermal SWIR 1 (Data SC Landsat 9) on the QGIS (Source: compiled by authors)

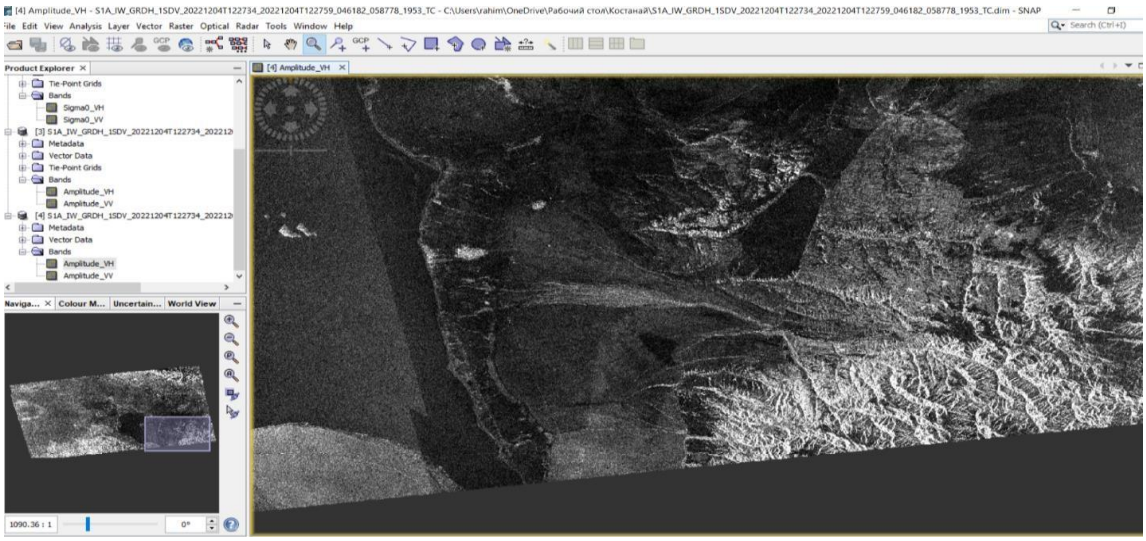

Figure 7. Processing Radar space image Sentinel-1A on the software SNAP (Source: compiled by authors)

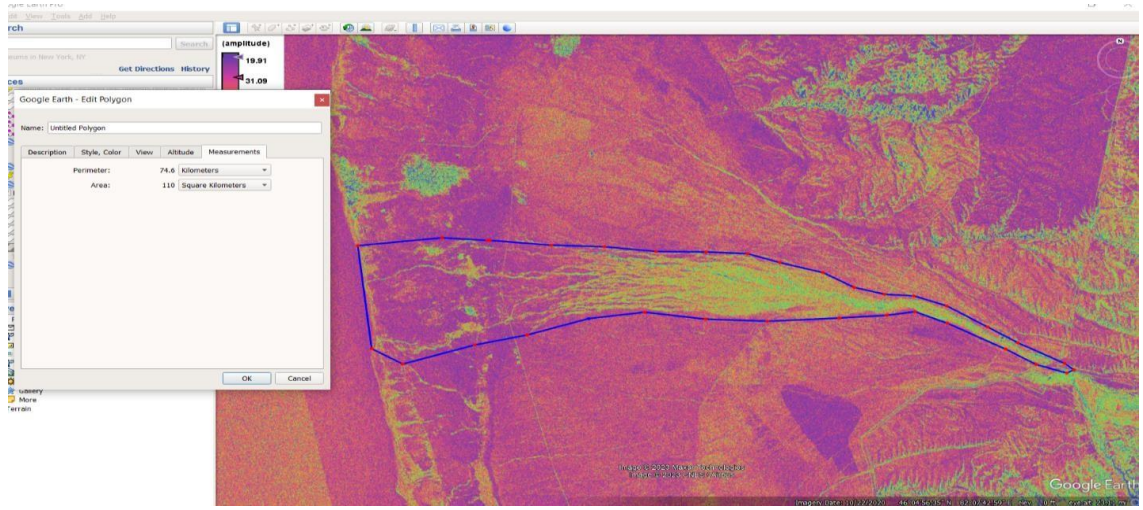

Figure 8. RGB composite of polarization channels VH, image Sentinel-1A on the Google Earth (Source: compiled by authors)

And then to deploying the signal were used calibration processing methods and multilooking, also terrain correction using the SRTM DTM with a resolution of 30 meters. Finally, an RGB composite of VH (vertical/horizontal) polarizations was received (Figure 8), this layer was exported as location data (KMZ) with further upload to Google Earth (Open Access software Google Earth). We obtained a mask for displaying stream of the Tasty River and the area of the Alluvial fans. The measurement of the area of the Alluvial fans and the river stream is about 100 sq. km.

Methods used: Questionnaire Survey

Questionnaire Survey (hereinafter - Survey) was composed according to interview with guesthouse owners of the Destination (Interview, June 2023) and Likert scale as a psychometric response (psychometric scale that has multiple categories from which respondents choose to indicate their opinions, attitudes, or feelings about a particular issue).

Scientific methodology: We adapted Survey according to the scientific methodology of published international articles such as «Evaluation of the accessible urban public green space at the community-scale with the consideration of temporal accessibility and quality», «Do Sustainability Perceptions Affect Lake Destination Loyalty?», «The Influence of Environmental Values on Consumer Intentions to Participate in Agritourism—A Model to Extend TPB» (Li et al., 2021; Ramazanova et al., 2023; Zhao et al., 2022). Supervision: Survey was conducted with collaboration of Department of Entrepreneurship and Industrial and Innovative Development of the Abay Region, Kazakhstan (hereinafter-DEIID).

After consideration and getting recommendations on conducting research from experts of DEIID, survey was officially sent to the guest house owners of the Destination. Responses from respondents were collected in the online form during 5-10 August 2024 (Official letter response from DEIID, 2024). Task for carrying out: Investigation of the ecological condition of the Destination and to identify the correlative relationship between attitudes as well as intentions of guesthouse owners (managers) in the ecological promotion of the Destination. Respondents: Guesthouse owners of the Destination and administration staff. At the beginning of the survey, we formulated research hypotheses and outlined the conceptual framework for ecological advancement of the Destination (Figure 9).

Hypotheses

H1: The availability of green areas and parks has a direct and positive impact on the ecological advancement of the destination.

H2: The pollution of Alakol Lake has a negative impact on the ecological advancement of the destination.

H3: The absence of conflict of interest among guesthouse owners has a positive impact on the ecological advancement of the destination.

H4: The availability of ecosystem services has a direct and positive impact on the ecological advancement of the destination.

H5: Government support measures have a positive effect on the ecological advancement of a destination.

H6: Environmental awareness of guesthouse owners has a positive impact on the ecological advancement of the destination. According to the hypotheses we indicated Independed and Depended variables and conceptual framework:

Independent Variables: Availability of Green Area and Parks (GAP); Pollution Levels of Lake Alakol (PL); Conflict of Interest among Guesthouse Owners (CI); Availability of Ecosystem Services (ES); Government Support Measures (GS); Environmental Awareness of Guesthouse Owners (EA);

Dependent Variable: Ecological Advancement of the Destination (EAD)

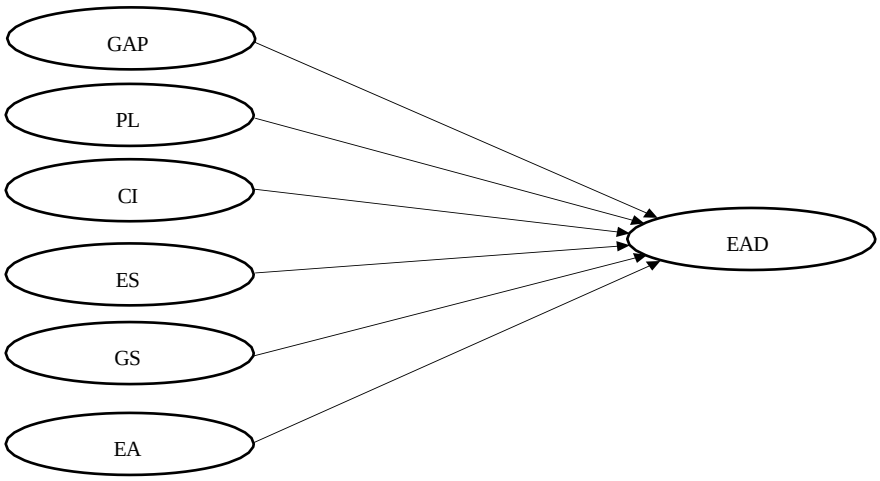

Figure 9. Conceptual framework of EAD (Source: compiled by authors)

RESULTS

Total number of guesthouses of the Destination – 208 (Bureau of National Statistics, 2024), 12.02% of the respondents participated in the questionnaire (15 guesthouse owners and 10 people administration staff).

In the Survey were 35 questions, the first 4 questions were belonging to socio-demographic (Table 1) and 31 questions were related to independent, depended variabilities (Table 2).

Table 1. Socio-demographic questions of the Survey

Q1-Q4	
Q1. Which of the following would best describe your role?	60% guesthouse owners, 40% administration staff
Q2. What's your age?	40% - Age 28-38, 20% - Age 48-58, 20%- Age 58+, 12% - Age 38-48, 8% - Age 18-28
Q3. What is your educational background?	84% - Higher Education, 8% - College (Technical School), 4% - Secondary Education, 4% - Student
Q4. What's your specialty?	32% - Economist, 24% - Tourism, Hospitality, 24% - Technical, 12% - Other, 8% - Lawyer

Table 2. Coefficient of variabilities (Source: compiled by authors)

№	**Variable (Q5-Q35)**	**Coefficient**
1	Availability of Green Area and Parks (GAP) Q5 Are green areas (trees, open green spaces) accessible to tourists on the east side of Alakol Lake?	5.99274E-18
2	Availability of Green Area and Parks (GAP) Q6 Are green spaces (trees, open green space) available to local residents on the east side of Alakol Lake?	-2.98372E-16
3	Availability of Green Area and Parks (GAP) Q7 How much do you agree that there are functioning green parks on the east side of Alakol Lake for running or hiking?	-2.82993E-16
4	Pollution Levels of Lake Alakol (PL) Q8 Do tourists clean up after themselves while vacationing along the Alakol Lake shoreline?	-4.5627E-17
5	Pollution Levels of Lake Alakol (PL) Q9 Do local residents clean up after themselves when vacationing along the Alakol Lake shoreline?	2.1526E-17
6	Conflict of Interest among Guesthouse Owners (CI) Q34 I would like to develop eco-tourism by cooperating with other guesthouse owners?	**0.25**
7	Conflict of Interest among Guesthouse Owners (CI) Q35 I would like to develop eco-tourism by cooperating with local governments?	5.31251E-17
8	Availability of Ecosystem Services (ES) Q10 Are bio-toilets (restrooms) available for tourists along the Alakol shoreline?	-1.48027E-16
9	Availability of Ecosystem Services (ES) Q26 Are bicycle routes of different lengths available for tourists?	5.22351E-17
10	Government Support Measures (GS) Q27 Do you receive a subsidy for the maintenance of sanitary and hygiene facilities in the amount of 83,300 tenge per month as part of state support?	9.82508E-17
11	Government Support Measures (GS) Q28 Have you been refunded 25% of the cost on the purchase of automobiles vehicles under the state support?	1.32584E-16
12	Government Support Measures (GS) Q29 Do you receive a subsidy of 15,000 tenge for each international tourist?	2.0374E-16
13	Government Support Measures (GS) Q30 Do you receive a subsidy for the cost of a ticket included in a tourism product for air transportation of underage passengers?	-1.00247E-16
14	Environmental Awareness of Guesthouse Owners (EA) Q32 I would like to receive a government subsidy to purchase food waste disposal equipment?	2.56439E-16
14	Environmental Awareness of Guesthouse Owners (EA) Q33 I would like to provide services and products related to eco-tourism?	**0.5**
15	Environmental Awareness of Guesthouse Owners (EA) Q34 I would like to develop eco-tourism by cooperating with other guesthouse owners?	**0.25**
16	Environmental Awareness of Guesthouse Owners (EA) Q35 I would like to develop eco-tourism by cooperating with local governments?	-6.4836E-17

Notable correlations

Environmental awareness (EA) Q33 has a significant positive coefficient (0.5) indicating that guesthouse owners' interest in providing ecotourism products, services and they are willing to contribute to EAD. Conflict of Interest (CI) Q34 and EA Q34 (0.25) reflect a positive and in other hand weaker relationship that relates to co-operation between stakeholders. The remaining variables with coefficients approaching zero are indicated small impact to the Destination's environmental promotion.

Moreover, we carried out coefficient variabilities (independent to depend on EAD) in Microsoft Excel 2010.

As a result, we can observe from Table 2 and Figure 10 (coefficient of variabilities) that EA of Guesthouse Owners shows a strong positive correlation with EAD. Conflict of Interest among Guesthouse Owners also correlates positively, suggesting cooperation improves ecological outcomes. Variables related to Government Support Measures and Availability of Green Areas show weaker or negative correlations. Regression coefficients and analysis reveal the contribution of each variable to predicting EAD: Environmental Awareness of Guesthouse Owners (EA) and Conflict of Interest (CI) variables have significant positive coefficients. Other variables such as Pollution Levels (PL) have smaller or negligible influence.

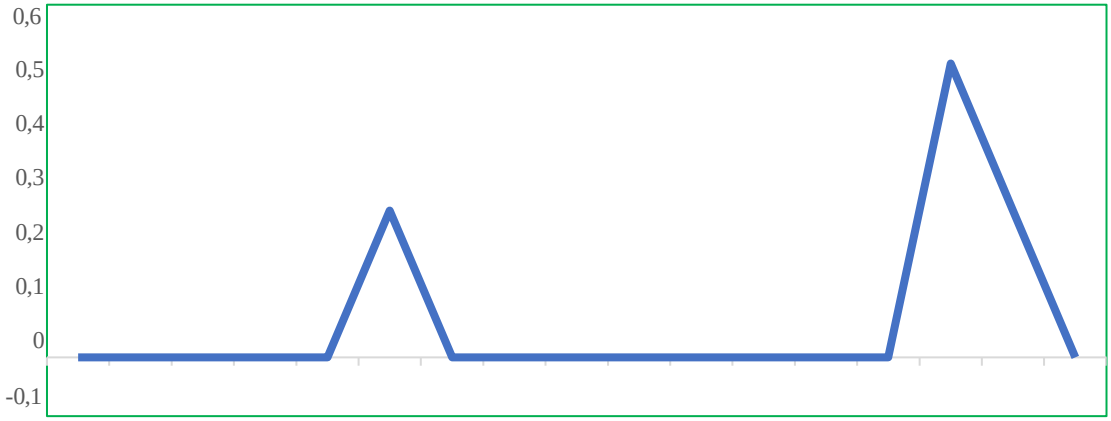

Figure 10. The diagram of coefficient of variabilities Blue: Coefficient variabilities (Source: compiled by authors)

FINDINGS AND DISCUSSION

In the research study we obtained a mask for displaying stream of the Tasty River and the area of the Alluvial fans. The measurement of the area of the Alluvial fans and the river stream is about 100 sq. km. Alluvial zones in dry lands are frequently utilized for agriculture due to their flat topography and access to groundwater for irrigation. Furthermore, the presence of river networks and the expansive Alluvial fans in arid and semi-arid regions create oases of ecosystem stability.

The studied polygon, located in the Destination, exhibits a favorable water balance along the Tasty river within the Alluvial fans. This provides an opportunity for the development of Ecosystem cervices by planting tree seedlings such as poplar, pine, spruce, thuja. These seedlings could be planted (landscaping potential) and used in the area of the Destination for increasing green belt, specialized green parks for the local people and tourists.

Moreover, according to Table 3 Environmental Awareness (EA) is a high positive correlation 0.742 for EA Q32, there are strong regression coefficients suggest that efforts for increasing environmental awareness among guesthouse owners significantly enhance the Destination's ecological advancement (EAD).

Table 3. Correlation Heatmap (Relationships between the independent variables Q5-Q35 and the dependent variable EAD)

Q5	Q6	Q7	Q8	Q9	Q34	Q35	Q10	Q26	Q27	Q28	Q29	Q30	Q32	Q33	Q34	Q35	EAD
					-			-					-	-	-		-
	0.41821	0.41649	0.38229	0.24619	0.05739	0.10180	0.22613	0.00798	0.25008	0.08045	0.15080	0.11165	0.14487	0.09425	0.05739	0.10180	0.07954
1	8503	3347	1646	1587	6334	787	3646	4378	4025	9032	9236	1595	9174	5773	6334	787	2821
					-	-							-	-	-	-	-
0.41821		0.74360	0.50836	0.45989	0.27570	0.04564	0.31517	0.23011	0.04595	0.07515	0.14085	0.07150	0.33931	0.46483	0.27570	0.04564	0.38861
8503	1	1346	8782	6384	5483	3546	8915	958	0914	0452	9042	9694	0446	484	5483	3546	8383
0.41649	0.74360		0.44162	0.43391	- 0.14781	8.93194	0.15971	0.15548	0.00404	0.05739	0.08172	0.00525	- 0.36738	- 0.23276	- 0.14781	8.93194	- 0.19945
3347	1346	1	77	9175	3261	E-17	7087	4297	9678	9759	5382	1823	7201	2163	3261	E-17	0897
0.38229	0.50836	0.44162		0.68528	0.06140	0.13259	0.36165	0.24065	0.16151	0.14262	0.19913	0.27005	- 0.07885	0.12275	0.06140	0.13259	0.09695
1646	8782	77	1	0514	3455	2881	5502	6113	7784	8802	9383	3057	4783	7154	3455	2881	4529
0.24619	0.45989	0.43391	0.68528		0.24265	0.29634	0.00795	0.13059	0.14320	0.32203	0.34956	0.41785	0.03566	0.13718	0.24265	0.29634	0.19492
1587	6384	9175	0514	1	2651	7792	802	4271	4843	1122	1006	8985	8034	2371	2651	7792	6866
0.05739	0.27570	0.14781	0.06140	0.24265		0.75505	- 0.19503	0.04511	0.02871	0.13076	0.11564	0.20153	0.78047	0.85438		0.75505	**0.9596**7
6334	5483	3261	3455	2651	1	0562	449	6608	6216	2382	3818	7396	2205	3428	1	0562	6064
0.10180	- 0.04564	8.93194	0.13259	0.29634	0.75505		0.04795	0.23341	0.16778	0.27441	0.25717	0.34815	0.53099	0.61721	0.75505		0.70951
787	3546	E-17	2881	7792	0562	1	2945	0527	9014	065	225	5312	4244	34	0562	1	6849
				-	-								-	-	-		-
0.22613	0.31517	0.15971	0.36165	0.00795	0.19503	0.04795		0.40938	0.52910	0.52529	0.54064	0.46078	0.18129	0.04439	0.19503	0.04795	0.12104
3646	8915	7087	5502	802	449	2945	1	5004	3468	9246	2188	4	4692	58	449	2945	3328
0.00798	0.23011	0.15548	0.24065	0.13059	0.04511	0.23341	0.40938		0.11561	0.15269	0.14214	0.18040	0.07733	1.34352	0.04511	0.23341	0.02244
4378	958	4297	6113	4271	6608	0527	5004	1	1308	5997	325	4115	8339	E-16	6608	0527	485
0.25008	0.04595	0.00404	0.16151	0.14320	0.02871	0.16778	0.52910	0.11561		0.86745	0.84920	0.83681	0.02316	0.03883	0.02871	0.16778	0.03529
4025	0914	9678	7784	4843	6216	9014	3468	1308	1	186	5347	8317	47	561	6216	9014	4566
0.08045	0.07515	0.05739	0.14262	0.32203	0.13076	0.27441	0.52529	0.15269	0.86745		0.95694	0.92193	- 0.01165	0.12702	0.13076	0.27441	0.13376
9032	0452	9759	8802	1122	2382	065	9246	5997	186	1	0106	712	6838	7448	2382	065	9652
0.15080	0.14085	0.08172	0.19913	0.34956	0.11564	0.25717	0.54064	0.14214	0.84920	0.95694		0.94460	0.02366	0.11904	0.11564	0.25717	0.12193
9236	9042	5382	9383	1006	3818	225	2188	325	5347	0106	1	3586	9877	7619	3818	225	1587
0.11165	0.07150	0.00525	0.27005	0.41785	0.20153	0.34815	0.46078	0.18040	0.83681	0.92193	0.94460		0.11092	0.20145	0.20153	0.34815	0.20924
1595	9694	1823	3057	8985	7396	5312	4	4115	8317	712	3586	1	108	5741	7396	5312	2215
-	-	-	-	-			-	-		-							

0.14487 9174	0.33931 0446	0.36738 7201	0.07885 4783	0.03566 8034	0.78047 2205	0.53099 4244	0.18129 4692	0.07733 8339	0.02316 47	0.01165 6838	0.02366 9877	0.11092 108	1	0.65547 3525	0.78047 2205	0.53099 4244	0.74286 1096
0.09425 5773	0.46483 484	0.23276 2163	0.12275 7154	0.13718 2371	0.85438 3428	0.61721 34	0.04439 58	- 1.34352 E-16	0.03883 561	0.12702 7448	0.11904 7619	0.20145 5741	0.65547 3525	1	0.85438 3428	0.61721 34	0.96600 7293
0.05739 6334	-0.27570 5483	-0.14781 3261	0.06140 3455	0.24265 2651	1	0.75505 0562	0.19503 449	0.04511 6608	0.02871 6216	0.13076 2382	0.11564 3818	0.20153 7396	0.78047 2205	0.85438 3428	1	0.75505 0562	0.95967 6064
0.10180 787	- 0.04564 3546	8.93194 E-17	0.13259 2881	0.29634 7792	0.75505 0562	1	0.04795 2945	0.23341 0527	0.16778 9014	0.27441 065	0.25717 225	0.34815 5312	0.53099 4244	0.61721 34	0.75505 0562	1	0.70951 6849
- 0.07954 2821	- 0.38861 8383	- 0.19945 0897	0.09695 4529	0.19492 6866	0.95967 6064	0.70951 6849	- 0.12104 3328	0.02244 485	0.03529 4566	0.13376 9652	0.12193 1587	0.20924 2215	0.74286 1096	0.96600 7293	0.95967 6064	0.70951 6849	1

Conflict of Interest (CI): Cooperation among guesthouse owners CI Q34 and Q35 is strongly positively correlated with EAD (0.95). This involves that better collaboration reduces conflict and fosters ecological development. Government Support Measures (GS): The correlations are moderate, indicating that while subsidies and support mechanisms contribute, they may not directly or significantly impact ecological outcomes. Pollution Levels (PL): Weak correlations suggest that reducing pollution alone may not sufficient without strengthened efforts in development planning local Alakol region.

Availability of Ecosystem Services (ES) and Green Areas (GAP): While essential, these factors showed weaker correlations, indicating the importance of active management and awareness for using Ecosystem Services resources.

In the research study we proved that Environmental awareness of guesthouse owners has a positive impact on the ecological promotion of the Destination (Hypothesis 6). Also, conflict of interest among guesthouse owners has significant positive coefficients (Hypothesis 3), Government support measures and pollution levels have slightly or negligible influence on ecological promotion (Hypothesis 2 and 5).

CONCLUSION AND SOME LIMITATIONS

Landscaping potential to developing ecotourism in the Destination has not been well studied and researched, the study has practical significance in the prospect of long-term development and maintenance of the life cycle of the Destination.

The attractiveness of every tourist destination is widely influenced by the greening of the territory. In this regard, the study suggest that Destination has sufficient water balance for planting seedlings of tree species and obtained results can be used by local executive bodies in territorial planning and landscaping the Destination.

The article underlines the opportunities and existing concerns expressing the relationship between tourism and greening. The role of landscape in tourism is generally recognized, especially in shaping the image of the Destination, while also contributing to the improvement of the living standards of the local community.

In conclusion, of the research work completed, we highlight the following important recommendations for the local executive bodies for the ecological promotion of the Destination:

1. Strengthening co-operation between guesthouse owners, managers and local executive authorities: The questionnaire data suggests that increasing the involvement of guesthouse owners in the eco-tourism sector can bring significant advantages.
2. Increasing the availability of green spaces: Achieving long-term economic benefits by extending the life cycle of the Destination, increasing attractiveness, the image of the Destination's environmental promotion.
3. Conducting training sessions for owners and managers of guesthouses about state support program: Existing grants from investors (national, international), subsidies, adopted legal norms to reduce tax payments for small and medium enterprises. Weak correlations between guest house owners' awareness of government support measures and the availability of green spaces indicate an absence of complex relationship, often involving economic, social as well as sectoral factors, which determine the development of regions at the local level.

In addition, one significant limitation of this study was the unwillingness of respondents to participate in the survey. This could have been due to factors such as lack of interest or not being confident in how their responses would be used. In future research it will be desirable to reduce the sample size by simplifying the survey questions.

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