



# Article Sustainable Development of Ecotourism in "Altynemel" National Park, Kazakhstan: Assessment through the Perception of Residents

Asyma Koshim<sup>1</sup>, Aigul Sergeyeva<sup>2,\*</sup>, Yerkin Kakimzhanov<sup>1</sup>, Aliya Aktymbayeva<sup>1</sup>, Mereke Sakypbek<sup>1</sup> and Akmaral Sapiyeva<sup>1</sup>

- <sup>1</sup> Faculty of Geography and Environmental Sciences, Al Farabi Kazakh National University, Almaty 050040, Kazakhstan; asima.koshim@kaznu.edu.kz (A.K.); erkinkakimzhanov@gmail.com (Y.K.); aliya.aktymbayeva@kaznu.edu.kz (A.A.); mereke.sakypbek@gmail.com (M.S.); akmaral.sapiyeva@kaznu.edu.kz (A.S.)
- <sup>2</sup> Department of Geography and Tourism, K. Zhubanov Aktobe Regional University, Aktobe 030000, Kazakhstan
- Correspondence: sergeyeva.aigul@gmail.com

Abstract: Protected natural areas of Kazakhstan, particularly national parks, occupy a unique role in developing ecological tourism. One way to ensure biodiversity conservation, environmental preservation, and regional sustainability is through promoting ecotourism in national parks. For the "Altynemel" National Park, ecotourism should be regarded as a priority type of tourism. The article considers the essential technologies and principles of implementation of ecological tourism in the National Park "Altynemel". Identified and justified the uniqueness of this protected area—the equal value of natural and cultural heritage on its territory. We revealed the problems and constraints of ecotourism development in the national park and offered the ways of their solution. The article is written based on field research materials, methods of a local population survey, interviews, and focus group discussions. In this article, 201 representative families were interviewed using questions on a 5-point Likert scale, including 159 residents of the village of Basshi and 42 residents of the village of Nurym. The results show that the overall assessment of sustainability is mild in the two communities. As a result, we claim that sustainable development in the "Altynemel" National Park is far from perfect. Sustainable development in the "Altynemel" National Park is far from perfect. Sustainable development in the "Altynemel" National Park is far from perfect. Sustainable development in the "Altynemel" National Park to be apparent.

**Keywords:** ecotourism; sustainable development; "Altynemel" national park; village of Basshi; village of Nurym; sustainability indices; GIS-MCDA

# 1. Introduction

The world scientific community recognizes the creation of specially protected natural areas (SPNA) as one of the most effective and efficient forms of conservation and restoration of natural and biological diversity [1]. As the world experience in the development of ecological tourism shows, protected areas contribute to the development of the local sociocultural environment and benefit the local economy, involving residents in producing goods and services for tourists [2,3]. Many natural and valuable areas worldwide regard sustainable development as a defining influence on their development. It is also often used in purposeful spatial planning [4,5].

Ecotourism is a complex business with laws, principles, and development mechanisms. Sustainable tourism pays much attention to the need for sustainable development solutions based on ecological, socio-cultural, and economic principles [6].

In Kazakhstan, the ecotourism industry in the national parks is in its formative stage. The territorial network of national parks is a set of environmental and economic objects



Citation: Koshim, A.; Sergeyeva, A.; Kakimzhanov, Y.; Aktymbayeva, A.; Sakypbek, M.; Sapiyeva, A. Sustainable Development of Ecotourism in "Altynemel" National Park, Kazakhstan: Assessment through the Perception of Residents. *Sustainability* 2023, *15*, 8496. https://doi.org/10.3390/su15118496

Academic Editor: Tsung Hung Lee

Received: 29 April 2023 Revised: 19 May 2023 Accepted: 21 May 2023 Published: 24 May 2023



**Copyright:** © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). united by scientific, environmental, tourist, and recreational ties, with common goals of preservation of the natural, historical, and cultural heritage of the country for the present and future generations. It is a dynamically open system. Currently, the network of national parks has some areas for improvement that hinder the formation of the national parks system in Kazakhstan.

The main ones are:

- the young age of Kazakhstan national parks;
- the lack of landscape representation;
- the lack of coordinated actions between the national parks in the issue of increasing the tourist flow;
- the need for a unified branding policy [7].

Study Area.

The "Altynemel" State National Natural Park's territory is in the central part of the Ili intermountain basin; there are the Altyn-Emel, Matay, Degerez, and Sholak mountains in the north. The southern natural boundary of the park is the Ili River and Kapshagay Reservoir. According to the physiographic zoning, it is a part of the Ili semi-desert area, the Ili-Balkhash-Alakol desert depression (Figure 1).



**Figure 1.** The settlements of Basshi and Nurym. The figure is constructed according to the data of the Landsat 8 OLI satellite.

Scientists of the Kazakhstan Academy of Science scientifically substantiated the need to organize a specially protected natural area in the Ili Intermountain basin in early 1970. In April 1991, in order to preserve the unique natural complexes of the middle part of the Ili Valley, flora and fauna of the Chulak, Degerez, and Matay mountain systems, the above nature conservation site was named the "Altynemel" State National Nature Park, and they decided on the need to develop a feasibility study for planning the park. The same decree decided to limit land allocation for state and public needs and to organize the directorate of the "Altynemel" State National Nature Park. In 1996, the Resolution of the Republic of Kazakhstan's Government №416, "On the organization of the state national nature park "Altynemel" in Taldykorgan oblast," was adopted. Land plots of the Kerbulak district, with an area of 2095.5 km<sup>2</sup>, and land plots of adjacent land users of the Kerbulak and Panfilov districts, with an area of 2500.7 km<sup>2</sup>, were given to the national park for permanent land use. In 2007, "Ecoproject" LLP completed works on expanding the park's territory, according to which it was planned to annex lots with an area of 1022 km<sup>2</sup> to the existing park territory. Thus, the area of permanent land use of the park should amount to

2633.5 km<sup>2</sup>. In addition, on the rights of easement (this is the right to use other people's property), SPNA was given 1968.8 km<sup>2</sup>, and 628.5 km<sup>2</sup> were allocated for the protection zone. The total area of the territory protected by the park is 5230.5 km<sup>2</sup> [8].

The park was established to protect the special ecological complex, historical and cultural artifacts, and rare and endangered plant and animal species. There are different landscapes on the park's territory, with a total area of 520 thousand hectares: mountains, a sandy desert covered with crushed stone, and desert.

The park's flora has about 1800 species of plants, among which 21 species are included in the Red Book of Kazakhstan. Approximately 60 species are rare, found only in the territory of Zhetysu Alatau and in the basin of the Ili River and Lake Balkhash. The Red Book of Kazakhstan includes 56 rare species of animals inhabiting the park: argali, kulan, gazelle, etc. [9].

In recent years, more than 25,000 tourists a year visited the "Altynemel" National Park, and this trend is increasing [10]. "Altynemel" differs from other national parks in Kazakhstan in a number of ways. In the beginning, tourism in the park takes the form of ecological excursions led by tour guides along the established tourist routes. As a result, the national park's tourism has an educational and eco-cognitive component. There are no uninvited guests, it is not a type of mass leisure, and safety and comfort are offered to visitors. The park also boasts a well-developed tourism infrastructure, including cozy hotels, well-equipped tourist routes, and high-quality roads, which enables it to accept visitors of various types and cater to their demands. The national park, which is the only desert park in the republic and is situated in the Ili Valley, gives visitors the opportunity to explore various types of terrain, including mountains, plains, river floodplains, riparian forests, and sand, as well as the desert ungulates kulan and gazelle, up close. The culturally significant features of the national park, including the "Tabalytas" Petroglyphs, "Besshatyr" Mounds, "Spring of Sh. Ualikhanov", "Oshaktas Stele", and "700-year-old elm", draw visitors as well.

Due to the region's enormous potential for investment, several phenomena pose a danger to its ecological, scenic, and cultural characteristics. The region is suited for increasing tourism and investment due to its distinctive topography, which has a considerable impact on the scenery. Although the existing infrastructure is insufficient to meet the needs of the tourist market, the construction of new facilities must be carried out in strict accordance with environmental requirements, as this increases the recreational and anthropogenic pressure on the environment and biodiversity of the "Altynemel" National Park.

The main risks:

- Increased landscape erosion processes;
- Increased emissions and waste;
- Contamination of open water sources and groundwater;
- Threats to wildlife, especially kulans, gazelles, and argali;
- increased vulnerability of vegetation cover, especially relic turanga groves [11].

Infrastructure development of the "Altynemel" National Park is possible only with an ecosystem approach, which, on the one hand, will create favorable conditions for tourism development and, on the other hand, will minimize the harmful impact on the ecology of the park, which is a priority task.

All of the above facts emphasize the diversity of flora and fauna in Zhetysu Alatau. In this area, there are special memorials to paleontological discoveries of flora and fauna, which unquestionably raises the worth of biological and landscape variety and supports the case for natural preservation.

The two neighboring settlements of Basshi and Nurym, located in the "Altynemel" National Park territory, were chosen for our research. The villages of Basshi and Nurym are electrified, with good telephone and Internet connections. The roads are primarily asphalted in Basshi village, while Nurym village needs repair.

Basshi is a village in the Kerbulak district of the Almaty region of Kazakhstan. As well as it is the administrative center of Basshi rural district. According to the census of 2021,

the village had 1.831 people (945 men and 886 women). Most residents of Basshi village are pastoralists. The population is more significant than in the other two nearby settlements, with 1.831 people, of which 1.571 are economically active; almost all are Kazakhs. There are four stores, one hotel, and guest houses in the center of the village. Nurym is a village in the Kerbulak district. It is part of the Basshi rural district. According to the 2021 census, 550 people (280 men and 270 women) lived in the village [12].

This study's purpose is to develop ecotourism in the national park "Altynemel" by comparing the sustainable development in the two settlements of the villages Basshi and Nurym. The practical significance of the study is due to the need to form effective mechanisms of management of the national park, aimed both at the conservation of natural resources of the "Altynemel" National Park and the solution of social problems, the maintenance of economic activity in the rural district.

### 2. Literature Review

Factors of rational planning of the national park territory

Functional zoning is the determining factor of the rational organization of ecotourism territory. Zoning is a clear identification of modes of tourist use of the territory, which determines the creation of a differentiated planning structure and regulation of tourist flows to reduce the anthropogenic impact on the natural complexes [13]. The structure of the area affects the functional zoning, which is determined by the presence of the primary sources of recreational demand [14].

Tourist routes in the national parks are laid under functional zoning and objects for cognitive purposes. The design of tourist routes considers visiting and inspecting historical and cultural monuments, natural monuments, and ethnographic objects [15].

Transport accessibility of the national park territory is a determining factor of the degree of their economic development and preservation of the unique natural landscapes. Currently, in the "Altynemel" National Park territory, works on improvement are carried out, focused on developing tourism and recreation. Park workers' pay attention to the construction and maintenance of the road network and the expansion of tourist routes.

Conducted economic and geographical studies have shown a set of local problems in the park's territory. This is a traditional triangle consisting of environmental, social, and economic problems and characterizing almost any territory where people exist. Ecological problems include the need to preserve the local nature, its uniqueness, and the priority of the reserved purpose [16]. Planning cognitive ecological tourism and studying the influence of natural and anthropogenic factors is a rational way of solving the national park's ecological-socio-economic questions of sustainable development [17]. Implementing the geo-ecological approach and developing geo-information technologies will allow to development of ecological excursion routes considering landscape features and reduce the anthropogenic impact in the protected areas [18].

With the help of GIS technologies, the following tasks are solved in the territory of the national park [19]:

- 1. Control and redirection of visitors. There is a specific flow of tourists who want to visit the territory with cultural and historical sites (for example, Mynbulak cordon) and stay there for 2–3 days, requiring overnight accommodation. Such points (with hotels) are developed locally.
- 2. Consideration of the functional zoning of the national park. Despite its imperfection, there are zones of protected areas, buffer zones, and areas where certain anthropogenic activities are allowed. This is where limited recreational use in the form of cognitive ecotourism is possible;
- 3. Recreational load control. Ecological routes direct the tourist to permitted places and lead away from protected areas;
- 4. Solving environmental problems. Excursion trails reduce the manifestation of the pyrogenic factor, directing tourists to safer areas.

5. Economic expediency of ecotourism development in protected areas. Ecotourism employs employees and the local population and the use of cultural objects. As a part of the tourist infrastructure, ecotourist routes solve several social and economic problems of the national park within the legal framework.

The attitude to strict environmental restrictions has been ambiguous. It remains ambiguous since they entail both an increase in the cost of economic activity and land and a more complicated procedure and an increase in the timing of environmental impact assessment of recreational development projects. On the other hand, the conditions have created the preconditions for a positive attitude to the ideology of environmentally responsible use of natural resources, which is fundamental to the development of the civilized tourism and recreation industry. The question of a unique approach to the development of tourism in the "Altynemel" National Park, considering the preservation of natural complexes, was comprehensively discussed at different levels. Foreign experience of preservation and rational use of recreational resources was actively studied [20,21]. At present, about 17 zones of recreational development have been formed in the national park. It is necessary to note the growing network of tourist routes, the total length of which reaches 350–400 km.

We used traditional data collection methods to study geosystems and their components, recreational, geo-ecological potential, and stability analysis: a literature analysis, cartographic materials, field expeditions, descriptive, and comparative-geographical methods, digital terrain model SRTM (Shuttle Radar Topography Mission), etc. Furthermore, we processed spatial information in ArcGIS.

The research procedure carried out to study the conditions of tourist activity and investment projects was as follows: the analysis of local conditions and planning of tourist zones of the "Altynemel" National Park within the framework of the expedition. The field study tasks were the assessment of the territory's tourist attractiveness, tourist pressure, social sphere of nature protection, and spatial planning. The use of nature for mass recreation introduces significant changes to the environment. The first principle of ecotourism is to minimize such impacts. The task of urban planning consists of managing these processes at all levels of design, contributing to the conservation of nature, the rational use of its resources, and the creation of favorable conditions for tourism. The particular value in a complex of nature protection measures gets the functional zoning of territory [22].

E.A. Kotlyarov distinguished three main zones [23]: (1) especially valuable territories; (2) a zone of extensive recreational development; (3) a peripheral zone. Thus, the planning measures corresponding to the first principle of ecotourism include functional zoning of territories of ecotourism, at which its separate sites are allocated under various kinds of use according to their natural features. The planning organization of ecotourism is organized according to the zonal type—each zone has its system of planning elements. Functional zoning is based on the landscape principle, where the zoning pattern is determined by the type of morphological structure of the landscape and the zoning regime—the maximum permissible capacity of landscapes [24]. Some researchers believe that zones should be allocated following the natural and cultural values of the protected area, the recreational capacity of sites, and especially vulnerable landscapes [25,26].

Providing persuasive arguments allows planners to make decisions using a systematic and comprehensive framework while maintaining high transparency. In such cases, multicriteria decision analysis (MCDA) [27] is widely used to support decision-making. MCDA offers a set of methods for selecting the most appropriate solution in a structured analysis [28]. The geographical component may be included thanks to the interaction between MCDA and GIS technologies. It significantly improves stakeholder communication in all facets of the decision-making process [29,30].

The goals of the national park include the development of sustainable forms of recreation. Legislation and the availability of tourist and recreational resources allow the development of ecological tourism in national parks. This rational type of nature management, if properly organized, promotes the sustainable development of territories at the local, regional, and state levels, contributes to the formation of environmental awareness and environmentally responsible behavior in citizens, contributes to the socio-economic growth of regions, and replenishes the revenue part of the national park budget [31,32]. National parks are national-park territorial tourist-recreational systems full-fledged participants in market economic relations. Ecological tourism is consistent with the concept of sustainable development. It can balance human needs for recreation and the preservation of natural and cultural-historical tourist resources, which will lead to regions' environmental, economic, social, and cultural sustainability [33,34].

As the global ecosystem protection agenda continues to unfold, the impact of protected areas on the socioeconomic development of local communities continues to be the subject of intense debate [35]. The conflicts between the interests of environmental protection and socio-economic development are particularly acute when the organization of a national park removes large areas of land from economic circulation. Under these conditions, determining how to shape the interaction of people with nature in the landscapes, they are a part of is not losing its relevance [36,37].

A review of the literature showed that the issues of assessing the social and economic consequences of legal restrictions on the life of citizens and economic activity within the boundaries of protected areas are actual but have yet to be studied. To a large extent, researchers have studied in depth the issues of cost estimation of all kinds of biological objects and resources, including specially protected natural areas [38], the assessment of the value and usefulness of the use and conservation of tourist resources of national parks using the method of transport costs [39], and the assessment of ecosystem services [40]. There is extensive literature devoted to methods for assessing direct production losses and lost benefits as a result of environmental restrictions [41], the development of socio-economic and compensatory mechanisms1 [42], and the assessment of the region's economic damage from the environmental factor [43].

An assessment of the socioeconomic consequences of legal restrictions on the life of the population in national parks will allow development measures to ensure a balance between the preservation of unique natural resources and the creation of conditions for the residence of citizens and their economic activities within the boundaries of protected areas [44].

# Socioeconomic Condition of the Population in the National Parks

Indicators of social status (employment, income per capita, and level of wages) of the population in the location of the National Park are worse than the national average. There is a high unemployment level in the settlements near the national park, which determines the agricultural orientation of the area [45]. Low profitability of this industry, reduction of production volumes, as well as ineffective activity does not allow the territory to provide the growth of financial income of the population; in this connection, the local population is mainly engaged in the development of personal subsidiary plots, partly in trade and participate in the organization of tourism [46].

The social problems include difficult conditions and low living standards of the local population, including the national park's employees. For example, low salaries and difficult working conditions are reflected in high staff turnover and the desire of the local population to leave the nearby villages and move to the city [47]. Economic problems include general reductions in funding and the partial transfer of the national park to self-sufficiency. The transport network plays a significant role in the socioeconomic development of the territory [48,49].

Drinking water is one of the most pressing problems for the residents of Basshi and Nurym villages. The second problem that worries the villagers is allocating land for grazing. According to them, the lands allocated for investment projects are either unused or given for sublease.

The Basshi and Nurym villages are located in an area with harsh natural and climatic conditions. In addition to high summer temperatures, strong winds prevail here, and there are no natural high tree plantations that would create ecological conditions for the living

of the local population. In addition, a severe problem is the need for more fuel supply for residents. Despite the ban, saxaul plantations are intensively cut down, the border of which in recent decades has receded for several kilometers and now runs 7–10 km from the settlements. Furthermore, Turanga (a rare tree for the region), bushes of comb, calligonum, and white acacia are cut down. The isolation of tree and shrub vegetation from populated areas dramatically changes the conditions for grass growth. As a result of the degradation of vegetation cover, highly productive fodder species are replaced by weedy, often not eaten by cattle species (brunette, woodruff, etc.). To protect Basshi and Nurym villages from strong winds and, consequently, to improve the microclimate of these settlements, it was proposed to create green protection zones, including recreational and leisure areas on the windward side of the villages.

# 3. Materials and Methods

We used a quantitative method to collect and analyze data. Moreover, we gave the questionnaire to assess the sustainable development of ecotourism in the National Park "Altynemel". The National Park "Altynemel" is the largest in Kazakhstan.

Our preliminary observations of the territory help us conduct surveys efficiently. Field surveys were conducted from 3 May 2022 to 23 May 2022, with respondents selected from Basshi (159 people) and Nurym (42). The primary respondents were residents of Basshi and Nurym villages, including park workers, guides, hotel and guest house owners, cooks, cab drivers, etc.

Table 1 contains comprehensive details regarding the replies chosen from the locals.

Characteristics	Basshi (n = 159) Percentage	Nurym (n = 42) Percentage	
Gender:			
Male	56.5	60.2	
Female	43.5	39.8	
Age (year):			
Young people (18–34)	31.3	29.7	
Average age (35–54)	57.5	55.1	
Older age ( $\geq$ 55)	11.2	15.2	
Education:			
Secondary education	76.4	85.5	
Higher education	24.9	14.5	

Table 1. Detailed information about the selection of resident responses (n = 201).

The survey used a five-point Likert scale. We used eighteen indicators to measure progress in improving sustainable development. This was based on the population's perception of sustainable development of ecotourism: environmental (4 indicators), sociocultural (4 indicators), economic (5 indicators), and political (4 indicators). We calculated the weight of the indicator according to the formula [50,51]:

$$W_i = \frac{\text{Mean indicator}}{\text{Total indicators mean scores}} \times 100$$
(1)

This formula defines the weighting of indicators in the three dimensions to determine sustainability:

$$y_i = \frac{r_i - 1}{m} \times W_i \tag{2}$$

where r<sub>i</sub>—average scores of indicators of the sustainability, W<sub>i</sub>—Indicator weight, and m—the four intervals of the sustainability barometer.

The study used a sustainability barometer to determine gradations of sustainability [52,53]. Additionally, we used four interval scales from 1 to 100, with a classification of "unstable (bad)" for 1–25% of the scales. A rating of "potentially unstable (bad)" was given to 26–

50%. 76–100% were categorized as "stable (excellent)" and 51–75% as "potentially stable (good)". According to the interval scales, the average score ranged from 1 to 5, with 1.0–2.0 denoting unsustainability, 2.0–3.0 denoting possible unsustainability, 3.1–4.0 denoting potential sustainability, and 4.1–5.0 denoting sustainability. The following formula was used to calculate accomplishment scores in order to measure the relationships' contribution to sustainability:

$$D_i = \frac{y_i}{W_i} \times 100\% \tag{3}$$

Sustainable ecotourism development will allow residents to generate income and create new jobs. To determine the sustainability of ecotourism development in the National Park "Altynemel", consider the following indicators: environmental, sociocultural, economic, and political aspects (Tables 2 and 3).

**Table 2.** Average scores and ranking of indicators of the sustainability of ecotourism development based on Basshi village in the implementation of each indicator.

Factors	Indicators	Mean Indicator	Score (r <sub>i</sub> )	Rank	
Environmental	The level of environmental education of the local population (EN1)	4.68	5.57	3	
	Training and development of local knowledge in ecotourism management (EN2)	4.37	4.52	1	
	Local people's ideas about the peculiarities of geomorphological monuments and terrain in the park (EN3)	3.75	4.98	2	
	Local Perceptions of Biodiversity in the national park (EN4)	3.95	6.35	4	
	Rehabilitation and preservation of local cultural and historical values (SO1)	4.14	5.28	5	
	Restoration and realization of national traditional customs and traditions, holidays (SO2)	3.68	3.51	3	
Socio-cultural	Improvement of social infrastructure (SO3)	3.17	2.82	1	
	Features of the organization of ethnographic tourism in the national park (ethno-aul, national games, etc.) (SO4)	3.78	4.51	4	
	Easy access to attractions and major tourist sites (SO5)	3.61	4.02	2	
	Increase in household income of residents (EC1)	3.45	3.22	1	
	Employment opportunities for residents (EC2)	3.66	4.01	5	
Economic	Promote investments that support local development (EC3)	3.42	4.80	3	
	Economic efficiency of the agricultural organization (EC4)	2.41	1.38	2	
	Increase in state tax revenues (EC5)	2.54	1.65	4	
Political	Attract investment for sustainable development (PC1)	2.21	1.09	1	
	Safety of tourists and locals (PC2)	2.7	2.01	3	
	Existence of educational promotion and public awareness strategies (PC3)	2.80	2.09	4	
	Existence of a strategy to reduce poverty through tourism (PC4)	2.62	1.65	2	

Table was developed based on Equations (1)–(3).

Factors	Indicators	Mean Indicator	Score (r <sub>i</sub> )	Rank	
Environmental	The level of environmental education of the local population (EN1)	3.62	5.01	4	
	Training and development of local knowledge in ecotourism management (EN2)	3.25	3.44	1	
	Local people's ideas about the peculiarities of geomorphological monuments and terrain in the park (EN3)	3.40	3.65	2	
	Local Perceptions of Biodiversity in the national park (EN4)	3.31	3.87	3	
	Rehabilitation and preservation of local cultural and historical values (SO1)	3.37	3.84	3	
	Restoration and realization of national traditional customs and traditions, holidays (SO2)	3.20	3.38	2	
Socio-cultural	Improvement of social infrastructure (SO3)	2.52	1.94	1	
	Features of the organization of ethnographic tourism in the national park (ethno-aul, national games, etc.) (SO4)	3.56	4.41	5	
	Easy access to attractions and major tourist sites (SO5)	3.44	4.14	4	
	Increase in household income of residents (EC1)	3.21	3.52	4	
	Employment opportunities for residents (EC2)	3.49	4.22	5	
Economic	Promote investments that support local development (EC3)	3.01	2.90	3	
	Economic efficiency of the agricultural organization (EC4)	1.94	0.92	1	
	Increase in state tax revenues (EC5)	2.11	1.12	2	
Political	Attract investment for sustainable development (PC1)	1.43	0.30	1	
	Safety of tourists and locals (PC2)	2.61	2.01	4	
	Existence of educational promotion and public awareness strategies (PC3)	2.52	1.91	3	
	Existence of a strategy to reduce poverty through tourism (PC4)	1.65	0.66	2	

**Table 3.** Average scores and ranking of indicators of the sustainability of ecotourism development based on Nurym village in the implementation of each indicator.

Table was developed based on Equations (1)–(3).

## 4. Results

# 4.1. Environmental Factors

Since the "Altynemel" National Park territory is under state control, only legal activities are allowed for its citizens and businesses, including those involving its natural resources. Due to the environmental aspect, the residents' perceptions of Basshi and Nuryma villages are approximate. Residents are well aware of the land conditions of the national park and biodiversity and have the right approach to nature conservation. Since it is native land, the protection of its nature is considered the primary goal of the respondents.

# 4.2. Socio-Cultural Factors

When comparing the baseline descriptive analysis, Basshi village has a high perception of indicators of the positive socio-cultural impact of tourism. The maximum average score for the "Rehabilitation and preservation of local cultural and historical values (SO1)" indicator is Basshi = 4.14 and Nurym = 3.37. Residents of the Basshi pay great attention to preserving cultural values. According to the indicator "Restoration and realization of na-

10 of 18

tional traditional customs and traditions, holidays (SO2)—Basshi = 3.68 and Nurym = 3.20. In both villages, residents treat national holidays equally.

## 4.3. Economic Factors

The national park's tourism product contributes to the diversification of the region's tourism offer, the formation of regional tourism industry centers, and, if the appropriate infrastructure is in place, the development of inbound tourism. National parks have a staff of highly qualified professionals in science, nature conservation, and environmental education; their knowledge and experience will undoubtedly be in demand in the formation of tours with a visit to the national park. It is national parks with access to information about the unique objects of the territory and the natural phenomena observed in them, which is of particular value for tour operators working in the domestic and inbound tourism markets.

Regarding the economic aspects, the results of both villages showed an average level. Basshi and Nurym villagers received an average score for "Employment opportunities for residents (EC2)" (Basshi = 3.66 and Nurym = 3.49). Moreover, for "Promote investments supporting local development (EC3)," the lowest average score was in Nurym village (1.94). This is due to the quality of the road and remoteness from the main areas of a tourist destination. In this regard, the residents of Nurym village, although located on the park's territory, see few economic benefits from tourism. Residents of two villages positively respond to the "Increase in household income of residents (EC1)"; the average score is higher—3. The fact that Kazakhstan's state budget is mostly funded by the oil and gas industry and that tourism is not a top priority for economic growth is one of the key reasons why they disagree that "Tourism increases state tax revenues."

## 4.4. Political Factors

In the concept of sustainable tourism development, tourist destinations must be comfortable for all, but not to the detriment of nature, so to further develop tourism and competitiveness of the national park should, first of all, solve the problem of road accessibility, as well as the lack of funding for tourism, which affects the presence of many other barriers. In addition, a high percentage of survey responses showed that residents need to be better informed about the opportunities for tourism development in the national park.

Residents of Basshi and Nurym villages could be more optimistic about the political dimension. Two villages showed a low level of promotion of investments to support local development—Basshi = 2.21 and Nurym = 1.43. This shows that the government needs to pay more attention to attracting investment to manage ecotourism activities. Residents of Nurym village scored the lowest average score on the "Poverty Reduction Strategy" through Tourism Development (PC4) "(1.65), as the awareness of the population by the relevant authorities was conducted at a lower level.

The opinions on "safety management of the local population and tourists are largely the same (Basshi = 2.7 and Nurym = 2.61)," according to the survey. When conducting research in the study area, we discovered that the government needs to focus more on providing funding for the establishment of local restaurants, hotels, and other projects that offer services to draw tourists.

The study area is attractive for all discussed areas of active tourism and the placement of recreational infrastructure. The provision of the engineering infrastructure of the park still needs to be completed. This applies to cordons, many of which have no power supply. Most cordons have private power generators ("shepherds"). Some cordons have solar panels, and only the Shygan cordon has a transmission line from the village of Bashy. Springs, rivers, or wells supply the cordons with water. The engineering infrastructure of the central farmstead, administrative building, hotel, and production base provides almost all necessary utilities, though there is no sewage system everywhere. The residential production fund of the National Park "Altynemel" consists mainly of cordons where park inspectors and members of their families live. Today, there are 31 cordons on the territory of the "Altynemel" National Park; almost all of them were built by the "people" construction at the expense of the National Park. Some cordons (Kyzylauyz, Shygan, Taigak, Zhantogai) simultaneously serve as guest houses and are notable for their excellent amenities. Currently, seven cordons are in good condition but need routine repairs, 14 need significant repairs, and eight non-standard cordons require reconstruction. There are ten checkpoints with barriers in the national park. Eight bivouac sites have been built in the park. Figure 2 shows the infrastructure of the national park.



Figure 2. Map of infrastructure development and tourist routes of the "Altynemel" National Park.

Infrastructural unpreparedness of the territory and ecological overloading of treasured landscapes of all recreational zones is the most acute problem of the protected natural area. However, the most problematic area in the National Park "Altynemel" remains the sanitary and hygienic sphere (garbage disposal). Even among the best tourist sites, only one is engaged in a selective (separate) collection of waste (glass, metal, plastic, organics to compost), guided by environmental motivation.

Unlike nature reserves, the "Altynemel" State National Nature Park is open to the public on most of its territory. The National Park operates three tourist routes:

- Automobile and pedestrian routes—1. Basshi village—state natural monument "Singing barkhans"—spring of Ch. Valikhanov—Turanga grove—stone steles "Oshaktas";
- Automobile and pedestrian routes—2. Rock paintings "Tanbalytas"—burial mounds "Besshatyr";
- Automobile and pedestrian routes—3. v. Basshi—Katutau mountains—Aktau—Kosbastau cordon.

Figure 2 shows other developed routes.

The historically established outline of the tourist route and existing objects of tourist attraction determined the configuration of the recreational area of the created trail. It includes areas with favorable bioclimatic and landscape diversity. Some areas of the national park are located in the planning areas and close to settlements and places of tourist recreation. The authors proposed the creation of a visitor service area, the primary function of which is the placement of tourist service facilities.

Around the world, zoning schemes are usually used to balance the needs of conservation and development while ensuring the full implementation of comprehensive service functions of national parks. Functional zoning of a national park is the differentiation of an area according to conservation priorities and natural resource management regimes for the most effective and long-term resource management.

To make a map of the functional zoning of the "Altynemel" National Park territory, the authors used various archival space materials, data on administrative borders, cartographic images, and fieldwork materials as initial data (Figure 3). The National Park's land was divided into seven functional zones as a consequence of zoning: protected area; environmental Stability Zone; tourist and recreational activity zone; regulated short-term rest areas; long-term rest areas; zone of limited economic activity; security zone.

As the functional zones of different purposes, we identified four zones: park conservation zone; environmental stabilization zone; zone of tourist and recreational activities; zone of limited economic activities; protection zone. The primary purpose of functional zoning is to optimize the ratio of environmental and recreational components, considering the prospects for its development.

As a result of our work, we characterized the area as a classic process of littering with plastic, paper, glass, and other waste. In addition, we established the hidden pit dumping of household waste. On the other hand, the untimely removal of containers and containers with solid waste is an element that violates the aesthetics of the landscape.

Thus, in the last decade, in the places of mass recreation on the Kapshagay coast, there have been processes of burying household waste due to the increasing volume of consumer waste. Nevertheless, the problem can be solved if "launch" organizational, financial, economic, and technological mechanisms for implementing already developed schemes, including the sanitary cleaning of settlements. Expeditionary studies of the last summer seasons allow us to state that the district akimats should solve the problems with waste in the tourist area. However, unfortunately, the akimats cannot solve this problem because of the inconsistency of powers between it and the national park, the functions performed, and financial security.

There are disparities in the sustainability of tourist development between the two villages, as shown by a comparison of the descriptive analyses of the Basshi and Nurym settlements (Figure 4).



Figure 3. Map of functional zoning of the territory "Altynemel" National Park.



Figure 4. Sustainable development of settlements Basshi and Nurym. Source: Own development.

Although the residents of Basshi and Nurym assessed the development of the national park at the same level (potentially sustainable and potentially unsustainable), on four factors that differ from each other. The population of Basshi were considered to be more sustainable tourist destination than the residents of Nurym by roughly 30%, if we compare the four indicators used to analyze the four selected communities. One of the reasons for the low score is that Nurym village locates away from the road Basshi, so the residents of Nurym refrain from associating themselves with the development of various tourism sectors in the national park.

In the sustainable ecological dimension, a relatively high level of development—residents of Basshi village receive 77.77%, and residents of Nurym village consider the development of tourism stable at 62.26% (Table 4).

Factors	Weight (W <sub>i</sub> )	Weighted Scores (y <sub>i</sub> )	Achievement Percentage (%)	Interpretation	
Basshi					
Environmental	27.48	21.11	77.77	Sustainable (excellent)	
Socio-cultural	30.44	22	72.27	Potentially sustainable (good)	
Economic	25.40	15.61	61.45	Potentially sustainable (good)	
Political	15.95	7.2	45.1	Potentially unsustainable (poor)	
Total	100	67.92	64.14	Potentially sustainable (good)	
			Nurym		
Environmental	26.29	16.37	62.26	Potentially sustainable (good)	
Socio-cultural	31.1	17.21	55.33	Potentially sustainable (good)	
Economic	26.64	13.27	49.81	Potentially unsustainable (poor)	
Political	15.89	7.91	49.77	Potentially unsustainable (poor)	
Total	100	54.76	54.29	Potentially sustainable (good)	

Table 4. Sustainability indices for Basshi and Nurym villages.

Table was developed based on Equations (1)–(3).

Residents of the hamlet of Basshi rate their degree of development in the sustainable ecological component at 77.77%, while those in the village of Nurym view 62.26% of it as stable (Table 4). Given that the people of Bassha awarded the development of ecotourism in the national park a reasonably good rating, this shows that the aim of the development of ecotourism in the national park has been partially met. According to Table 4's evaluation of the socio-cultural aspects of tourism, inhabitants of two settlements scared at a possibly stable level (Basshi = 72.27 and Nurym = 55.33). Demonstration of national traditions to tourists is often organized in Basshi village.

### 5. Discussion and Conclusions

The findings of the research are used as the foundation for programs that will promote active tourism. Using a combination of GIS and MCDA techniques, we were able to apply a sizable number of criteria for coming to a compromise between two major land use priorities: sustainable tourism and improvements in the overall tourist infrastructure. In order to add to the debate on the practical issues of employing the MCDA approach, an effort was made in this study to modify the analysis's scope for practical reasons.

We evaluated the sustainability of ecotourism in the national park by looking at the perspectives of locals in settlements on the ecological, sociocultural, economic, and political effects of tourism. This method aids in conceptualizing socioeconomic worthwhile and having a favorable effect on the environment.

The study came to the conclusion that the two primary settlements of the tourist destination of the National Park "Altynemel" were unhappy with the two aspects (economic

and political) growth of sustainable tourism, which are the key driving factors of the development of the local territory.

In the village of Nurym, which is somewhat removed from the main highway, particularly few people now recognize the economic advantages of the tourist sector. At the same time, the state has not come up with a solid plan for getting the locals involved in tourism.

This generally suggests that the "Altynemel" National Park's ecotourism is still not very sustainable. It is crucial to include the local community in plans for the development of sustainable ecotourism in order to ensure best practices and a high degree of development of the national park.

We gave the following recommendations to improve the sustainability of ecotourism based on the "Altynemel" National Park:

The appropriate tourist management organizations should first emphasize the advantages of ecotourism development for the local population's economy. "Promoting the development of other sectors of the economy" and "increasing government tax revenues" are the metrics related to the economic aspect with the lowest average score. Marketing tactics, advertising, and cooperative groups may boost neighborhood productivity and help nearby small companies succeed. To do this: (1) state agencies should ensure a high degree of implementation of the economic aspects of Basshi and Nurym settlements; (2) state agencies should promote the strategies "Attracting Investment to Support Local Development" and "Reducing Poverty through Tourism Development" in Basshi and Nurym settlements. It is better to improve the participation rate and the level of empowerment in tourism to implement the points mentioned above.

National parks, being one of the effective forms of natural and recreational resources, can become initiators and centers of active expansion of sustainable development strategy in the surrounding areas. They combine the protection of natural and cultural complexes with the conduct of tourist and recreational activities, acting as tourist and recreational systems where the concept of sustainable tourism can be successfully implemented.

The "Altynemel" National Park can be considered a tourist-recreational system of the lowest level in several aspects:

- economic, when the organization and functioning of the national park are associated with creating jobs, developing ecotourism in the region, and related infrastructure (involvement of residents in the service of visitors to the national park). The most common ways of this direction are the development of paid services (lodging, meals, guide services, trade services);
- academic, in which the national park's resources become a regional center for ecological education. In practice, it is the activity and potential of the park in various forms of its work with pupils and students;
- environmental protection allows using the potential of the national park, which has a large staff of state inspectors, to realize the state ecological control.

The authors hope the MCDA methodology demonstrated in this study will become a practice in developing local legislation. Applying this methodology will increase the environmental awareness of the local community, providing an understanding of the potential consequences of the investments made.

**Author Contributions:** Conceptualization, A.K. and A.S. (Aigul Sergeyeva); methodology, A.K., A.A. and A.S. (Aigul Sergeyeva); software, A.S. (Aigul Sergeyeva) and Y.K.; validation, A.K., A.A. and A.S. (Aigul Sergeyeva); formal analysis, A.S. (Aigul Sergeyeva) and Y.K.; investigation, A.A. and A.S. (Akmaral Sapiyeva); resources, Y.K.; data curation, A.A. and M.S.; writing—original draft preparation, A.K. and A.S. (Aigul Sergeyeva); writing—review and editing, A.K. and A.S. (Aigul Sergeyeva); visualization, M.S.; supervision, A.K. and A.S. (Aigul Sergeyeva); project administration, A.S. (Aigul Sergeyeva); funding acquisition, A.A., A.S. (Aigul Sapiyeva) and M.S. All authors have read and agreed to the published version of the manuscript.

**Funding:** This article was prepared with funding from the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan in the framework of the implementation of the project on the topic AP09260144 "Rational use of natural tourist-recreational resources of the Republic of Kazakhstan based on recreational capacity assessment and anthropogenic impact minimization".

Institutional Review Board Statement: Not applicable.

**Informed Consent Statement:** Not applicable.

Data Availability Statement: Not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Štetić, S.; Trišić, I.; Nedelcu, A. Natural potentials of significance for the sustainable tourism development—The focus on the special nature reserve. J. Geogr. Inst. Jovan Cvijic SASA 2019, 69, 279–287. [CrossRef]
- Akbar, I.; Yang, Z. The influence of tourism revenue sharing constraints on sustainable tourism development: A study of Aksu-Jabagly nature reserve, Kazakhstan. Asian Geogr. 2022, 39, 133–153. [CrossRef]
- 3. Ryan, C. Equity, management, power sharing and sustainability—Issues of the 'new tourism'. *Tour. Manag.* 2002, 23, 17–26. [CrossRef]
- 4. Aliyeva, Z.; Sakypbek, M.; Aktymbayeva, A.; Assipova, Z.; Saidullayev, S. Assessment of recreation carrying capacity of Ile-Alatau national park in Kazakhstan. *Geo J. Tour. Geosites* **2020**, *29*, 460–471. [CrossRef]
- 5. Sobhani, P.; Esmaeilzadeh, H.; Sadeghi, S.M.M.; Marcu, M.V.; Wolf, I.D. Evaluating Ecotourism Sustainability Indicators for Protected Areas in Tehran, Iran. *Forests* **2022**, *13*, 740. [CrossRef]
- Trišić, I.; Privitera, D.; Štetić, S.; Genov, G.; Jovanović, S.S. Sustainable Tourism in Protected Area–A Case of Fruška Gora National Park, Vojvodina (Northern Serbia). Sustainability 2022, 14, 6006. [CrossRef]
- Abylkassimova, L. Key Trends and Prospects of Ecological Tourism Development in Kazakhstan. Bull. Natl. Acad. Sci. Repub. Kazakhstan 2022, 6, 229–241. Available online: https://journals.nauka-nanrk.kz/bulletin-science/article/view/4858/3689 (accessed on 11 March 2023).
- Geographical Location of "Altynemel" National Park. Available online: https://www.altyn-emel.kz/kz/ (accessed on 24 March 2023).
- Pachikin, K.M.; Nasyrov, R.M.; Sokolov, A.A. Soils and soil cover of Altyn-Emel National Park. In Proceedings of the "Altynemel" National Park; Michael Succow Foundation partner in the Greifswald Mire Centre & Biosphere Reserve Institute: Greifswald, Germany, 2016; pp. 33–45.
- Makenova, G.U.; Tuleubayeva, M.K.; Baktiyarova, A.Z. Tourist and Recreation Zones of the Republic of Kazakhstan as Attractive Tourist Destinations. *Cent. Asian Econ. Rev.* 2019, *6*, 133–145. Available online: https://www.elibrary.ru/download/elibrary\_44 867361\_91596505.pdf (accessed on 10 March 2023).
- Mazhenova, Z.A.; Sarsembekova, Z.K. Actual Problems of Development of Ecological Tourism in Kazakhstan. J. Geogr. Environ. Manag. 2017, 1, 297–304. Available online: https://bulletin-geography.kaznu.kz/index.php/1-geo/article/view/374/354 (accessed on 28 February 2023).
- 12. Information on the Work of the Akim of the Basshi Rural District of Kerbulak District for 2022. Available online: https://www.gov.kz/memleket/entities/zhetysu-kerbulak/press/article/details/108263?lang=kk (accessed on 19 February 2023).
- Taukebayev, O.; Seitkazy, M.; Salmurzauly, R.; Sakhariyev, B.; Aktymbayeva, A.; Tussupkanova, A.; Batay, G. Creating schematic map of tourist routes and infrastructure of Ayusai Gorge (Ile-Alatau national park). *J. Geogr. Environ. Manag.* 2021, *3*, 78–91. [CrossRef]
- 14. Bunruamkaew, K.; Murayama, Y. Land Use and Natural Resources Planning for Sustainable Ecotourism Using GIS in Surat Thani, Thailand. *Sustainability* **2012**, *4*, 412–429. [CrossRef]
- 15. Bahaire, M.; Elliot-White, M. The application of Geographical Information Systems (GIS) in sustainable tourism planning: A review. *J. Sustain. Tour.* **1999**, *7*, 159–174. [CrossRef]
- Astanin, D.M. Application of Network Method in the Planning and Functional Zoning of Territories Favorable for the Organization of Ecotourism (Case Study of the Central Part of the Eastern Sayan Mountains). *Mosc. Univ. Bull.* 2017, *3*, 51–60. Available online: https://vestnik5.geogr.msu.ru/jour/article/view/319?locale=en\_US (accessed on 29 April 2023).
- Baloch, Q.B.; Shah, S.N.; Iqbal, N.; Sheeraz, M.; Asadullah, M.; Mahar, S.; Umar Khan, A. Impact of tourism development upon environmental sustainability: A suggested framework for sustainable ecotourism. *Environ. Sci. Pollut. Res.* 2023, 30, 5917–5930. [CrossRef]
- 18. Gurung, D.B.; Scholz, R.W. Community-based ecotourism in Bhutan: Expert evaluation of stakeholder-based scenarios. *Int. J. Sustain. Dev. World Ecol.* 2008, *5*, 397–411. [CrossRef]
- 19. Habchak, N.F.; Dubis, L.F. Analysis of ecotourism infrastructure within the nature-protected areas of the Transcarpathian region (on the example of National Nature Park "Synevyr"). J. Geol. Geogr. Geoecology 2022, 31, 22–30. [CrossRef]
- 20. Bayadilov, K.O. The relief of the Park has a complex geomorphological structure, formed under the influence of tectonic, erosion, denudation, and accumulation processes. Mountain structures-Altynemel ridge and adjoining Sholak mountains. In Proceedings

of the "Altynemel" National Park; Michael Succow Foundation partner in the Greifswald Mire Centre & Biosphere Reserve Institute: Greifswald, Germany, 2016; pp. 11–25.

- Cherednichenko, O.G.; Mit, N.V.; Magda, I.N.; Pilyugina, A.L.; Bekmanov, B.O.; Mamilov, N.S.; Chirikova, M.A.; Nigai, N.L. Ecological characteristics of the area and evaluation of bio indicator species condition in Altyn-Emel State National Natural Park. *Bull. Karaganda Univ. Biol. Med. Geogr. Ser.* 2022, *4*, 148–160. [CrossRef]
- 22. Adamczyk, J.; Wałdykowski, P. Planning for Sustainable Development of Tourism in the Tatra National Park Buffer Zone Using the MCDA Approach. *Misc. Geogr.* 2022, *26*, 42–51. [CrossRef]
- 23. Kotlyarov, E.A. Geography of Recreation and Tourism: Formation and Development of Territorial Recreational Complexes; Mysl: Moscow, Russia, 1978; p. 238.
- 24. Ceballos-Lascuráin, H. Tourism, Ecotourism and Protected Areas: The State of Nature-Based Tourism around the World and Guidelines for Its Development; IUCN Publications: Cambridge, UK, 1996; p. 301. [CrossRef]
- 25. Strasdas, W. 'Sustainable tourism' or 'ecotourism?—Terms and concepts | Nachhaltiger Tourismus oder Ökotourismus?—Licht im Begriffsdschungel. *Nat. Landsch.* 2011, *86*, 518–520.
- 26. Liu, J.; Huang, X.; Guo, H.; Zhang, Z.; Li, X.; Ge, M. Study on Functional Zoning Method of National Park Based on MCDA: The Case of the Proposed "Ailaoshan-Wuliangshan" National Park. *Land* **2022**, *11*, 1882. [CrossRef]
- Fadafan, F.K.; Soffianian, A.; Pourmanafi, S.; Morgan, M. Assessing ecotourism in a mountainous landscape using GIS–MCDA approaches. *Appl. Geogr.* 2022, 147, 102743. [CrossRef]
- Gigović, L.; Pamučar, D.; Marković, S. GIS-Fuzzy DEMATEL MCDA model for the evaluation of the sites for ecotourism development: A case study of "Dunavski ključ" region, Serbia. *Land Use Policy* 2016, 58, 348–365. [CrossRef]
- 29. Zhang, Z.; Sherman, R.; Yang, Z.; Wu, R.; Wang, W.; Yin, M.; Yang, G.; Ou, X. Integrating a participatory process with a GIS-based multi-criteria decision analysis for protected area zoning in China. *J. Nat. Conserv.* **2013**, *21*, 225–240. [CrossRef]
- Bhuiyan, M.A.H.; Siwar, C.; Ismail, S.M. Sustainability measurement for ecotourism destination in Malaysia: A study on Lake Kenyir, Terengganu. Soc. Indic. Res. 2016, 128, 1029–1045. [CrossRef]
- 31. Morais, J.; Castanho, R.A.; Loures, L.; Pinto-Gomes, C.; Santos, P. Villagers' perceptions of tourism activities in Iona National Park: Locality as a key factor in planning for sustainability. *Sustainability* **2019**, *11*, 4448. [CrossRef]
- 32. Purnomo, A.; Idris, I.; Kurniawan, B. Understanding local community in managing sustainable tourism at Baluran National Park–Indonesia. *Geo J. Tour. Geosites* 2020, *29*, 508–520. [CrossRef]
- 33. Dumitras, D.E.; Muresan, I.C.; Jitea, I.M.; Mihai, V.C.; Balazs, S.E.; Iancu, T. Assessing tourists' preferences for recreational trips in national and natural parks as a premise for long-term sustainable management plans. *Sustainability* **2017**, *9*, 1596. [CrossRef]
- 34. Breiby, M.A.; Selvaag, S.K.; Øian, H.; Duedahl, E.; Lerfald, M. Managing sustainable development in recreational and protected areas. The Dovre case, Norway. J. Outdoor Recreat. Tour. 2022, 37, 100461. [CrossRef]
- 35. Blanco-Cerradelo, L.; Diéguez-Castrillón, M.I.; Fraiz-Brea, J.A.; Gueimonde-Canto, A. Protected Areas and Tourism Resources: Toward Sustainable Management. *Land* **2022**, *11*, 2059. [CrossRef]
- Gilmore, A.; Carson, D.; Ascenção, M. Sustainable tourism marketing at a world heritage site. J. Strateg. Mark. 2007, 15, 253–264. [CrossRef]
- Peng, J.; Xiao, J.; Wang, R.; Qi, Y. The Impacts of Establishing Pilot National Parks on Local Residents' Livelihoods and Their Coping Strategies in China: A Case Study of Qilianshan National Park. *Sustainability* 2022, 14, 3537. [CrossRef]
- Tsaur, S.H.; Lin, Y.C.; Lin, J.H. Evaluating ecotourism sustainability from the integrated perspective of resource, community and tourism. *Tour. Manag.* 2006, 27, 640–653. [CrossRef]
- 39. Ruiz-Ballesteros, E. Social-ecological resilience and community-based tourism: An approach from Agua Blanca, Ecuador. *Tour. Manag.* **2011**, *32*, 655–666. [CrossRef]
- 40. Guo, Y.; Jiang, J.; Li, S. A sustainable tourism policy research review. Sustainability 2019, 11, 3187. [CrossRef]
- 41. Akbar, I.; Yang, Z.; Han, F.; Kanat, G. The influence of negative political environment on sustainable tourism: A study of Aksu-Jabagly world heritage site, Kazakhstan. *Sustainability* **2020**, *12*, 143. [CrossRef]
- Reimer, J.K.K.; Walter, P. How do you know it when you see it? Communitybased ecotourism in the Cardamom Mountains of southwestern Cambodia. *Tour. Manag.* 2013, 34, 122–132. [CrossRef]
- 43. Kaplan, S. Community involvement and sustainability of tourism: A discussion through local community understanding in the Eastern Black Sea Region. *WIT Trans. Ecol. Environ.* **2015**, *193*, 885–894. [CrossRef]
- 44. Williams, P.W.; Fennell, D.A. Creating a sustainable equilibrium between mountain communities and tourism development. *Tour. Recreat. Res.* **2002**, *27*, 5–8. [CrossRef]
- Bello, F.G.; Carr, N.; Lovelock, B. Community participation framework for protected area-based tourism planning. *Tour. Plan. Dev.* 2016, 13, 469–485. [CrossRef]
- 46. Sharpley, R. Host perceptions of tourism: A review of the research. Tour. Manag. 2014, 42, 37–49. [CrossRef]
- 47. Zheng, R.; Zhen, S.; Mei, L.; Jiang, H. Ecotourism Practices in Potatso National Park from the Perspective of Tourists: Assessment and Developing Contradictions. *Sustainability* **2021**, *13*, 12655. [CrossRef]
- 48. Zhunusova, A.A.; Ayapbekova, A.E.; Kurmankulova, N.Z. The essence of ecotourism and the problems of its development in Kazakhstan. *Econ. Ser. Bull. L.N. Gumilyov ENU* **2022**, *2*, 252–261. [CrossRef]

- Theingthae, S. Sustainability of community based ecotourism development after the impact of tsunami disasters: Comparison between buddhism community and muslim community in Phuket Province, Thailand. J. Tour. Res. Hosp. 2017, 6, 1000175. [CrossRef]
- 50. Akbar, I.; Sergeyeva, A.; Myrzaliyeva, Z.; Tazhekova, A.; Saulembaev, A.; Mominov, S. Sustainability of the community-based ecotourism development in the Aksu-Zhabagly nature reserve, Kazakhstan: An evaluation through local residents' perception. *Region* **2022**, *9*, 69–82. [CrossRef]
- Job, H.; Becken, S.; Lane, B. Protected Areas in a neoliberal world and the role of tourism in supporting conservation and sustainable development: An assessment of strategic planning, zoning, impact monitoring, and tourism management at natural World Heritage Sites. J. Sustain. Tour. 2017, 25, 1697–1718. [CrossRef]
- 52. Ko, T.G. Development of a tourism sustainability assessment procedure: A conceptual approach. *Tour. Manag.* **2003**, *26*, 431–445. [CrossRef]
- 53. Karhu, J.; Lähteenmäki, M.; Ilmolahti, O.; Osipov, A. From threat to opportunity: Sustainability and tourism in Koli National Park. *Tour. Geogr.* **2022**, *24*, 859–878. [CrossRef]

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.