

OPPORTUNITIES AND PERSPECTIVES OF FORMATION OF THE MOUNTAIN TOURISM CLUSTER IN ALMATY AGGLOMERATION

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Citation: Issakov, Y., Aktymbayeva, A., Savanchiyeva, A., Assipova, Z., Taukebayeva, M., Moldagaliyeva, A., Burakov, M., Kai, Z., & Dávid, L.D. (2025). Opportunities and perspectives of formation of the mountain tourism cluster in Almaty agglomeration. *Geojournal of Tourism and Geosites*, 58(1), 105–118. <https://doi.org/10.30892/gtg.58109-1394>

Abstract: In the current conditions of sustainable development, the main reason for the importance of creating tourism clusters in mountainous areas is determined by competitiveness, the availability of attractive tourist facilities, and the possibility of achieving economic development by increasing the number of tourists. This is due to the fact that recreational resources and landscape features of mountainous areas significantly increase the tourist potential of the territory and contribute to the development of tourism. In connection with this, Almaty agglomeration is one of the most favourable regions for the creation and development of the first mountain tourism cluster in the Republic of Kazakhstan. Therefore, the purpose of this study was to explore the opportunities and prospects of mountain tourism cluster development in Almaty agglomeration. The study began with a literature review of the theoretical and practical foundations of mountain tourism cluster formation. The main problems of the enterprises-participants of the mountain tourism cluster and ways to solve them became known in the course of a specially conducted interview. The interview was based on 4 questions pre-designed for tourism industry entrepreneurs participating in the cluster located in the agglomeration and 63 business managers voluntarily participated. As a result of the research the main problems of enterprises-participants of mountain tourism cluster in Almaty agglomeration are revealed and the structural model of mountain tourism cluster development is developed. The model was aimed at mobilising tourism and recreational facilities and service organisations into a unified environment that would form the basis for the formation and development of a mountain tourism cluster. As a competitive advantage of Almaty agglomeration the presence of unique picturesque wildlife, as well as the occupation of such types of active recreation as sports tourism and extreme tourism is defined. Thus, having studied the development potential of mountain tourism cluster in Almaty agglomeration, natural resources and attractions, as well as the current state of the tourism industry, the need to develop a state strategic plan for the development of tourism cluster in Almaty agglomeration was determined. The said plan should fully

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incorporate marketing strategies, infrastructure development, socio-economic development, environmental cleanliness and safety, and protection of stakeholder rights. The results of this study will be effective in creating a mountain tourism cluster in the Almaty agglomeration, attracting visitors from around the world and stimulating the local economy.

Keywords: mountain tourism, cluster development, opportunities and prospects, Almaty agglomeration, Kazakhstan

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INTRODUCTION

In the modern conditions of sustainable development, the mountains are of particular interest to tourists as one of the most attractive tourist sites of natural and cultural significance and a unique landscape with a variety of amazing aesthetic views (Dax & Tamme, 2023). The recreational value of mountainous areas significantly increases the potential of the local area and favours the development of tourism (Tampakis et al., 2019). Mountain tourism is a specific type of tourism activity characterised by a particular landscape, topography, climate, biodiversity and local communities (Agbebi et al., 2021). Therefore, a large number of educational, sporting and therapeutic treks are organised in mountainous areas according to geographical features (Ito, 2021). Due to the difficult terrain of the mountains, the intensity of mountain tourism is not as high as in urban centres or beach resorts on a regional scale. However, mountains are in very high demand as one of the outdoor holiday destinations after beaches and ocean islands. After all, due to the increase in health problems after the global pandemic of COVID-19, mountain tourism is developing all over the world (Linca and Toma, 2021).

The main reason was that during the COVID-19 pandemic, many tourists maintained a social distance by renting private villas, apartments or holiday homes in mountainous areas (Zeng et al., 2022). Thus, mountain tourism involves visiting certain mountainous areas by special tourist groups, enjoying the landscape features of these places and obtaining tourist services in mountainous areas of great tourist and recreational importance. Nowadays, in terms of mountain tourism, many mountainous regions are famous for their sights and peaks, in particular, Peru is world famous for Machu Picchu and Nepal for the Himalayas. In addition, the Grand Canyon National Park in the USA; some tourist areas of the Alps in Italy and Austria (Mont Blanc, Monte Rosa, Matterhorn); Picos de Europa in Spain; Kilimanjaro in Kenya and Tanzania; the Carpathians in Slovakia, Czech Republic, Poland, Hungary, Romania and Ukraine; the Ural and Caucasus Mountains; and the Tien Shan Mountains characteristic of China and Central Asian countries are particularly sought-after tourist regions (Larson & Poudyal, 2012; Výrostová et al., 2021; Bennike & Nielsen, 2023; Sharma et al., 2023). The said mountainous areas offer hiking, mountaineering, cultural monuments preserved for centuries and unique routes that will give you an adrenaline rush. Therefore, it is necessary to diversify the functional activities for mountain tourism in these regions. That is, it is necessary to organise services on a cluster basis. Tourism clusters-tourist products and services should be realised as a network of supply chains of tourism services, covering various components of activity (Zhang et al., 2009). So, since the development of mountain tourism on a cluster basis is most often reflected at the regional level, the creation of clusters based on the tourist and recreational features of the same mountain region becomes extremely important.

The primary reason for the importance of creating tourism clusters is determined by their competitiveness, the presence of attractive tourist facilities, as well as an increase in the number of tourists, the ability to promote the development of transport, culture, trade, hospitality and other sectors of the economy (Jackson & Murphy, 2002; Alimova et al., 2020). In this regard, Kazakhstan has all prerequisites for the development of tourism business on the basis of clustering, i.e. historical and architectural monuments, medical and health resorts, nature reserves, cities that have developed as financial, educational and cultural centres are distinguished by their attractiveness for tourists (Saduov et al., 2019). The development of the cluster will contribute to the development of the construction, transport, entertainment industry and increase the volume of capital as investments in the republic. At the same time, the cluster will create an opportunity for the systematic development of Kazakhstan's regions, which currently have significant tourism resources that are not taken into account (Kenzhebekov et al., 2021). Support for the development of the tourism cluster is based on integrated actions of the public and private sectors, in particular, on the understanding of the priority of creating a competitive tourism industry to achieve a normal and dynamic socio-economic level of development of the region. However, at present, the most important aspects of the problems of improving the competitiveness of tourism services in Kazakhstan and the creation of a cluster in the sphere of mountain tourism have not been solved. Also, the theoretical and practical foundations of mountain tourism cluster development are not fully defined, there are practically no fundamental works devoted to the ways of solving the main problems of tourism cluster development.

In this connection, the purpose of this study was to explore the opportunities and promising directions for the development of mountain tourism cluster in the agglomeration of Almaty, the southern capital of the Republic of Kazakhstan. This is due to the fact that Almaty is a multi-route centre, where tours of active and passive types of tourism can be carried out at the national and regional levels (Zharkenova et al., 2023). Moreover, the location of Almaty will be particularly favourable for the development of mountain tourism, and it will be very advantageous to form a mountain tourism cluster within the Almaty agglomeration. Also, the ski resort in Almaty has every chance to develop in line with the times and become one of the world centres of mountain tourism (Dorokhov et al., 2020). The tourist potential of such resorts as Shymbulak, Oi-Qaragai, Akbulak, Tabagan, Pioneer Family Mountain Resort and Medeu Ice Rink is especially high. The fact is that snow falls in abundance in these places all year round and the ski season lasts for a very long time. Besides, there are Butakovskiy pass (route №106), Lesnoy pass - Bukreev peak (route №108), Gorelnikskiy gorge - trapezoidal pass - Kumbel peak - Kokzhailau - Ak-Bulak (route №120), Gorelnik - alplager "Dead-end water" - Mynzhylky - Titova pass - Gorelnik gorge (route №122), Shymbulak

ski resort - Talgar pass - Shymbulak peak (route №123), Shymbulak ski resort - Talgar Pass - Bogdanovich Glacier (route №124), dead-end Water Mountaineering Camp - Mynzhylky - Lake Manshuk Mametova (route №134) and dead-end Water Mountaineering Camp - Mynzhylky - Titova Pass - Availability of tourist routes, such as Gorelnik Gorge (route №136), gives tourists an opportunity to choose. Thus, it is necessary to fully utilise the potential of the Almaty Industrial Zone and the Alatau Innovation Technology Park. Almaty accounts for 5/1 of all visitors to the Republic, including 40% of domestic and foreign visitors. According to the results of a survey of Kazakh and foreign tourists, 60% of foreign tourists choose Almaty for ecotourism, and 55% of Kazakh tourists come for various activities and entertainment (Koshim et al., 2023).

Popularisation of the recreational value of tourist service objects in these mountainous regions creates the potential for increasing tourist flow. Therefore, the assessment of opportunities for the creation and development of mountain tourism cluster in Almaty and the identification of its promising directions will allow us to set a course for the future. This study, making conclusions about the creation and development of mountain tourism cluster in Almaty, is aimed at identifying the possibilities of cluster development and promising directions of development.

LITERATURE REVIEW

Tourism cluster basics

In the scientific literature, clusters are peculiar ways of self-organisation of society, adapted to withstand the rigours of global competition and maintain their existence. Cluster development is defined as a geographical concentration of interrelated companies and specialised suppliers and a group of consumer industries (Porter, 2000). The application of cluster development measures in tourism activities is often reflected at the regional level. Provides for the consolidation of tourism elements into a single centre to attract, serve and satisfy tourists within a city or county at the prefectural level as a geographical area (Yang & Fik, 2014; Peiró-Signes et al., 2015). In essence, the concept of tourism clusters is based on the theory of industrial clusters first introduced by Marshall (2009). Tourism clusters are composed of several industries and are shaped by the dynamics of relationships between different industries within the cluster (Cole, 2009).

Tourism clusters, as a result of the concentration of tourism industries and firms of the same destination in the same environment, allow small enterprises to introduce new innovations (Chan et al., 2012). More specifically, clustered products of interconnected firms and productivity gains in hotels (Chung & Kalnins, 2001).

As a result of the search for strategic methods of cluster development of the tourism industry, effective cluster models for the tourism industry have become known. In particular, the majority of tourism cluster researchers use the Porter's Diamond model. An example is the conceptual model (CR) of Crouch & Ritchie (1999). They suggested that the competitiveness of tourism destinations is determined by four main components, namely: qualifying determinants; destination management; key resources and attractors; and supporting factors and resources. However, Jackson & Murphy (2006) believe that Porter's model facilitates the shift from comparative advantage to competitive advantage in the process of cluster development. Hong (2008) uses Porter's model as the relationship between companies and suppliers as well as other relevant institutions. In addition, Dwyer & Kim (2003) proposed an "Integrated model" (DK) that represents the determinants and indicators of target competitiveness. Over time, Mazanec, Wöber and Zins (2007) extended the integrated model in terms of the competitiveness coefficient. Meanwhile, Kim & Wicks (2010) reconstructed a tourism cluster development model of global competitiveness based on Porter's diamond model, bringing together tourism researchers to study competitiveness and multinational activities in the global economy. To date, the strategy of tourism cluster development is developed through the efforts of all cluster participants, and the strategy defines the basic principles of tourism cluster development (Doçaj et al., 2018). Since the creation and development of a tourism cluster is a rather complex process, it requires constant work to adapt to changes in market and innovation conditions (Lascau et al., 2018).

Therefore, when establishing a tourism cluster, great efforts are made to improve transport and financial infrastructure, increase investment to improve management and attract companies that provide certain services and have experience in cluster development (Ivanovic et al., 2010). In this context, the main objective of tourism cluster policy is determined by the need to increase the share of clusters in the national economy, and increase cluster productivity and competition. Accordingly, clusters in the non-oil sector of the economy will be based on the division of enterprises into several industries using new methods.

Development of mountain tourism cluster

In line with the research topic, however, the development of a mountain tourism cluster is considered a major issue when considering a development plan for tourism-related activities in many regions (Page & Connell, 2020). Unique landscapes, wildlife, clean air, local culture, history and cultural heritage, winter and summer sports, and the possibility of nature-related activities were named as the main factors of high attractiveness of mountainous areas (Jeelani et al., 2023). Mountain areas are more fragile than other landforms and tend to be more susceptible to changes caused by tourism (Shah & AhmadWani, 2014). Conceptually, therefore, there are different strategies for mountain tourism clusters, which include: rural tourism, agritourism, ecotourism, community tourism and cultural tourism. In particular, rural tourism is developed as an alternative source of employment in mountain regions in the context of the cluster (Khartishvili et al., 2019). Indeed, with the accelerating urbanisation process, mountainous areas outside the suburbs are becoming increasingly popular due to the fact that most tourists prefer mountain tourism in rural areas to rural tourism (Podovac et al., 2019). Consequently, the mountain tourism cluster becomes prioritised as a regulator of environmental and community impacts in mountainous areas (UNEP, 2007; UNWTO, 2018). The formation and development of mountain tourism clusters by region is thus a very complex process, and many studies have therefore been conducted on a geographical basis. Moric (2013), for example, is concerned that

most of the routes in Montenegro are in the first stage of cluster development and that the rural tourism sector is still underutilised. Cao and Sarker (2022) in assessing the competitiveness of mountain tourism in China, developed the following key recommendations. They believe that county authorities should improve the balance between competition and cooperation with proper conservation and strengthen the balance by establishing a coordinated mechanism. In addition, local authorities believe that it is necessary to improve tourism infrastructure and develop the mountain tourism market by removing barriers to tourism co-operation. Additionally, Ng (2022) conducted a Scopus literature review on mountain tourism and concluded that mountainous countries are often more productive in terms of publications than countries poor in mountain resources and that geographical proximity facilitates academic exchange and cooperation in mountain tourism research.

Despite valuable world studies, there is no clear single formula for the formation and development of mountain tourist cluster. Therefore, a mountain tourist cluster should be based on the peculiarities of the location of mountain territories, convenience, aesthetic appeal and value of landscapes and much more. Unfortunately, there are practically no tourism clusters in Kazakhstan that meet the Kazakhstani recommendations for assessing the competitiveness of existing and prospective sectors of the economy and their development. American consulting J.E. Austin Associates Inc. according to the analysis conducted by the company, there are seven cluster areas in Kazakhstan: tourism, production of building materials, food industry, cargo transportation, textile industry, production of tools for mining, metallurgical industry (Samambayeva, 2013; Gallardo Vázquez, 2023). However, Kazakhstan has limited opportunities for global competitiveness as a result of the lack of proper management of tourism entrepreneurship (Aktymbayeva et al., 2023).

The implementation and successful functioning of targeted programmes for the development of high potential in the tourism business of Kazakhstan will create favourable conditions for the existing clusters in the country and will contribute to the emergence of new clusters. In this regard, the potential for the development of mountain tourism cluster in Almaty is very high, as noted in their studies by Kazakhstani scientists Niyazbayeva and Yessengeldina (2016), Askeyev and Baizholova (2021), Issakov et al. (2023a) and Tokbergenova et al. (2023). The authors believe that the development of mountain tourism cluster in Almaty will contribute to the achievement of high quality of recreation, consumption of environmentally friendly products, increasing the level of service using modern technologies, automation of management and digitalisation of marketing activities. In conclusion, the development of the mountain cluster in Almaty promotes this region as a centre of ecotourism and presents it as a multi-destination centre where active and passive tourism tours can be carried out at the national level.

MATERIALS AND METHODS

Study Area

Nowadays, mountain tourism is a special branch of tourism, which is dynamically developing in developed and developing countries of the world. Mountain tourism involves visiting certain mountainous areas in order to familiarise oneself with the landscape features of these places and to obtain tourism services in mountainous areas of great tourist and recreational importance. The development of mountain tourism is seen as an opportunity to combat the threat of marginalisation and to enable mountain residents and businesses to earn higher incomes.

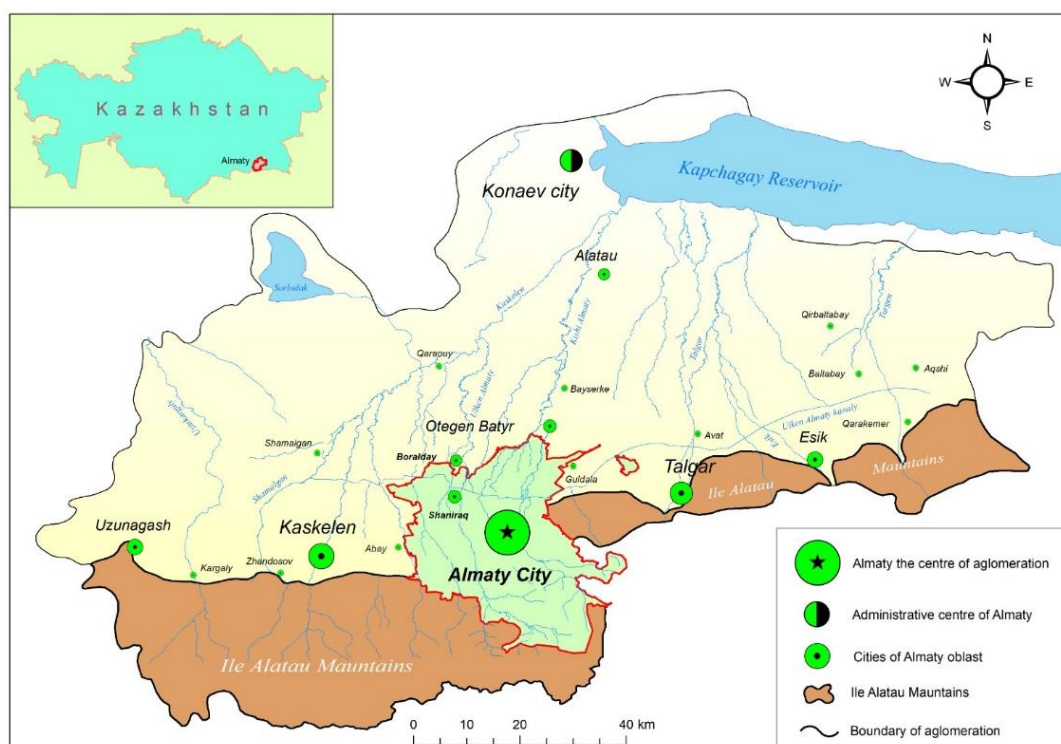


Figure 1. Territory of Almaty agglomeration (Source: compiled by the authors)

Therefore, tourism clusters in the mountain region are considered as a systemic mechanism for generating regional income through tourism activities. Also, the development of mountain tourism on a cluster basis is based on the tourist and recreational features of a particular mountain region, as it is carried out at the regional level. In this context, this study is aimed at exploring the opportunities and promising directions of mountain tourism cluster development in Almaty agglomeration, the southern capital of the Republic of Kazakhstan. This is due to the fact that the territory of Almaty agglomeration has a unique recreational potential and tourist resources of world significance. The rationality of the geographical location, wide opportunities for the development of virtually all types of tourism and the availability of regional tourist products allow the development of tourism and recreational infrastructure of this region. Almaty agglomeration includes five administrative districts of Almaty oblast (Yenbekshikazakh, Zhambyl, Iliysk, Karasai, Talgar districts and the territory of Kapshagay city administration) and the territory of Almaty city (Figure 1). The centre (core) of the agglomeration is the city of Almaty. In order to form optimal directions of agglomeration development, a rational plan of the territory has been developed, taking into account the interests of administrative-territorial units within the boundaries of the territory. The plan states that Almaty agglomeration has full potential for the development of extreme types of tourism - ski tourism, mountain biking, rafting and hang-gliding (Resolution on approval of the interregional scheme of territorial development of Almaty agglomeration, 2016). The President also spoke about the need to develop a mountain tourism cluster in the Almaty agglomeration (Official website of the President of the Republic of Kazakhstan, 2021). This is because the Almaty agglomeration has a large number of national parks and scenic spots, which allows for a large tourist flow. In addition, as part of the task to bring the number of external tourists to 3 million people in the agglomeration by 2025, ecotourism, skiing, health, sports, ethnic and urban tourism are offered to tourists as special destinations (Concept of cultural policy of the Republic of Kazakhstan for 2023-2027).

The survey

In the course of the research a special interview was obtained to identify potential enterprises-participants of the mountain tourism cluster, their grouping by industry characteristics and identification of key problems. After all, for the system solution of problems of development of mountain cluster of Almaty it was important to listen first of all to the opinion of business representatives working in this sphere. Therefore, the interview was based on 4 questions developed in advance for tourism industry entrepreneurs participating in the cluster located in the agglomeration. Simple random sampling was used to conduct structured face-to-face interviews (Hoyos, 2010). Executives or managers from 63 companies who agreed to be interviewed answered questions, giving interviews for 20 minutes each. Data were collected from September to November 2023. Interviews were conducted on weekdays at 17:00-20:00 by a well-trained senior lecturer in interview style. The interview questions (Q) were as follows:

Q1. In your opinion, what is the current state of mountain tourism in Almaty?

Q2. What are the main problems that exist in your enterprise?

Q3. What do you think are the solutions to these major problems?

Q4. In your opinion, in what direction should mountain tourism in Almaty develop in the future and what tourist attractions would you highlight?

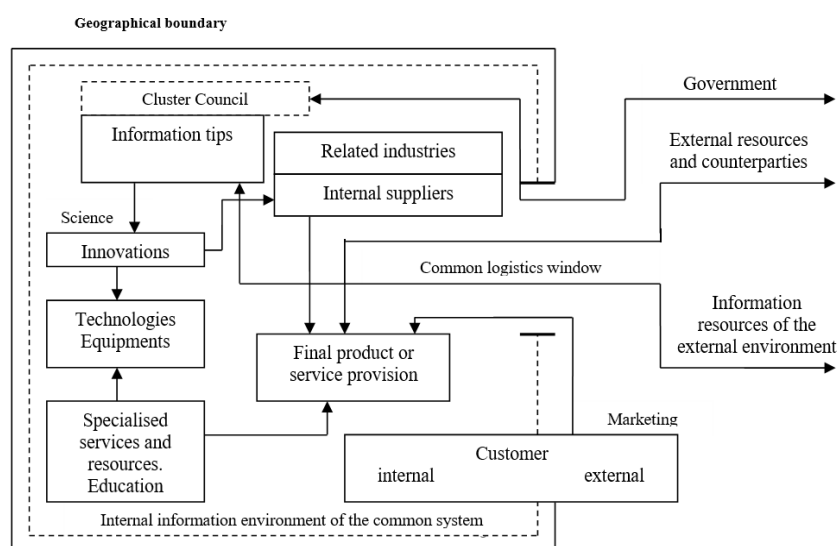


Figure 2. Common structure characteristic of clusters (Source: compiled by the authors)

Cluster Framework

The structure of tourism clusters today has become more complex, the cluster council includes regional leadership and is linked to the Government Entrepreneurship Council. The most important thing in the cluster structure is to spread innovation in value creation to the whole industry and to have a common logistic window in interaction with the external environment (Figure 2). This structure allows minimising transaction costs. Therefore, the creation and development of a tourism cluster within the Almaty agglomeration is very important. The possibility of cluster development of mountain

tourism is especially high. In this regard, having identified opportunities and promising directions for cluster development of mountain tourism in Almaty agglomeration, we have developed a structural model (in the results section of the model). The structural model was based on Porter's Diamond model (Fang et al., 2023). In other words, the model is aimed at mobilising tourist and recreational facilities and service organisations into a unified environment, which is the basis for the formation and development of a mountain tourism cluster in the Almaty agglomeration.

Research Flowchart

This study involves the development of a cluster model with the identification of opportunities and promising directions of mountain tourism cluster development in the agglomeration of Almaty, the southern capital of the Republic of Kazakhstan. The study began with a literature review and study of theoretical and practical foundations of mountain tourism cluster formation. To identify the main problems of entrepreneurs in the sphere of tourism in the studied territory, an interview was conducted, opportunities and promising directions of mountain tourism cluster development were identified. As a result, a cluster model for the development of promising areas was proposed. The full scheme of this study can be seen in Figure 3.

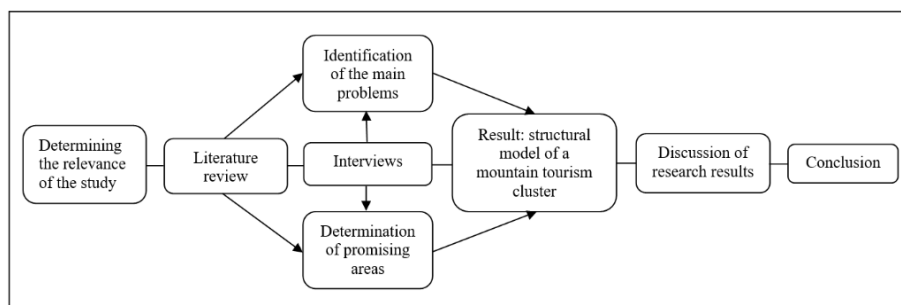


Figure 3. Research Flowchart (Source: compiled by the authors)

RESULTS AND DISCUSSION

Identification of enterprises participating in the mountain cluster

As a result of the study, the enterprises participating in the development of mountain tourism cluster in Almaty agglomeration were identified and grouped by industry (Table 1). Among the enterprises participating in the Almaty mountain tourism cluster were hotels, restaurants, resorts and sanatoria located on the mountain, national parks and reserves, ski complexes, clubs engaged in skiing, agricultural enterprises (representatives of agritourism) and hiking and trekking circles. Among them, ski complexes are of great importance in the development of mountain tourist clusters. This is due to the fact that tourists primarily come to the mountains for skiing, snowboarding, conkey or trekking, so in the process of organising or developing a mountain cluster it is necessary to give priority and support to enterprises working in this direction.

Table 1. Enterprises participating in the mountain tourism cluster, N=63

| Type of ownership | Hotels located in the mountains | Restaurants located in the mountains | Mountaineering clubs | Hiking and trekking circles | Sanatoriums | Ski (snowboarding) complexes | National parks and reserves | Agricultural enterprises |
|-------------------|---------------------------------|--------------------------------------|----------------------|-----------------------------|-------------|------------------------------|-----------------------------|--------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| State | - | - | 1 | - | 1 | 2 | 3 | - |
| Private ownership | 16 | 13 | 6 | 10 | 3 | 4 | - | 5 |
| Total 63 | 16 | 13 | 7 | 10 | 4 | 6 | 3 | 5 |

Due to the territorial specificity of Almaty, skiing complexes are scattered. Nevertheless, ski resorts on the slopes of the Alatau have a high tourist potential (Table 2). Such resorts as Shymbulak, Oy-Karagai and Akbulak have especially high chances of receiving tourists. In addition, there are plans to build a ski resort Kokzhailau and develop mountain tourism in the future.

Table 2. Ski complexes located in the vicinity of Almaty (Source: compiled by the authors)

| № | Name of ski resorts | Location feature | Type | Price |
|---|---------------------|--|----------------------------|------------|
| 1 | Shymbulak | Ski resort located at an altitude of 2510 metres above the Zailiyskiy Alatau gorge near Almaty. | Ski resort | 5-15 euros |
| 2 | Oi-Qaragai | The resort is located at an altitude of 1,650 metres above sea level in a zone of coniferous forests | Mountain resort | 7 euros |
| 3 | Ak-Bulak | Located in the foothills of Ili Alatau at an altitude of 1600 metres above sea level, outside the city of Talgar | Ski resort | 6-32 euros |
| 4 | Tabagan | The complex covers an area of 91 hectares. The highest point of the slope is 1,652 metres above sea level. | Ski resort | 6-12 euros |
| 5 | Pioneer | The resort is located at an altitude of 2000 m above sea level in the picturesque Kotyrbulak Gorge on the territory of Ile-Alatau National Park. | Ski Park | 6-12 euros |
| 6 | Medeu | High-altitude sports complex located near the city of Almaty, at an altitude of 1691 metres above sea level. | High mountain skating rink | 3-6 euros |

Currently, alpenism, a special type of mountain tourism in the vicinity of Almaty, is rapidly developing day by day, influenced by the clubs operating in the area. Several well-known alpenism clubs are active today (Table 3). Among them we can single out the Almaty Mountain Club and the Almaty School of Mountaineering. This is due to the fact that these clubs specialise in organising mountaineering trips and training in extreme outdoor sports. They are also actively involved in training climbers and organising competitions. These teams run many routes near Almaty, the most popular of which are as follows: 1) Butakovskiy pass (route №106), 2) Lesnoy pass - Bukreeva peak (route №108), 3) Gorelnik gorge - Trapeziya pass - Kumbel peak - Kokzhailau - Ak-Bulak (route №120), 4) Gorelnik - Tuyuku alplager - Mynzhilki - Titova pass - Gorelnik gorge (route №122), 5) Chimbulak ski resort - Talgar pass - Chimbulak peak (route №123), 6) Chimbulak ski resort - Talgar pass - Bogdanovich glacier (route №124), 7) closed water mountaineering camp - Mynzhilki - Manshuk Mаметova lake (route №134) and 8) closed water mountaineering camp - Mynzhilki - Titova pass - Gorelnik gorge (route №136).

Table 3. Mountaineering clubs (Source: compiled by the authors)

| № | Club name | Direction |
|---|--|--|
| 1 | Almaty Mountain Club | Actively participates in organising climbing trips, training and competitions |
| 2 | Almaty Adventure Club | A club specialising in extreme sports, including mountaineering |
| 3 | Almaty Rock Climbing Club | Engaged in mountaineering and mountain tourism |
| 4 | Extreme Tourism and mountaineering Club "Vertical" | Specialises in mountain trekking, mountaineering and mountain tourism and is dedicated to training beginners |
| 5 | Almaty Mountaineering School | Mountaineering and mountaineering courses for amateurs and professionals |
| 6 | Cozy Rock | Rock climbing for children and adults |
| 7 | Alpine Asia Team | Mountaineering section |

At present, there are 7 sanatoriums in Almaty, which are engaged in health improvement of residents and tourists (Table 4). This is due to the fact that the slope of the Ile Alatau is an ideal place for climatotherapy. Most sanatoriums provide an opportunity for hiking and eco-tourism due to the location on the territory of Ile-Alatau National Park and Almaty reserve in the picturesque nature. The air of the valley facilitates blood circulation and restores metabolism. Therefore, most foreign and domestic tourists come for this purpose. In these sanatoriums, programmes of therapeutic and recreational procedures for each holidaymaker are prescribed by doctors individually, taking into account the state of health, chronic diseases and compatibility of procedures.

Table 4. Sanatoriums (Source: compiled by the authors)

| № | Name of ski resorts | Sanatorium-resort treatment for the following types of diseases | Price |
|---|---------------------|---|--------------|
| 1 | Altyn Kargaly | Cardiovascular system; musculoskeletal system; gastrointestinal tract; upper respiratory system | 20-80 euros |
| 2 | Ak-Kain | Inflammation of the palatine tonsils; inflammatory process of the pharyngeal mucosa; chronic inflammation of the trachea and bronchi; respiratory diseases; heart and vascular diseases; high or low blood pressure; spinal diseases; joint diseases; colitis, haemorrhoids; diseases of the female genital organs; infertility; inflammation of the prostate gland; gum diseases and cavities of the mouth | 20-30 euros |
| 3 | Ak-Bulak | Cardiovascular diseases; musculoskeletal system diseases; gastrointestinal tract diseases; chronic liver and biliary tract diseases; respiratory diseases | 20-55 euros |
| 4 | Kazakhstan | Rehabilitation of musculoskeletal apparatus; respiratory organs; cardiovascular and nervous systems; urological and gynaecological diseases | 25-75 euros |
| 5 | Koktem | Digestive organs; gastric and duodenal ulcer; biliary tract; chronic colitis; treatment of metabolic and endocrine system diseases; treatment of nervous system diseases (out of exacerbation phase); treatment of respiratory and ENT diseases; treatment of chronic and occupational intoxication, including heavy metals and phosphorus. | 22-70 euros |
| 6 | Samal | Specialises in rehabilitation of the musculoskeletal system; respiratory organs; cardiovascular and nervous systems | 32 euros |
| 7 | Almaty Resort | Sanatorium profile - general therapeutic | 70-420 euros |

However, there is a high demand for hiking and trekking on the part of tourists visiting Almaty. After all, the good work of enterprises working in this direction and the ability to arouse interest in this direction among tourists increase the demand. In particular, such teams as: Demal, Tourist and Sports Club "Monte", Lake Alma Hiking Trail, Gorny Club Almaty, Tamyr and Morena are well developed in this direction. These teams intend to develop this direction of ecological tourism. In addition, it contributes to improving the level of physical culture of any tourist and promotes a healthy, active lifestyle. These teams provide services on many hiking and trekking routes in the vicinity of Almaty, the most popular of which are Kokzhailau, Butakov waterfalls, Furmanov Peak and others.

As for the hotels belonging to the mountain tourism cluster located in the mountainous region near Almaty, there are many hotels with special service among them (Table 5). It can be said, however, that the location and prices of the hotels differ. It is very important to have unified agreements, as hotels participating in the cluster operate within the cluster. Therefore, we believe that state regulation of this direction is necessary. In addition, restaurants are of great importance in mountain tourism (Abdirazakov et al., 2023). There are many good restaurants located on the mountain that are part of the Almaty mountain tourism cluster, among which we can highlight the following: Akauly, Chashnagiri, Auyl, Hisan, Inzhu, Abay, Restaurant & club Bellagio, Chalet Shymbulak meat restaurant, Rifugio del Monte, Big Chefs Shymbulak and Dadli.

Table 5. Hotels (Source: compiled by the authors)

| № | Hotel name | Guest feedback | | Minimum price, euro | Hotel category |
|----|----------------------------|-----------------|------------------|---------------------|----------------|
| | | TripAdvisor (5) | Booking.com (10) | | |
| 1 | Shymbulak Resort Hotel | 3.5 | 8.4 | 80 | - |
| 2 | Oi-Qaragai Mountain Resort | 4.0 | 8.6 | 120 | 4* |
| 3 | Be Fine | 4.5 | 9.0 | 165 | 4* |
| 4 | S.N.e.G Hotel | 4.5 | 9.3 | 120 | - |
| 5 | Qazaq Auyly Eco Hotel | 5.0 | 9.1 | 250 | 5* |
| 6 | Tenir Eco Hotels | 4.0 | 9.1 | 290 | - |
| 7 | Alpine Rose Resort | 3.0 | - | 50 | - |
| 8 | Hostel Shymbulak | - | 8.8 | 30 | - |
| 9 | Edelweiss | - | 7.7 | 40 | 3* |
| 10 | Sunkar Hotel | 3.0 | 8.2 | 30 | - |
| 11 | Samal Resort & SPA | 4.5 | 9.1 | 100 | 4* |
| 12 | Medeu Hotel Almaty | 2,5 | - | 30 | 2* |

Agricultural entrepreneurs and farmers have a great influence on the formation and development of the mountain tourism cluster in Almaty. In the past, this region is the birthplace of apples, and the local brand "Aport apple" is known all over the world (Robbins, 2010). Given that Apple apor grows in mountainous areas, it can be seen that agritourism representatives located in the region also participate in the mountain tourism cluster. Thus, agritourism is a relatively new trend of ecotourism that is becoming increasingly popular in Almaty. Several farms participating in the mountain tourism cluster can be noted in Almaty: Arba Wine Vineyards, GreenEco Greenhouse Complex, Flower farm Little Garden, Ostrich Farm, Taurus, Agroimpex, Talgar Trout Farm, Turgen Trout Farm Altyn Tau and Dragan Farm.

It is worth highlighting the Dragan Farm, which is of particular interest for the Almaty Mountain tourist cluster. This farm is gaining the respect of tourists by organising many types of agritourism. Thus, Almaty agglomeration has sufficient tourism and recreational potential for the development of mountain tourism cluster. However, due to the lack of systematic organisation and mutual agreements, mountain tourism is not developed at the appropriate high level. There are a number of urgent problems that need to be solved, which we have shown in the next section.

Actual problems of development of the mountain tourism cluster of Almaty

In order to identify the main problems of development of the Almaty cluster of mountain tourism, the heads and managers of 63 enterprises located in the mountain zone of Almaty agglomeration and carrying out tourism activities were interviewed. According to the results of interviewing the following problems of the current state of mountain tourism and services in Almaty agglomeration were identified:

1) Lack of qualified specialists. In general, there are no special institutes engaged in tourism research in Kazakhstan (currently, only state institutions conduct research). Kazakhstani companies conduct market research on their own. However, there are practically no experienced specialists to develop the construction of tourist facilities and amusement parks (Shevyakova et al., 2019). Also, not all educational institutions in the tourism sector provide the industry with full-fledged experienced specialists (Németh et al., 2019). Therefore, it is necessary to stimulate support for the training of necessary specialists for clusters where the education system will be established. To ensure quality training of tourism personnel it is necessary to:

- introduction of the tourism education quality certificate "UN Tourism.TedQual" in the universities that train personnel for the tourism industry;

- ensuring Kazakhstan's participation in international tourism events;

- ensuring the participation of foreign specialists in the development of educational programmes, teaching aids, textbooks and visual materials of higher education institutions that train tourism personnel (Zhoya et al., 2023);

- conducting training seminars and refresher courses for tourism industry specialists, including guides, tour guides, tourism instructors, including for specially protected natural areas and state national parks. In addition, according to the results of international experts, one of the most important measures for the development of the tourism industry is its scientific and methodological support. In Almaty there is practically no scientific and methodological base for the development of mountain tourism, while in developed countries, such as Germany and the UK, there are Centres for research and forecasting the prospects for the development of national tourism, funded from the state budget (Aliyeva et al., 2020).

2) Vulnerable infrastructure and recreation industry development. The main problem is the lack of developed infrastructure and services corresponding to international standards. In fact, one of the problems is the difficulty to reach the facilities due to roads in poor condition. According to experts, the most significant impact on the development of tourism comes from the hotel business, transport, travel agencies, and global computerised booking and reservation systems. Therefore, it is necessary to pay special attention to them, improve the quality of their service and expand the scope of services. Taking into account the insufficient development of tourism infrastructure and limited financial resources, it is necessary, first of all, to undertake the construction of a network of hotels and motels located in mountainous areas, as well as campsites. This is due to the fact that today accommodation prices in this region are relatively expensive for locals. In order for affordable hotels to appear in the mountains of Almaty, it is necessary to strengthen competition, and then prices will fall. In addition, of particular importance for the development of mountain

tourism in Almaty is the development of health resort activities. This requires the implementation of the following measures: certification and classification of health resort facilities, ensuring coordination of their activities.

3) The presence of administrative barriers. In particular, it is important to improve the legal and regulatory framework and resolve visa issues. This issue, in turn, requires the participation of all stakeholders in the implementation of the state programme, public-private partnership. Therefore, the involvement of all interested ministries and local executive bodies in the development of tourist industry facilities is becoming more and more urgent. It is necessary to expand the list of countries whose citizens are entitled to simplified visa and registration regimes. At the same time, tax incentives should be granted to participants operating within the mountain tourism cluster. Such common problems cannot be solved by individual companies. Therefore, they should be controlled by a targeted government policy.

4) Lack of proper marketing. Although there are many picturesque places near Almaty agglomeration, they are not popular with foreign tourists. Developing an image strategy of Almaty as a tourist centre with unique tourism potential, open to the whole world, safe for tourists, is an important factor in attracting them to the country. As a marketing strategy, it should be implemented in the following directions:

- organisation of demonstration of video materials on mountain tourism on the world media channels BBC, CNN, Euronews, Discovery, Tourism and Adventures, etc;
- frequent briefings, presentations on the potential of mountain tourism in Almaty;
- development of customised videos tailored to specific target markets;
- organisation of information and press tours for representatives of major leading tour operators.

5) The problem of financial resources. For the development of mountain tourism it is very important to attract large investments into the industry and increase the investment attractiveness of Almaty. For sustainable development of mountain tourism in Almaty, it is necessary to make many changes to the law "on investments". In particular, it is necessary to reduce taxes and customs duties. Special attention should be paid to crediting and investing domestic tourism enterprises by providing discounts.

6) The issue of tourist safety. The safety of tourists directly depends on the state policy, measures taken by tour operators and travel agents when organising tours. In the conditions of increasing frequency of terrorist acts, epidemics and unfavourable technogenic consequences, the issue of safety becomes urgent. In this regard, the issue of development of Almaty mountain tourist cluster is to inform tourists on the issues of protection and defence of tourist environment and safety.

In general, for the cluster development of mountain tourism in Almaty agglomeration there are many issues to be solved. These issues should be solved by co-operation between government and business as well as local communities through proper solution planning.

State regulation of the mountain tourism cluster

The issues of development of the mountain tourist cluster of Almaty should be solved first of all by the state and private entrepreneurs. This is due to the fact that in the development of tourism, as one of the spheres of the economy, it is possible to distinguish the tasks of the state and individual entrepreneurs. For the development of mountain tourist cluster at the level of agglomeration, active intervention of the state is necessary to solve the main problems (Li & Liu, 2022). That is, it is necessary to stimulate promising areas for the development of domestic tourism and arrivals to the agglomeration with constant monitoring of alternative markets for tourist services. At the same time, the tourism cluster should support the construction of new and reconstruction of old facilities, ensuring the effective functioning of the Coordinating Council. It is also necessary to legally regulate the improvement of service quality and price reduction (Moldagaliyeva et al., 2023).

National channels should be obliged to promote mountain routes and routes with tourism potential and systematise the organisation of winter and summer sports events. The development and publication of agglomeration guides, thematic maps in several foreign languages should be supported (Issakov et al., 2024). In addition, it is necessary to prepare special itineraries for foreign tour operators and media in the territory of Almaty agglomeration and organise information tours. It is necessary to promote mountain tourism as the best form of healthy lifestyle and create appropriate infrastructural conditions for it (Issakov et al., 2023b). In this connection, the participation of entrepreneurs of private tourism business in the development of mountain tourism cluster in Almaty agglomeration promotes the development of this sphere of activity. Due to the growing demand for mountain tourism, the number of tourism enterprises in the agglomeration will increase. This will also expand the geography of tour operators developing new tourist routes and mountain tourism requirements in the vicinity of Almaty. Promotes the development of mountain tourism on a cluster basis by investing in the construction of small and medium-sized private hotels. Based on the results that are currently being carried out, it can be seen that the development of the tourism industry is fully dependent on the support of the state. As a result of the state measures described above, in our opinion, the mechanisms of state regulation of the industry can be structured as follows:

- credit and financial: creation of a special economic zone, transport and other infrastructure, targeted programme of mountain tourism development, development of a form of property state partnership in the sphere of mountain tourism (system of state guarantees, soft loans, direct financial support of important projects), financial assistance for advertising services;
- investments: attraction of foreign financial sources for the development of regional tourism opportunities, establishment of co-operation relations with the Sustainable Development Fund "Samruk-Kazyna" for the implementation of promising projects;
- tax-budgetary: discussion of measures to provide tax incentives for the development of the industry, provision of tax benefits by reducing administrative barriers;

- price regulation: increasing demand for tourism products by indirectly influencing pricing;
- information support: targeted orientation of advertising activities in the media to promote and position the tourist product and opportunities of the region;
- formation of the national tourist brand "Almaty Mountain Tourism".

Structural model of mountain tourism cluster development in Almaty

The development of a competitive cluster in the tourism industry directly depends on the measures taken by the state. This is due to the fact that as a result of mutual agreements between market institutions, government agencies and entrepreneurs, based on the proposals of each party, a single transaction and joint work, a competitive product in the tourism industry is formed (Nyanga et al., 2023; Berdiyarov, 2021). The importance of the presence of state structures in the cluster is due to the solution of issues related to the formation of the legal environment, tax policy, financing, infrastructure development. Similarly, given the great influence of socio-political factors on the legislative and executive activities of the state in various spheres of domestic and foreign policy, their relevance is indicated by the regulatory and legal environment of the tourism cluster (Chen et al., 2021; Cheng et al., 2023). In this regard, the development of mountain tourism cluster in Almaty will depend on the following circumstances: the creation of an optimal institutional environment aimed at balancing the interests of society, enterprises and local communities. Therefore, when developing the cluster model of mountain tourism in Almaty (Figure 4), we ensured the participation of various stakeholders, including government agencies, travel agencies, local businesses and members of the public.

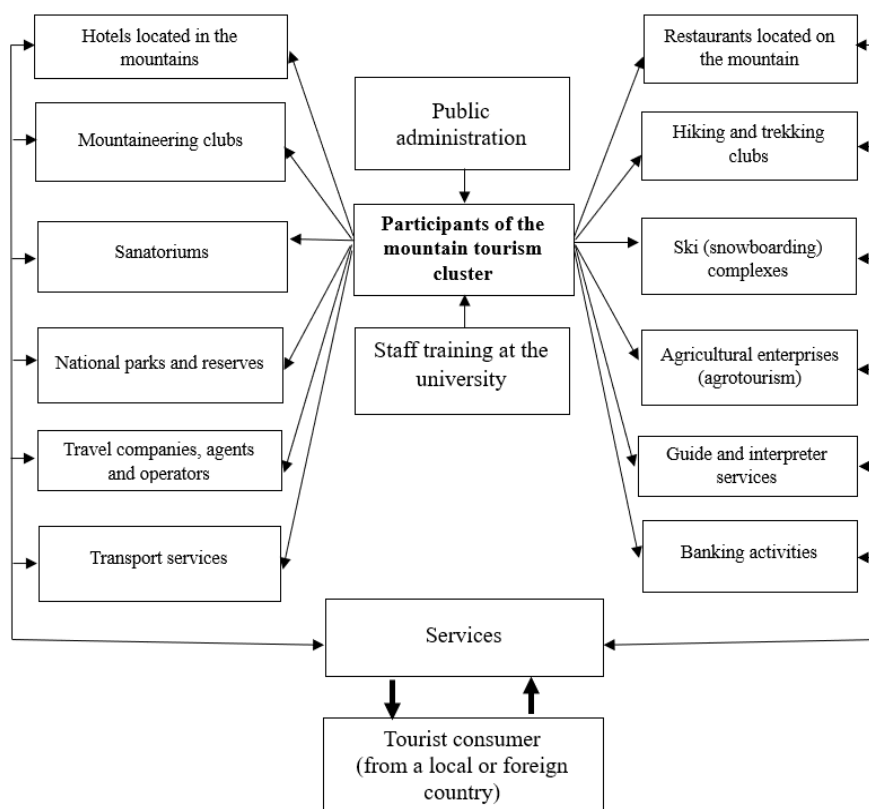


Figure 4. Structural model of the Almaty mountain tourism cluster (Source: compiled by the authors)

Mountain tourism cluster participants are an important part of the cluster model, as they form the main demands of tourists. The following enterprises will participate in the implementation of the cluster model of mountain tourism in Almaty:

- 1) Hotels located in the mountains: Shymbulak Resort Hotel, Oi-Qaragai Mountain Resort, Be Fine, S.N.e.G Hotel, Qazaq AuyI Eco Hotel, Tenir Eco Hotels, Alpine Rose Resort, Hostel Shymbulak, Edelweiss, Sunkar Hotel, Samal Resort & SPA және Medeu Hotel Almaty.
- 2) Restaurants located on the mountain: «Akauly», «Chashnagiri», AuyI, Hisan, Inzhu, Abay, Restaurant & club Bellagio, Chalet Shymbulak meat restaurant, Rifugio del Monte, Big Chefs Shymbulak and Dadli.
- 3) Mountaineering clubs: Almaty Mountain Club, Almaty Adventure Club, Almaty Rock Climbing Club, Extreme Tourism and mountaineering Club "Vertical", Almaty Mountaineering School, Cozy Rock and Alpine Asia Team.
- 4) Hiking and trekking clubs: Demal, Tourist and Sports Club "Monte", Lake Alma Hiking Trail, Gorny Club Almaty, Tamyr and Morena.
- 5) Sanatoriums: Altyn Kargaly, Ak – Kain, Ak-Bulak, Kazakhstan, Koktem, Samal and Almaty Resort.
- 6) Ski (snowboarding) complexes: Shymbulak, Oi-Qaragai, Ak-Bulak, Tabagan, Pioneer and Medeu.
- 7) National parks and reserves: Ile-Alatau National Park and Almaty Reserve.

8) Agricultural enterprises (agrotourism): Arba Wine Vineyards, GreenEco greenhouse complex, Flower farm "Little Garden", Ostrich Farm, Taurus, Agroimpex, Talgar trout farm, Turgen trout farm "Altyn Tau" and "Dragan" farm.

9) Travel companies, agents and operators: Tumar Trans, Sky Way, Asia Connection, Discover Almaty, Grande Voyage, Meloman travel, Alatau in travel, All Service Tourism, Almaty Horse and Polo Club, AmAr Travel, Asia Discovery, Australia & Oceania Travel, Azimut Travel, Eco Park Tour, Fantasy Way, Gid Travel, GornoTravel, Green Trip, Holiday Globus etc.

10) Guide and interpreter services: KGB Language Services, Welcome.kz, Wegotrip etc.

11) Transport services: Grande Voyage, CarPlusDriver, Rosalie Trans, Minivanservis, AllTransQazaqstan, ExpressBus etc.

12) Banking activities: Altyn Bank, Bank RBK, Bereke Bank, First Heartland Jusan Bank, Fortebank, Home Credit Bank, Kaspi Bank, CenterCredit Bank, Eurasian Bank, Narodny Bank of Kazakhstan, Freedom Finance Kazakhstan, Nurbank and VTB (Kazakhstan).

Thus, the competitive advantage of Almaty is the presence of unique culture (historical tourism), beautiful wildlife (ecological tourism), as well as the opportunity to engage in such types of recreation as sports tourism, extreme tourism (Figure 5). That is why it is possible to develop the mountain tourism industry by carrying out work to increase the potential of mountain tourism in Almaty, including existing natural resources and tourist attractions, infrastructure (Issakov et al., 2023c). Unfortunately, mountain tourism is not developed at the proper level due to the fact that modern tour operators do not have a clear idea of what types of tourism should be developed.

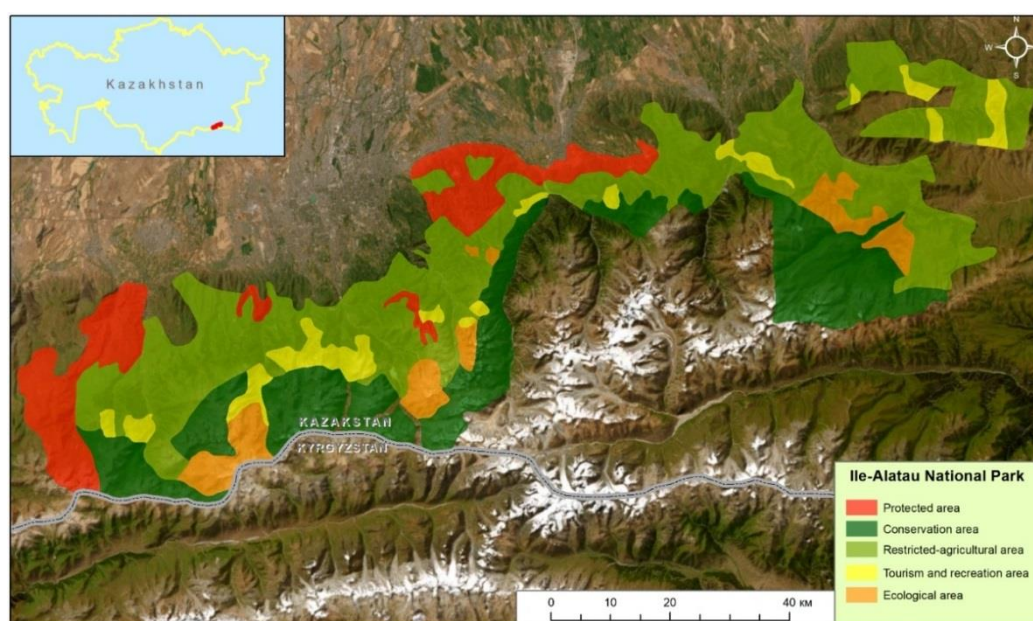


Figure 5. Tourist potential of Ile-Alatau Mountain (Note: compiled by the authors)

CONCLUSIONS

So, having studied the potential of mountain tourism cluster development in Almaty agglomeration, natural resources and attractions, as well as the current state of the tourism industry, we came to the conclusion that it is necessary to develop a strategic plan defining the goals. The strategic plan should include marketing strategies, infrastructure development and stakeholder engagement. In this regard, it will be useful to organise more frequent social media marketing, tourism fairs and events to raise awareness of the mountain tourism offerings in Almaty. Infrastructure development should start with improving roads, building footpaths and creating visitor centres. Therefore, government agencies, tourism agencies, local businesses and community representatives should work together to achieve the goal of developing mountain tourism infrastructure through mutual partnership or knowledge sharing. It is also important to provide training and development opportunities for the local labour force involved in the mountain tourism cluster with the skills and knowledge to meet the needs of tourists. This will improve the quality of hospitality, tourism management and customer service. However, the most important point is to ensure that the mountain tourism cluster is sustainable and not damaging to the environment and local communities. This can be achieved by adopting sustainable practices such as waste management, eco-friendly accommodation facilities and responsible tourism initiatives. In this way, by engaging and satisfying all stakeholders, a thriving mountain tourism cluster can be created in the Almaty agglomeration, attracting tourists from around the world and contributing to the local economy.

In conclusion, we note that it is obvious that the effectiveness of formation and development of the Almaty mountain-tourist cluster is impossible without state support and regulation. Therefore, we conclude that the objectives of the state cluster policy should be as follows:

- promotion of integration of participants in the mountain tourism cluster;
- implementation of programmes to support the entry of domestic travel agencies into the foreign tourist market;

- carrying out joint marketing research and promotional activities;
- coordination with representatives of the participants of the tourism cluster, implementation of educational policy and provision of opportunities for communication with educational institutions;
- development of information and communication infrastructure;
- formation of the institutional environment for the development of the mountain tourist cluster;
- construction of special routes for winter and summer sports and organisation of competitions on them (e.g.: biathlon, bicycle tour, jeep tour);
- promoting the development of active tourism and local history in secondary educational organisations.

Author Contributions: Conceptualization, Y.I. and L.D.D.; methodology, Y.I. and L.D.D.; software, Y.I. and L.D.D.; validation, Y.I. and L.D.D. and A.A.; formal analysis, Y.I. and L.D.D. and A.S.; investigation, Y.I. and L.D.D. and Z.A.; data curation, Y.I. and L.D.D. and M.T. and A.M.; writing - original draft preparation, Y.I. and M.B. and L.D.D.; writing - review and editing, A.A. and A.S. and Z.A.; visualization, Y.I. and A.M. and K.Z. and L.D.D.; supervision, Y.I. and L.D.D. and A.A. and K.Z.; project administration, Y.I. and L.D.D. All authors have read and agreed to the published version of the manuscript.

Funding: This article was financially supported by the JSC “Science Fund” under the project titled “Modernization of Tourism Digital Content: Mobile Applications, Panoramic 3D Tours, Interactive Maps, and QR Codes,” with project number 0358-18-GK.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study may be obtained on request from the corresponding author.

Acknowledgments: This research was supported by the John von Neumann University and Abai Kazakh National Pedagogical University.

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

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