# ASSESSMENT OF SHORT-TERM VACATION CONDITIONS IN URBAN AGGLOMERATIONS' OF KAZAKHSTAN

# Alexey ABILOV, Vladimir YASKEVICH, Madina JUNUSSOVA and Anton KHODZHIKOV\*

Kazakh National Technical Research University named after K.I.Satpaev, Kazakhstan.

\*Corresponding authors: aabilov1@mail.ru, yaskevich\_87@mail.ru, ebabalyk@gmail.com, khojikov\_an@bk.ru

### **ABSTRACT**

Recreational and tourism industry may have a great impact on sustainable development of the country. One of the important aspects of tourism and recreation development is the arrangement of the physical environment. In this article we share some results of the pilot social survey conducted in three agglomerations of Kazakhstan in order to identify the existing conditions of short-term vacation. The results of the survey could be used to enhance current architectural and planning practice.

Keywords: tourism, short-term vacation, architecture, planning, social survey, agglomeration

### 1. INTRODUCTION

Many developing and transition countries as Kazakhstan consider recreation and tourism to be important for sustainable development. First tourism can contribute to economic growth. For example, the Gross Development Product (GDP) of the recreation and tourism sector in the top ranking countries is considerable: in the United States - 450 billion US\$, in China - 240 billion US\$, in Japan – 110 billion US\$, in France – 100 billion US\$ [1 - Schwab K., 2015]. Second availability of the good quality tourism infrastructure may have a positive influence on the local standards of living [2 - Allen L. R., 1991]. The recreational facilities can be used not only by foreigners, but also by domestic residents. Third introduction of the international environmental and safety standards can help to mitigate a negative impact of tourism on nature. Fourth tourism industry does require an extensive use of resources as industrial or agricultural development. Fifth development of international tourism can help to improve an international image of the country that will positively impact on its attractiveness for foreign investors. Moreover, tourism and recreation development lead to creation of new employment opportunities.

Kazakhstan has a high potential for both development of domestic tourism and attraction of foreign travelers to visit the country (Figures 1,2,3). However the tourism industry is still undeveloped in Kazakhstan. The share of the tourism industry is only about 1.6% of GDP.[1 - Schwab K., 2015] There are many reasons for that, but the main one is the quality of the physical infrastructure for recreation. Nowadays the quality of services provided at the most of the hotels does not meet the international standards. It's necessary to create alternative approaches to design, to locate, to build and to arrange functioning of tourism facilities.

The presence of the qualitative physical environment (such as development of tourists places' accessibility in terms of transportation links, and safety; tourism service facilities, and etc.) may help to the development of the tourism in the country.



Fig. 1. Shymbulak Ski Resort, 25 km from Almaty. Source: Yaskevich V.V., January, 2014



Fig. 2. Borovoe Lake located in 250 km from Astana city. Source: Web site of the domestic touristic agency TigrokhaudTOUR, retrieved in September, 2015: http://www.tigrotour.kz



Fig. 3. Western Tien Shan Mountains, 50 km from Shymkent, Source: Web site of the domestic on-line news portal Tengri News, retrieved in September, 2015: http://tengrinews.kz

Architectural and planning aspects have a great influence on tourism industry development. This opinion is shared by a large number of researchers who deal with tourism and recreation architecture in Commonwealth of Independent States (CIS) (Vilkovsky, Abilov, Antufeev, and Nurgaldieva) and global community (Solmaz, Baker, Baud-Bovy, Lawson, and Lovitu) [3-10]. The most important architectural and planning aspects are: allocation and prioritizing of tourism resources, searching for an optimal transportation system, creating an attractive physical environment and so on. The creation of these conditions may contribute to the improvement of competitiveness and attractiveness of a certain tourism facilities and industry in general.

Actual architectural and urban design practices are still based on theoretical and practical experience of the Union of Soviet Socialist Republics (USSR). During the USSR, planning was implemented by design and research institutes. Main decision makers of the design institutes were the main architects (Vilkovsky) [3]. After the collapse of the USSR, state research institutes working in the field of architecture and urban planning were closed or lost their preliminary functions. Nowadays, market economic conditions require new approaches to architectural and urban design of tourism development. In this regard, it is very important to implement social surveys that aim to understand real demands and to collect live data in architectural and urban design. This article contains the results of one of the first large scale social surveys that carried out in the independent Kazakhstan, dedicated to architecture and urban planning.

One of the main objectives of Kazakhstan today is to switch towards sustainable development. In this matter, a social research can play a special role, because it is one of the unique instruments that could connect the development of the physical environment proposed by designers to the real needs of the main consumers as people. It is important to consider potential visitors' preferences as well as to forecast a possible number of visitors, demanding infrastructure and service qualities and others. Social survey results can help to make these forecasts more feasible. Implementation of architectural and urban design based on the social survey results may help to achieve a long-term, efficient economic growth, ecological safety and other sustainable development criteria.

### 2. THE CASE STUDY CITIES

Today Kazakhstan is taking a new political course named "Kazakhstan 2050" that was introduced by Nursultan Nazarbaev in 2014. As a part of the strategy implementation plan, the Government of Kazakhstan approved the state program on "Development of Regions until 2020". One of the main objectives of the program is the formation of urban agglomerations in the country. The first level agglomerations will be developed based on the cities: Almaty, Astana, Shymkent [5,11]

This study was conducted to provide a preliminary assessment of the tourism industry condition in the first level agglomerations in Kazakhstan. The main considered issues are: to identify areas that require in-depth study; to determine the overall recreational industry trends for the Kazakhstan agglomerations; to turn designers' attention on some possible decisions for improving defined problems. The study is based on the results of the social surveys that were conducted through questionnaires in the cities of Kazakhstan: Astana, Almaty and Shymkent. These are three biggest cities and important destinations of the foreign tourists.

Astana, the central city of Astana agglomeration, was assigned a role of the capital of the Republic of Kazakhstan on December 10, 1997. The total area of the Astana city is 71.0 thousand hectares. Astana consists of three administrative districts: Saryarka, Almaty and Esil. The River Ishim flows across the Astana city. There are numerous fresh and salt lakes located within a radius of 25-30 km around Astana. The climate of the city is continental. Summers are hot and dry and winters are long and frosty. In the summer the temperature can exceed + 40 °C, during the winter the maximum temperature can reach -50 °C. The city population was amounted to 866 thousand people on January 1, 2015. The population growth rate for the last 16 years (since 1999) was equal to 86.7% [12]. The suburban area of the Astana agglomeration

includes Arshaly, Tselinograd and Shortandi districts of the Akmola region. The total population of the metropolitan area in 2015 was estimated as 970 thousand people [13].

Almaty, the central city of Almaty agglomeration, is the largest city of Kazakhstan (1 475 429 residents in 2015). Almaty is located in the foothills of Zailiy Alatau mountains (Fig. 1). The city is located in the area with a mild climate with cold winters and warm summers. There are several mountain rivers flow across the city. The Almaty city in situated in a seismic area. The territory of Almaty is divided into seven areas: Almaly, Auezov, Bostandyk, Zhetysu, Medeu, Turksib, Alatau. The suburban area of the Almaty agglomeration includes five administrative districts of Almaty region: Karasai, Talgar, Ili, Enbekshikazakh, Zhambyl and Kapshagai city. The total population of the Almaty agglomeration is about 2.5 million people [6].

Shymkent, the centre of the Shymkent agglomeration, is also a centre of the South Kazakhstan region. The city population was amounted to 670 thousand people on April 1, 2013 [11]. The city is located near the foothills of the Tien Shan Mountains (Fig. 3). The Arys River flows across the Shymkent city. The city is located in the area with hot and relatively dry summers and cold, but not snowy winters. There are many historical sites located around the Shymkent city: the ancient settlements of Otrar and Sauran, Mausoleum of Khoja Ahmed Yasawi and Arystan Baba. The suburban area of the Shymkent agglomeration includes: Arys town, Baidibek, Tyulkubas, Kazygurt, Tolebi, Ordabasy and Sairam districts. The total population of the Shymkent agglomeration was estimated as 1,500 thousand people.

# 3. SOCIAL SURVEY AS A RESEARCH METHOD FOR ARCHITECTS AND PLANNERS

Residents' survey, as a method of social study, appeared in the first half of the 19th century in the USA. The method was used to examine people's opinion on political changes. For example, large-scale questionnaires were arranged to forecast presidential vote results, but this type of questionnaires did not become popular. Due to the incidents of the wrong forecasts, the method started to be considered as not reliable. The social surveys as questionnaires have started to be used worldwide in the second half of the 20th century [14]. By that time technology of this kind of social survey was developed enough to consider it as a scientific method. The results of surveys conducted by reputable companies (Gallup, Roper Center and Crossley), showed their practical value and social surveys as questionaries gained a certain popularity both in society and in the academic world. However, there are some important criteria that have to be followed to get good results from a survey. First of all,

respondents have to be formed from the representative group of population depending on the studied issue. The second is an equability of the respondents in terms of demographic structure: participation of all population's significant segments in the survey (by age, income, nationality, place of residence, etc.). There are also distribution methods, ensuring anonymous participation and other important factors that may impact on the quality of a survey. Social survey are popular in social sciences [15]. However, it has started to be used in other sciences where consideration of people's perception is important. For example, many architectural and urban design studies have been carried out with the integration of the questionnaires to understand how people perceive their living physical environment.

Development of the physical environment for tourism requires an understanding of the people opinion and demands. The creation of the appropriate architectural and urban design may positively impact on the development of the tourism sector [7, 16, 17]. There are also academic studies aimed to show how social survey results can be used for planning of the better local tourism facilities [5]. Efficiency of tourism and recreation facilities has a direct impact on their attractiveness to visitors. Therefore, the questionnaires involving an understanding of the local people' needs are one of the important tools for us to learn about better location, functional contain, spatial image of tourism infrastructure. Some of the topics for development of the surveys about of the local situation are:

- Places and purposes of trips, the popularity of certain tourism destinations
- Preferred forms of tourism
- Quality of tourism services and their maintenance
- Transport accessibility of tourism facilities
- The costs of services
- The level of security, health care and hygiene
- Dates and length of stay etc.

There are different manuals and recommendations that describe how to obtain better results from analysis of the tourism situation (Lennon, Sirakaya-Turk, Alsos), in particular, how to assess a quality of tourist services (European communities) [18-21]. Identification of social trends in the development of recreational and tourism facilities have a particular importance for urban agglomerations development. In many cities around, planning decisions about city development are based on the results of the population surveys. For example, Barcelona tourism industry development plan was developed involving intensive social surveys [22]. The results of the social studies may impact on such architectural and urban planning decisions as the location of

tourist sites in the structure of a city or region, the style of tourist facilities such as architectural design, the functional structure of premises, seasonal usage, capacity and etc. The attractiveness of the physical infrastructure for tourists could become one of the key factors, especially if we consider a heritage of the historical sites [8-10, 23, 24].

In this study, we pay attention to the short-term vacation facilities that are used not only by tourists, but also by the local population. The understanding of the current condition for a short-term vacation may assist to approach the development of the domestic and international tourism in Kazakhstan in a more sustainable way. By short-term vacation facilities we mean places that are visited for a day or a weekend. Usually, the total duration of the stay does not exceed 3 days. Most of the short-term vacation facilities located either in the city or in an accessible distance. In our opinion, the surveys of short-term vacation within selected agglomerations allow to come up with the some useful findings that can be further used to form a touristic content of the urban agglomeration of Kazakhstan.

# 4. RESULTS OF SHORT TERM REST ORGANIZATION STUDYINTHEAGGLOMERATIONS OF KAZAKHSTAN

The social survey was conducted in the period from 2013 to 2015 in the framework of the research aiming to understand the influence area of the central cities of agglomeration: Almaty, Shymkent and Astana cities. The questionnaire included questions about the residence satisfaction on local recreational areas as well as the general development of infrastructure and transport connections between central city and suburban area. The questionnaires were distributed with the support of the local authorities. The local Public Service Centers play a role of the main distribution points. The survey was conducted not only the central cities, but also in some of the important settlements of agglomeration. The survey was managed to ensure participation of different segments of the population. As the result of the survey, we collected 4600 filled forms: 3100 about Astana agglomeration, 1500 about Almaty agglomeration and 1000 about Shymkent agglomeration. The expected error was calculated and it was not over 5% that is acceptable for pilot studies.

One of the main parts of the questionnaire aimed to study a current state of the short-term vacation. The questions reveal: main directions of the vocational travels to the countryside; location preferences (near the water, in the mountains, natural reserves, public parks, individual garden plots, and etc.); comfort preferences (camp side, touristic centres, hotels, renting a private property and etc.), preferences of the recreational type (static – inside

the entertainment complexes and sanatoriums, dynamic – excursions, ecotourism and etc.). The understanding of the local people preferences was important to identify main recreational processes and demands that are being formed within the main agglomerations of Kazakhstan. The results of the each case study are presented below.

### 4.1 Astana Agglomeration Result

The Astana agglomeration survey results are shown in the Figure 4. The outdoor rest (e.g. near the waterfront or in the forest) is the most popular type of the recreation in Astana agglomeration (37,3% of respondents answered positively). The popularity can be explained by the presence of many of water reservoirs and forests. This neighbourhood of the city with the beautiful natural environment is an opportunity for further development of the ecotourism and environment friendly short-term vacation facilities around the Astana city. Also, the majority of the population (over 45%) prefers to have a rest at Borovoe Lakes system and the surrounding area (Fig. 2). This confirms the importance of preservation of these Borovoe, Shchuchye, Qatar-Kol, Chebache lakes for further development of the recreational system of the Astana agglomeration. However, most of the above provided preferences are seasonal. During the cold, the majority of respondents choose to stay and to rest at home (32.2%). This fact raises the need of the planning better facilities to attract people to arrange their leisure time outside of the home even during the cold winters. It should be also noted that recreation in winter is complicated mostly by local climatic conditions.

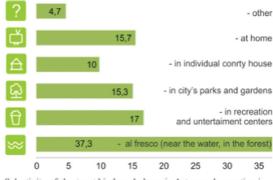
## 4.2 Almaty Agglomeration Result

The Almaty agglomeration survey results are shown in the Figure 5 above. During the summer, the most popular destination to rest is mountains. Some people also prefer to rest near the rivers and lakes (16%) and public parks (11%). During the winter, people also choose to spend their holidays in the mountains (about 25%). They do skiing and ice-skating or spend their leisure time in the special winter entertainment centres. However, as in the case of Astana, most of the people decide to stay at home and watch TV during the winter season. It can be due to the considerable costs of the rest in the mountains as well as the lack of the affordable inside entertainments arranged in winter.

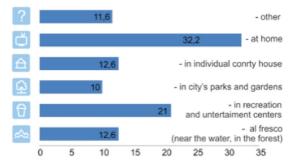
## 4.3 Shymkent Agglomeration Result

The Shymkent agglomeration survey results are shown in the Figure 6 above.

During the summer, a significant part of respondents prefer to spend their leisure time in the mountains or near the water reservoirs. Less people are willing to visit mountains during the winter due to the lack of the facilities for skiing, snowboarding and even sledding. Both in summer and in winter, many people prefer to have a rest at home "watching television" (17% and 31% respectively). It is linked not only with the climatic conditions, but also with the lack of transportation access linking the main settlements with the places to rest. The public parks and countryside gardens are one of the most popular destinations of the people both in summer and winter. The popularity of outdoor recreation spaces such as parks and courtyards can be a certain signal for the development of this type of tourism facilities in the area (Compare Fig. 7 and Fig. 8).



Selectivity of short rest kinds and places in Astana aglomeration in summer



Selectivity of short rest kinds and places in Astana aglomeration in winter

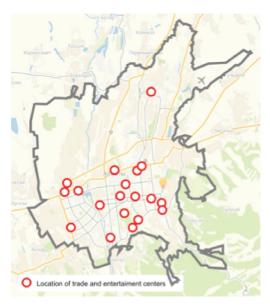


Figure 7. Location of trade and entertainment centres within the Almaty city's administrative boundaries. Created by the survey group based on the GIS map retrieved from the Google Maps in 2014

Based on the survey results, we can say that there are: a significant decrease of recreational activities in winter; a lack of capacity of outside recreational facilities; an insufficient development of the transportation system to access recreational facilities. There is a need to arrange special conditions for local residents to be active during all seasons. For example, it is important to create a physical environment that is comfortable during the winter such as: construction of heated public transport stops and wind-protection structures along the pedestrian pathways; development of the underground and passing over pedestrian communications for a safe crossing during the cold and hot seasons. The attention should be paid to development of indoor spaces for ice skating and sledding. There should an assessment of the allowable anthropogenic load on the local ecosystems. The outside recreational facilities should be developed and better distributed in order to avoid over concentration of people masses on the limited in number recreational spots. However, during the allocation of new recreational complexes, it is important to respect limits established by the special protected environmental areas. The development of more recreational complexes should not be implemented separately from the improvement of the regional transportation system.



Figure 8. Location of trade and entertainment centres within the Shymkent city's administrative boundaries. 1 - Al-Farabi, 2 - Bayan Sulu, 3- MEGA retail & entertainment centre.

Created by the survey group based on the GIS map and images retrieved from the Google Maps in 2014

## 5. CONCLUSION

The current stance of the recreation activities within the urban agglomeration of Kazakhstan requires a special attention of the local authorities, architects and urban designers who are involved in the development of the recreational facilities. To ensure the tourism development of all three agglomerations, it is required to use all potential of natural environment. The project of Almaty and Shymkent agglomeration must be developed with the attention to the creation of the system of mountain recreation centres outside of these cities. For example, in the case of Almaty, these mountain complexes can locate in the Talgar, Esik and Kaskelen settlements.

The greater attention should be paid to the development of transportation links between the agglomeration central cities and their neighbourhood. The time spent on travel should not exceed 1-2 hours. However, it is also important to limit usage of the foothill areas for construction of the individual housing. The projects of the recreational facilities for a short-time vacation have to include the impact of new complexes on the natural ecosystem. It is important to develop recreational infrastructure for year-round use. Enough attention should be paid for arrangement of special mobile facilities for short-term recreation activities near water reservoirs and in public parks. Development of a special historical sightseeing and cultural complexes has a special value for the Astana and Shymkent agglomerations.

The results of the survey revealed some of the main challenges of a short-time vacation in three agglomerations of Kazakhstan. Each of these issues can be considered as a certain signals for further development of the tourism industry. In order to approach these issues in a right way, it is necessary to initiate at least three additional detailed researches. The first research can be on the seasonal structure of the recreation and on how to improve the leisure time of the residents during cold winters and hot summers. The second research may be an assessment of the capacities of the recreational facilities located within important natural areas as mountains, river and lakesides and forests. The last one can address the current stance the regional transportation and on how to improve an access of the local population to main recreation spots.

### 6. REFERENCES

- SCHWAB K. (ed.), The Travel & Tourism Competitiveness Report 2015, "Growth through Shocks", World Economic Forum, ISBN-13: 978-92-95044-48-7, 509 p.
- ALLEN, L. R., 1991, Benefits of leisure services to community satisfaction, In B. L. Driver, P.J. Brown and G. L. Peterson (eds), Benefits of Leisure.

- State College, PA: Venture, p. 331-350
- VILKOVSKY M.B.., 2010, Sociology architecture, M .: Fund "Russian avant-garde", ISBN 978-5-91566-021-1, 592 p.
- ABILOV A.J., 2015, Background study of urban agglomerations in the Republic Kazahstan, "Proceedings of the international scientific-practical conference: Space. Time. Architecture", 32.ISBN 978-9965-20-633-6, P. 10-14
- ANTUFEEV V.A., 2007, Architecture and spatial organization of recreation and tourism in the flood plain and delta formations: the example of the Volga-Akhtuba floodplain, Thesis for a candidate degree in architecture, Moscow. P. 127-135
- NURGALDIEVA A.R., 2014, Tendencies and factors of development of territorial organization of the Almaty agglomeration, Vestnik KazNTU, 1, p.- 217.
- SOLMAZ DARGAHI, 2014, The Role of Hotel Architecture in Tourists Attraction Development, European Online Journal of Natural and Social Sciences 2014, [Online] Available from:http://european-science.com/eojnss/article/viewFile/1866/pdf, [Accessed: 10 August 2015])
- BAKER R., 2015, Green Cities New Approaches to Confronting Climate Change, [Online] Available from: http://www.oecd.org/gov/regional-policy/45377963.pdf [Accessed: 21 June 2015]
- BAUD-BOVY M., LAWSON F., 1998, Tourism and Recreation: Handbook of Planning and Design, Oxford: Architectural Press, ISBN-13: 978-0750630863, 304 p.
- IOVITU M., 2013, Tourism Planning in Urban Areas Trends, Best Practices and Priorities in Bucharest, Journal of Knowledge Management, Economics and Information Technology Vol. III, Issue 5, p.
- GOVERNMENT OF KAZAKHSTAN. Resolution of K.Masimov (2014) 728. The program of regional development up to 2020, National Center of Legal Information of the Ministry of Justice of the Republic of Kazakhstan
- ASTANA STATISTICS AGENCY, 2015, Astana, [Online] Available from: http://www.astana.stat.kz/home-4/item/o-demograficheskoj-situatsii-v-gorode-astana-8.html [Accessed: 21 June 2015]
- Government of Kazakhstan. Resolution of S. Akhmetov (2013) 1434. General scheme of the territorial organization of the Republic of Kazakhstan, National Center of Legal Information of the Ministry of Justice of the Republic of Kazakhstan
- PSYFACTOR, 2015, Public opinion polls. Influence of polls, [Online] Available from: http://psyfactor.org/lib/sociology.htm [Accessed: 20 July 2015]
- OKTAY D., 2010, measuring the quality of urban life and neighbourhood satisfaction: findings from Gazimagusa (Famagusta) area study, International journal of social sciences and humanity studies, Vol 2, No 2,

- ISSN: 1309-8063 (Online), p. 5,54.
- GRUNDLAGENSTUDIE, 2015, "Architektur macht Gäste" über den Zusammenhang zwischen Architektur und Wirtschaftlichkeit im Tourismus, [Online] Available from: Analysis of the interaction between architecture and tourism, http://www.platou.at/portal3/images/stories/Download/ amg\_summary.pdf, [Accessed: 30 July 2015]
- ACAR NAM E., 2012, Evaluation of destination image: Antalya–Belek Tourism Center, [Online] Available from: http://www.az.itu.edu.tr/azv9no2web/06-AcarInam-ErinselOnder-09-02.pdf, [Accessed: 30 July 2015]
- LENNON J.J., 2003, Tourism Statistics: International Perspectives and Current Issues, Cengage Learning EMEA, ISBN-13: 978-0826465016, 380 p.
- ERCAN SIRAKAYA-TURK, 2011, Research Methods for Leisure, Recreation and Tourism, CABI, ISBN-13: 978-1845937638, 278 p.
- ALSOS G. A., 2014, Handbook of Research on Innovation in Tourism Industries, Edward Elgar Publishing, ISBN-13: 978-1782548409, 384 p.
- EUROPEAN COMMUNITIES, 2003, A Manual for Evaluating the Quality Performance of Tourist Destinations and Services, [Online] Available from: http://ec.europa.eu/enterprise/ sectors/tourism/files/studies/evaluation\_quality\_performance/qualitest\_manual\_en.pdf [Accessed: 30 July 2015]
- EBCN, 2010, City of Barcelona Strategic Tourism Plan, [Online] Available from: http://www.turisme2015bcn.cat/files/7931-74-arxiuCAT/STRATEGIC%20PLAN%20EXECUTIVE%20SUM-MARY.%20FEBRER%202010.pdf [Accessed: 30 July 2015]
- SHIN J.-C., 2011, Hierarchical status of busan & changes of spatial structure from the viewpoint of urban basic planning, [Online] Available from: http://www.oecd.org/gov/regional-policy/6102470.pdf), [Accessed: 10 July 2015]
- OECD, 2013, Rural and urban planning to promote cooperation, OECD RURBAN Conference, Bologna, [Online] Available from: http://www.oecd.org/gov/regional-policy/Session%20IV%20presentations.pdf, [Accessed: 27 July 2015]