ANNOTATION

Dissertation for the degree of Doctor of Philosophy (PhD) in the educational program 8D07311 «Architecture» by Ostapenko Inna Ivanovna on the topic: «Architectural and planning structure of agroecotourist complexes by the example of South Kazakhstan»

"The Address of the Head of State Kassym–Jomart Tokayev to the People of Kazakhstan. September 1, 2020" in the list of priority tasks identified: «The leading role of private entrepreneurship». «Greening» of the economy, environmental protection. This document focuses on expanding agricultural product reproduction and environmental protection measures. Combined with these processes the organization of agro–ecotourism as a developed sphere of private entrepreneurship can be carried out.

Relevance of the research

Agroecotourism is one of the most popular areas of modern leisure. Different countries around the world, depending on the specifics of the natural and climatic characteristics of the territory and the specifics of economic management, organize this type of activity in different ways. Organization of recreation takes place on the basis of the agro—landscape and natural recreational resources.

A significant problem in the organization of agroecotourism is the creation of appropriate infrastructure to expose natural and agricultural processes and service visitors. For natural reasons, the objects of agroecotourism are located far from urban settlements that form the main flows of tourists in this direction. In addition, such agro—tourism resources are located far away and from places with developed construction infrastructure and main networks of engineering support. This greatly complicates the erection of buildings and structures appropriate to the specific activities.

In addition, an attempt to apply the common methods of industrial construction in these conditions with the organization of a full-fledged construction site, places of storage of building materials and structures, and maneuvering platforms of construction equipment can cause significant damage to the natural environment, which is an essential part of the exposure. Moreover, in some cases, such an arrangement is practically impossible due to the natural landscape peculiarities. In addition, the costs of the subsequent arrangement after the construction with bringing the territory adjacent to the object into the exposition—appropriate condition are significant.

The peculiarity of natural and climatic conditions and established settlement systems on the territory of Kazakhstan actualizes the task of reflecting this specificity in the solution of agroecotourist complexes in different regions of the country. The most densely populated region of the country is the Southern, which influenced the choice of the scope of priority research.

The terms «tourist resource» and «agroecotourism» in the territorial design within the rural settlement and the inter–settlement areas become the key concepts of the dissertation. The author of the dissertation research analyzes the organization of contemplative, activity, and mixed programs of tourist trips. The author considers the use of «sea containers» as one of the available possibilities for forming the material environment of agroecotourist complexes.

Boundaries of the research

The solution of the set tasks was carried out within the following boundaries:

- historically, the work covers mainly the practice of implementation of objects of agroecotourist service of the second half of the XX and the second decade of the XXI century;
 - geographically limited to the limits of the Almaty region.

The object of the study

The complex of agroecotourist service structures as a set of typologically different structures, linked in a single technological chain of operation.

The subject of the study

Features of architectural and planning solutions for different types of agroecotourist service complexes.

The purpose of the dissertation research is to develop a theoretical basis for the formation of comfortable environment agroecotourist complexes with the definition of the possibilities of forming their technologically sound architectural and planning solutions.

To achieve this goal the following research objectives were set:

- to identify the theoretical and historical preconditions for the formation of the architectural environment of agroecotourist complexes;
 - to collect static and cartographic material on the topic of research;
 - identify regional resources of agroecotourism;
- conduct a comparative analysis of the types of models of foreign agrotourist experience;
 - to analyze the architectural and planning solutions of agro-eco-complexes;
- to analyze foreign experience in functional repurposing of modular logistics equipment for use in tourism purposes;
- to analyze world experience in decorating agro-environment for the organization of recreation of visitors;
- to develop models of the territorial and functional organization of agroecotourism at the regional level;
- develop principles and methods of architectural and planning organization of agro-eco-complexes;
- to develop methods of differently configured blocking of logistic modules, taking into account both peculiarities of typology of a separate object and the complex as a whole.

Level of research of the problem

Tourism and recreation as a whole, as a sphere of activity on the organization of recreational service of the population, are reflected in the works of such researchers as A. Azizova–Poluektova, E. Aigina, I. Asanova, D. Bagova, M. Baranovsky, A. Bagatov, M. Birzhakov, T. Boiko, V. Topuz, V. Bogaldin–Malikh, F. Kotler, T. Brusokene, E.Bulatova, G.Bunich, I. Butko, M. Valiev, V. Vetkin, V. Guliaev, A. Kuskov, A. Durovich, D. Zhmulina, P. Zhukov, T. Vinogradova, E. Ilyina, S.Medlik, A.Kosolapov, F. Kotler, V. Kruzhalin, E. Lapshina, E.Maximova, I. Rodichkin, L. Sitniko, L. Skuratova, Y. Fedorova, Yu. Khromov, V. Egorova, G. Demishkevitch, V. Sharapov, T. Fock, G. Russkikh, A. Zdorov.

The most important part of the organization of recreation is the attention to providing it in a wholesome form for socially protected strata of citizens, which was highlighted in their works E. Andreeva, L. Donskova, I. Kabirov, V. Kotelkin, T. Kritikova, V. Mikhailov, D. Narkulova, N. Andreeva, N. Sokolova, V. Stauskas, A. Maltseva, E. Trofimov, E. Sheshegova, S. Semchenkova, J. Jablonska, H. Kim, L. Minnaert, V. Saprunova, A. Safarian.

Various aspects of the organization of leisure in rural areas were revealed in research by M. Abalkin, G. Abdrasilova, A. Adamesku, A. Iskakova, A. Anikina, N. Anisimova, S. Arutyunyan, O. Arkhipova, E. Akhmedova, S. Babushkina, A. Bakanova D. Grebenyuk, F. Marshani, A. Morgun, S. Mosiyuk, N. Belova, A. Paniukova, I. Potapov, S. Potokina.

The problem of emphasizing environmental issues in the recreation process revealed I. Abramova, E. Lebedko, E. Alexeeva, P. Karanayevski, L. Arapova, Yu. Zhukova, M. Bayun, B. Bespartochni, G. Bagmanova, K. Bilenkina, O. Kosenchyk, D. Bogatyreva, E. Kandaurov, T. Karakova, E. Smirnova, N. Fomina, N. Khechoshvili, E. Khokhlova, V. Hrabovchenko, V. Tsehanovich, P. Bondarenko, S. Kaznacheeva, V. Chernov, V. Chibileva, G. Yakimovich, E. Yakovleva, N. Kostrikova, N. Yashalova, O. Fiklisova, E. Cater, M. Honey, S. Ross, P. Valentine, V. Bedzir.

The so-called «green tourism» is especially singled out by such authors as N. Demianenko, A. Ioshchenko, A. Fedulin, O. Lukomskaya, V. Nikolenko, D. Ruban, Y. Savinov, V. Ustin, A. Chernyavaya, V. Shostka.

Some specificity has the organization of agroecotourism in specially protected natural areas, which was noted by the following authors T. Emelyanenko, Y. Voronina, Y. Golubchikov, A. Gudym, M. Zadevalova, A. Khutorova, E. Zvyagina, P. Eagles, A. Kolotukhin, O. Kudryavtseva, A. Lukichev, K. Makarova, L. Matveeva, I. Moskalenko, V. Nikolashin, Y. Pasyura, L. Belyaeva, M. Rybakova, V. Stepanitsky, N. Usova, A. Khutorova, V. Chizhova.

Here the aspect of formation of some kind of «eco-settlements» and «ethno-settlements» is very indicative, which have devoted their works to C. Antonets, D. Arkhipova, A. Babitsky, T. Vavilova, L. Herzberg, A. Galimzhanova, S. Gomanova, I. Dunichkin, O. Zheleznyak, Y. Zubtsov, V. Kulikova, M. Zdorov, Metelkin, I. Nemtsov, V. Vasiliev, S. Kadralieva, E. Saakyan, A. Sayfullina, I. Dunichkin, M. Rybakova.

Kazakhstan's practice of solution to the considered problems is accentuated in the works of such scientists as G. Abdrasilova, A. Abdrashitova, A. Abilov, A. Aktymbaeva, J. Alieva, A. Artemyev, G. Begeeva, A. Beisembinova, Z. Borbasova, J. Bulambaev, T. Gulyaeva, B. Karakbaev, Sh. Karmanov, N. Kozbagarova, A. Kornilova, R. Plokhih, M. Smykova, O. Bantserova, E. Hamsina, L. Khayarova.

The scientific novelty of this work lies in the first developed theoretical model of the territorial and functional organization of agroecotourism systems at the regional level for the conditions of South Kazakhstan; principles and methods of architectural and planning organization of agroecotourist complexes, new functional use of logistic modular objects for tourist purposes. The rapid erection of a large number of typologically different objects, technologically linked to the agroecotourist complex, puts forward the assumption about the possibility of using end—to—end modularity. The new functional use of logistic modular objects, proposed by the author of the dissertation research, as the basis for the formation of tourist development, has the quality of novelty.

The validity of the study's scientific results is confirmed by the graphic presentation and scientific and practical systematization of the collected material, the study of archival photo and video sources.

Methodology and methods of research

When determining the perspective of the dissertation research, the toy in modern science systematic approach was chosen. At the initial stage of the research general scientific methods of empirical research were used: collection of initial information (photo, graphic materials), observation, description; general scientific methods: methods of statistical, graph analytical, comparative analysis (models of world experience in agrotourism, modular architecture); special scientific methods (methods of sociological research, theoretical modeling).

The hypothesis of the research consists of the fact that when planning the system of agroecotourism activities in the Almaty region, the tourist environment can be formed at a new qualitative level, as the resources of ecological tourism are added to the agro resources.

The scientific-theoretical and practical significance of the dissertation consists in deepening the degree of study of agroecotourist resources of the Almaty region, obtaining the results of a sociological survey of the Almaty region population on agroecotourist preferences, in developing methods of formation of agroecotourist service complexes based on different configurative module blocking, taking into account both the specificity of typology of a separate object and the complex as a whole.

All this determines the possibility of using the obtained results in the real design practice, research works, as well as in the educational process.

Approbation and implementation of scientific results were carried out in the form of the publication of the textbook «Architectural and planning organization of the territories of agroecotourism». There are theoretical aspects of tourist activity: typology, tourist resources, and features of the formation of social demand for agroecotourism. Current trends in the development of agritourism on

the example of the latest world experience and the prerequisites for the development of agroecotourism in Kazakhstan are considered. The results of the dissertation research are implemented in the design practice of LLP PF «Urbostil» in the development of the «Integrated scheme of urban planning territories of Almaty region» in the Section «Design proposals for the territorial and spatial organization of the tourism and recreation industry», 2022.

The provisions of the dissertation were presented at the XVIII International Scientific and Practical Conference named after V. Tatlin «Rehabilitation of the living space of the citizen» (Penza, 2022).

Structure and scope of work

The dissertation consists of an introduction, three sections, a conclusion, a list of references from 504 titles and 7 appendices. The total volume of the dissertation is presented on 290 pages, where 169 pages are the main text and 121 pages are appendices, including 92 figures, 14 tables and 12 diagrams.

The presentation will include:

- 1. Historiography of agritouristic activity;
- 2. Typological Model of tourist needs—preferences by levels. Application of general philosophical hierarchical structure of human needs categories to tourist activity;
 - 3. Classification Model of typology of tourist resources properties;
 - 4. Forms of agroecotourism;
- 5. Model scheme of the influence of agro—tourist activity on the functioning of rural settlements;
- 6. The results of a sociological survey of the population of Almaty region on agro–ecotourist preferences;
 - 7. Typology of agro-eco-resources of Almaty region;
- 8. The model—scheme of interrelations between participants of interaction in the system of agroecotourism «Agroresources—Tourist—Agrocomplexes»;
- 9. Model of the territorial and functional organization of agroecotourism in the Almaty region;
- 10. Composite Model of multi–configured blocking of logistic modules in the structure of agro–tourist complexes.

The author is grateful to the professors and staff of the IEC / KazGASA, who advised her on the composition and content of the study; the Scientific and Technical Library of the Republic of Kazakhstan, the National Library of the Republic of Kazakhstan, the Russian State Library, Scientific Electronic Library of dissertations and abstracts "disser Cat", search engine "Google", information system "Wikipedia", whose funds were involved to form the literature and illustration base of research, the peasant farm "IVAN" for providing information about crop production, foreign scientific consultant, candidate of architecture, academic professor, associate professor of the department "Architecture" of NRU MGSU, member of the Union of Moscow Architects Bantserova Olga Leonidovna, as well as the supervisor, doctor of architecture, professor—researcher of the Faculty of Architecture of the IEC / KazGASA Kozbagarova Nina Zhoshevna.

PAPER'S MAIN CONTENT

The introduction_substantiates the relevance of the topic, and the degree of development of the problem, represented by a series of research areas in general tourism, on individual issues of agrotourism and regional issues. The object and subject of the research, the purpose and objectives are noted, the methodological base is highlighted and the methods for different stages of research are indicated, and the issue of scientific novelty is emphasized.

The first section «Historical and theoretical basis for the formation of agroecotourist activities» presents the results of the analysis of historical processes which formed agroecotourism as part of the concept of sustainable development. Foreign experience in the development of the agroecotourism system is described. Its forms, types, stages of development, types of models of foreign experience in agroecotourism, as well as architectural and planning justifications for the development of agro-eco complexes. The world experience in the use of modules is considered and relevant conclusions are drawn. Having the purpose of a variety of leisure and recreation, cognitive and entertaining trips to the countryside have a centuries—old history, differentiating them from business trips, pilgrimages, or seasonal changes of residence. Gradually, excursions, the program of which is part of the curriculum of various disciplines in educational institutions, have also fallen into this sphere. Mass seasonal visits to suburban garden plots, which have become an integral part of the urban way of life since the first half of the last century, are becoming a peculiar type of travel to the countryside for leisure combined with active participation in the production of agricultural products. Citizens without dacha plots began to practice mass family or company trips out of town not only to relax but also to acquire or harvest one or another type of agricultural product.

In studying the formation of argroecotourism, the following conclusions were made.

Conclusions on the first section

- 1. Historically, tourism since the 1980s was formed with the obligatory condition of sustainability and environmentalism, marking the emergence of ecotourism.
- 2. Specificity of agroecotourism, consisting of the purposeful trip to the object of exposure and a relatively long stay at it, implies the presence of a rather extensive and thematically diverse program of additional services in the organization of recreation and cognitive pastime.
- 3. There are different models of agroecotourism: the model of living on a farm, agro park, wine tourism, and eco—lodge. Governments of different countries developed different systems of certification, and funds, helping in the development of rural tourism and defining the criteria of ecology and safety.
- 4. Tourist resources of the agro–eco–program imply the presence of existing, specially developed, or newly created objects, which by appropriate transport and logistics, organizational and financial, engineering and technological, architectural and planning, and thematic–cognitive–entertaining measures are turned into a demanded tourist product.

- 5. The main conditions for the development of agroecotourism are natural and agrarian resources, which must be preserved and maintained by the population in their sustainability and environmental friendliness.
- 6. Landscape environment of agro–eco–complexes in most cases is formed on the methods of agricultural development established in the area. In some cases, the innovative approach to the cultivation of plants and animals becomes a tourist attraction.
- 7. Agrotourism is formed according to different models depending on the country, region, the level of development of agricultural production, the users' request for a particular degree of involvement in the processes of agricultural production, interest in a particular degree of anthropogenic changes in the visited territory, the level of development of tourist and transport infrastructure. The models are constantly transformed in the process of changing these parameters, gradually blurring the regional conditioning.
- 8. The availability of a large number of reusable logistics modules of different types and the practice of their application to serve typologically different functions opens up prospects for the development of modular architecture of agroecotourist complexes.

In the second section "Regional features of the formation of agroecotourism infrastructure in the Almaty region", the following issues are consistently considered: domestic experience in the use of agricultural resources in the organization of agroecotourism in the territory of the Almaty region (the use of wine-making specialization of agricultural activities, aesthetics of gardens and agricultural fields), natural, historical and cultural landscape in the organization of regional territorial objects of agroecotourism, social aspects in agrotourism organizations of Kazakhstan, regional tourist preferences of the population, the place of tourist and recreational facilities of the Almaty region in the perspective national concept of development of the tourism industry of the Republic of Kazakhstan. On the territory of the Almaty region there are a large number of resources promising for the organization of agro-tourism activities. They are associated with the contemplation of the natural agricultural landscape, greenhouse crop production, drive-away or stall animal husbandry, hunting, fishing and gathering. Depending on the tourist demand, there are opportunities to exhibit both industrial and artisanal production of agricultural products. Of particular interest is the active participation of the population in the reclamation of lands affected by natural or anthropogenic impacts. An important block of agroecotourism is the social component, which allows maximum coverage of the contingent of socially protected segments of the population, including people with limited mobility. This is especially important in the field of organizing educational children's recreation. The wide coverage of the population with agrotouristic activity forms an environmental vector of thinking. From a social point of view, it is important to expand the scope of activity and increase the income of the population in the zones of agricultural development exposure. Familiarity with the agroindustry, educational, entertaining and health-improving recreation in rural areas is one of the important tourist motivations. Tourist preferences in the direction of

agroecotourism have a regional identity. This subsection presents the results of a sociological survey of the population. To determine the specifics of preferences in the south—eastern part of Kazakhstan, the author developed a questionnaire. The proposed questionnaire made it possible to identify a number of peculiar details that determine the attitude of citizens to tourism, and agrotourism in particular, which is formed as part of tourist activity in the field of nature at the intersection of agro— and ecotourism. The Concept of the development of the tourism industry in the Almaty region, as well as in the Republic of Kazakhstan as a whole, emphasizes the predominance of outbound tourism as a modern problem, agrotourism is also indicated in the structure of the seven main promising areas.

The results of the research made it possible to develop in the third section models of the territorial and functional organization of agrotourism at the regional level, principles and methods of forming the structure of agroecotourism complexes.

The studies conducted in the second section allow us to draw the following conclusions:

Conclusions of the second section

- 1. The territory of Almaty region has a large number of resources, promising for the organization of agro–ecotourist activities. They are associated with natural, agricultural crop production, distant or stabled animal husbandry, hunting, fishing and gathering.
- 2. In the main axis of the southern historical settlement of Almaty region the basis of the formation of tourist and recreational flows is the population of Almaty city, while the rural settlement can be considered as a potential base for the formation of agro–ecotourist complexes.
- 3. An important component of agroecotourism is the social, allowing it to cover a wide range of socially protected layers of the population, including disabled citizens. It is especially important in the sphere of organization of cognitive children's rest.
- 4. The sociological analysis conducted among the population revealed tourist preferences in terms of agro-tourism topics, so 30.9% chose any topic in the context of a hiking trip, 24.4% chose to admire nature, 15.5% would prefer an introduction to agriculture combined with caring for animals, and 13.6% would like a multi-topic experience combined with a business trip.

When analyzing the results for the types of landscape preferred for recreation, the majority 70.4% identified a foothill landscape type, with 26.1% of respondents favoring a river—steppe type, and only 3.4% favoring a riverine—desert type.

There were received data about the desired duration of the trip: for 36,0% of the respondents, it was two days with an overnight stay, 33% of the respondents opted for one day without an overnight stay, but 19,4% of the interviewed residents would like to spend a week on the trip.

5. The prospective formation of agrotourist infrastructure in the Almaty region will expand the palette of realization of tourist preferences of the population and reduce the percentage of outbound tourism.

The third section «Principles of forming the architectural and planning structure of agroecotourist complexes on the territory of Almaty region» consecutively considered: the principles and methods of formation of agroecocomplexes, theoretical models of architectural and planning organization of agroecocomplexes, protected areas, and ethnographic parks as structural elements of the territorial and functional organization of agroecotourism at the regional level, ethnoarchitecture, multifigure blocking of logistic modules in the structure of agroecotourist complexes, measures of energy efficiency and reducing the negative impact on the environment of agroecotourist complexes, equipment and decorative-prick elements Different spatial organization of agroecotourist complexes is based on the mutual arrangement of its constituent parts: agro-ecoexposition, tourist and administrative and service sub-zones. Here five models are possible: Model – 1 implies a relatively isolated position of agro–eco–exposition, tourist, and administrative—service subzone; Model -2 – a relatively compact position of agro-eco-exposition, tourist, and administrative-service subzone; Model - 3 – relatively isolated position of agro–eco–exposition and joint location of tourist and administrative-service subzone; Model - 4 - relatively isolated position of administrative-service and joint location of tourist and administrativeservice subzone. In addition, the modeling of agro-eco-tourist complexes takes into account the principles formulated in the previous works of domestic researchers (comfort, accessibility, diversification of services, environmental credibility, aesthetics, and safety).

For agro-ecotourist complexes of South Kazakhstan, ethno-architecture is of great importance, both in the form of original and reconstructed elements and in the form of new buildings in the appropriate interpretation of architectural and artistic heritage. One of the forms of such organization is ethno-aul. A promising solution seems to be the reuse of logistics freight containers. The available nomenclature of these closed, semi-open, platforms, and capacity containers of different lengths with the unity of width and height allows in a single or combined position to solve problems of compositional character. The extensive world practice of such containers adaptation shows the possibility of placing the systems and units of engineering support, sanitary-household premises, living quarters, and also the spaces for the cultivation of different kinds of crop and cattle breeding production, and also the premises for primary treatment and realization of production in them. The proposed nomenclature of buildings and constructions of the agroecotourist complex can be formed of forty-eight corresponding sets of containers providing a convenient exposition of many different agro-production processes, comfortable accommodation of tourists and service personnel, and organization of accompanying services, and entertainment. In combination with this, it is expedient to use already available in practice technological solutions of containers intended for the implementation of agro-production processes for ethical reasons not expedient for exposition. In the container form, based on modules produced by various enterprises, it is advisable to solve the complex of engineering and technical facilities, including water recycling stations, and wind

and solar generators, reducing energy consumption from non-renewable sources. An integral part of agro-ecotourist complexes are ethnographic parks of various types, which organize recreational activities, catering, and independent production, or purchase of folk crafts. They are equipped with physical education and sports, playgrounds, and quiet recreation. The arrangement, of agro-ecotourist complexes implies numerous elements of equipment, landscaping and architectural and landscape organization of the territory, small architectural or sculptural forms.

Research conducted in the third section allows us to draw the following conclusions:

Conclusions on the third section

- 1. Enterprises engaged in agroecotourism are organized according to the territorial—functional feature into the adapted part of the enterprise, which has united common resources and technology, and the cooperative, which has a common resource and technological base allocated from the main volume. Territorial—functional relationships are described by 9 models.
- 2. The principles of the nine models show the structure of relations between the basic enterprises of the following kinds: regionally oriented, comprehensively oriented, regionally non-oriented and oriented agro-tourist. Five of the nine models are aimed at describing the interdependence of the agro-exposition, administrative and service and tourist complexes. The remaining three models describe the organization of space: integrated, differentiated, mixed.
- 3. The techniques on which the territorial and functional organization of agroecotourism is based on models that differ in the degree of regional orientation of production occurring in the basic and agroecotourist enterprises, as well as in the level of involvement of agroecotourist enterprise in the work of the basic agroenterprise. The relationship is created by means of involvement, independence or cooperation. The very process of formation of agroecotourist enterprises is built on the basis of demand among different types of visitors, whose survey is analyzed and, in some cases, predicted. The number of organization models in total equals one hundred and thirty–five. In order to organize effective work of agroecotourist complex it is necessary to use combinations of these models, according to the relevant regional specifics.
- 4. For agro–ecotourist complexes of South Kazakhstan the ethno–architecture in the form of original and reconstructed elements as well as in the form of new buildings in the appropriate interpretation of architectural and artistic heritage is of great importance. One of the forms of such organization is ethno–aul.
- 5. For the intensive development of agro–ecotourism it is necessary to carry out a significant amount of work on the construction of appropriate buildings and structures. The reuse of logistic freight containers is seen as a promising solution.
- 6. The practice also shows great volumetric and architectural and artistic possibilities of combining containers to form buildings of different purposes and stories, creating of sculptural works, carrying both semantic and playful load.
- 7. It is reasonable to solve a set of engineering and technical facilities, including recycling water supply stations, and wind and solar generators reducing

energy consumption from non-renewable sources, in a container form based on modules produced by different enterprises.

- 8. The Organic part of agro–ecotourist complexes is a kind of ethnographic park that organizes national games, amusements, organized mass preparation and consumption of national cuisine, and independent production or purchase of folk crafts.
- 9. Appropriate equipment of agro–ecotourist complexes implies numerous elements of furniture, landscaping and landscaping, small architectural or sculptural forms, landscaped recreational areas and sports, as well as playgrounds.
- 10. Agro-products themselves and agro-production as a whole have been reflected in the decoration of architectural objects since antiquity. It concerns the configuration of territories, forms of buildings or constructions, and decorations of these or those elements.

The following publications on the subject of this dissertation research are listed below:

- 1. Ostapenko I.I. Systemic formation of agrotourism. 2012. № 5–3 (5). P. 80–81.
- 2. Ostapenko I.I. Experience of formation of systems of agro–tourism development // Collection of scientific works SWorld. 2013. T. 44. № 1. P. 40–44.
- 3. Ostapenko I.I., Abildinov R.S., Development of agrotourism in the Almaty region // Agriculture, Forestry and Water Management. 2013. № 3 (18). P. 3–7

Ostapenko I.I. Agrotourism: foreign experience and prospects // Actual problems of humanities and natural sciences. 2013. № 3. P. 289–291.

- 5. Ostapenko I.I., Bryantsev A.A. Formation of a single geo–economic space of Almaty // Collection of scientific papers SWorld. 2014. T. 19. № 1. P. 92–95.
- 6. Ostapenko I.I., Bryantsev A.A. Small architectural forms in the landscape // Collection of scientific papers SWorld. 2014. T. 18. № 3. P. 19–22.
- 7. Ostapenko I.I., Bryantsev A.A. Notes on tourism // Actual problems of humanities and natural sciences. 2016. № 3–4. P. 33–35.
- 8. Ostapenko I.I. Prospects for the development of agro-tourism as a type of tourism in the Republic of Kazakhstan // «IV international book publication of the Commonwealth of Independent States «The best young scientist 2021», RK, Nur-Sultan, 2021. P. 8–11.
- 9. Ostapenko I.I., Kozbagarova N.J. Electronic textbook: Architectural and planning organization of territories of agro–tourism // Certificate of Record in the State Register of Rights to objects protected by copyright № 20704 on October 6, 2021.
- 10. Ostapenko I.I. A set of theoretical models of the territorial and functional organization of agro ecotourism// Chronos: Natural and Technical Sciences. -2022. -T. 7, No 1 (39). -P. 52-57.
- 11. Ostapenko I.I. Interpretation of agro–product theme in decorating of architectural objects // XVIII International Scientific–Practical Conference named after Tatlin. V. Tatlin. Penza, 2022. P.155–159.
- 12. Ostapenko I.I., Bryantsev A.A. Theoretical and practical aspects of the use of modular systems, on the example of sea containers, for agroecotourist

- complexes // Scientific Journal « Bulletin of KazGASA». 2022. № 3 (85). P. 83–93.
- 13. Ostapenko I.I., Kozbagarova N.J. Specificity of agroecotourist preferences of residents of Almaty and the suburbs // Scientific Journal «Bulletin of KazGASA». $-2022. N_{\odot} 4 (86). P. 67-79.$
- 14. Ostapenko I.I., Bantserova O.L., Bryantsev A.A. To the question of the historical development of tourist sites // Scientific Journal «Bulletin of KazGASA». 2023. № 1 (87). P. 113–120.
- 15. Ostapenko I.I., Bryantsev A.A. Theoretical aspects of the territorial—functional organization of agro–ecotourism in Kazakhstan // International Journal of GEOMATE. 2023. Vol. 25, № 109. P.109–116.
- 16. Ostapenko I.I., Kozbagarova N.Zh., Bryantsev A.A. Potentials of Using Container Buildings for Producing Facilities for the Agro–Ecological Tourism Complexes in Kazakhstan // ISVS e–journal. 2023. Vol. 10, № 6. P. 351–364.