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INDUSTRIAL TOURISM IN SUMY REGION: RESOURCES AND PERSPECTIVES

The essence of industrial tourism as well as the volume of terms “production tourism” and “industrial tourism” are considered. The regional features of the clustering process of the tourism services market are studied and the ways of its intensification are demonstrated. The sectoral and territorial structure of the industrial tourism in the Sumy region is characterized. In the context of industrial tourism, the Sumy region is a diversified complex that combines large-sized and medium-sized industrial enterprises which are specialized in extraction of energy resources, the development of machinery, the chemical and petrochemical industry, and the processing of agricultural products. Taking into account the geographical peculiarities, six industrial tourism clusters (ITCs) are selected in the area of the Sumy region, i.e. territorial combinations of industrial, agricultural, transport or service enterprises that have a tourist attraction and conduct excursions to their production sites. In addition, the cluster should include necessary elements of the tourist infrastructure (transport, hotel-restaurant, information infrastructure etc.). Detailed sectoral characteristics of each industrial tourism clusters and their specialization are presented.

It was defined that the industrial tourism cluster (ITC) of Sumy (the city of Sumy, and Sumy, Lebedyn, Bilopillia and Krasnopillia districts) specializes in such segments as machine building tourism, chemical industry tourism, light industry tourism, food industry tourism, agro-industrial tourism, construction industry tourism and power industry tourism. Concerning Okhtyrka-Trostanets ITC (including Okhtyrka, Trostanets, and Velyka Pysarivka districts), the most developed segments are mining tourism, light industry tourism, food industry tourism, and construction industry tourism. Romny ITC (Romny, Lypova Dolyna and Nedryhailiv districts) includes food industry tourism, light industry tourism, construction industry tourism and machine building tourism segments. Konotop ITC (Konotop, Krolevets and Buryń districts) is best represented by the machine building industry tourism and food industry tourism segments. The specialization of the Hlukhiv-Putyl' ITC (Hlukhiv and Putyl' districts) is special. This is the least promising ITC for the development of industrial tourism. Instead, it has developed pilgrimage, historical, cultural and other tourism segments. Shostka ITC (Shostka, Yampil' and Sredna-Buda districts) includes chemical industrial tourism, food industry tourism, machine building tourism, and forestry tourism segments.

Keywords: industrial tourism, industrial tourism cluster (ITC), excursion, enterprise, Sumy region.

Олеся Корнус, Сергій Сюткін, Анатолій Корнус. ВИРОБНИЧИЙ ТУРИЗМ У СУМСЬКІЙ ОБЛАСТІ: РЕСУРСИ І ПЕРСПЕКТИВИ

У статті розглянуто сутність виробничого туризму і зміст понять «виробничий туризм» та «індустріальний туризм». Вивчено регіональні особливості процесу кластеризації ринку туристичних послуг та обґрунтовано шляхи його інтенсифікації. Охарактеризовано галузеву і територіальну структуру виробничого туризму в Сумській області. З урахуванням географічної специфіки, на території Сумської області виділено шість виробничо-туристичних кластерів (ВТК) – територіальних поєднань підприємств промисловості, сільського господарства транспорту чи сфери послуг, які мають туристичну привабливість та проводять екскурсії на свої виробництва. Межі кластерів проведені згідно адміністративно-територіального поділу, але є достатньо умовними, адже їх реальні межі постійно змінюються, оскільки з'являються нові підприємства, розвиваються нові напрями виробничо-туристичної діяльності, змінюються маршрути транспортного сполучення. Подано детальну галузеву характеристику кожного виробничо-туристичного кластера, встановлено їх спеціалізацію.

Так, у Сумському ВТК виділені машинобудівельно-туристичний, хімічнопромислово-туристичний, легкопромислово-туристичний, харчопромислово-туристичний та ін. Охтирсько-Тростянецький ВТК вирізняється розвитком добувної та харчової промисловості. Роменський ВТК включає харчопромислово-, легкопромислово-булівеальнопромислово- та машинобудівельно-туристичний сегменти. Конотопський ВТК – машинобудівельно- та харчопромислово-туристичний сегменти. Глухівсько-Путівльський ВТК має легкопромислово-туристичний сегмент. У Шосткинський ВТК входить хімікопромислово- туристичний, харчопромислово-туристичний, машинобудівельно-туристичний та лісгосподарсько-туристичний сегменти.

Ключові слова: виробничий туризм, виробничо-туристичний кластер, екскурсія, підприємство, Сумська область.

Олеся Корнус, Сергей Сюткин, Анатолий Корнус. ПРОИЗВОДСТВЕННЫЙ ТУРИЗМ В СУМСКОЙ ОБЛАСТИ: РЕСУРСЫ И ПЕРСПЕКТИВЫ

Рассмотрена сущность производственного туризма и объём понятий «производственный туризм» и «индустриальный туризм». Изучены региональные особенности процесса кластеризации рынка туристических услуг и обоснованы пути его интенсификации. Охарактеризованы отраслевая и территориальная структуры производственного туризма в Сумской области. С учетом географической специфики, на территории Сумской области выделено шесть производственно-туристических кластеров (ПТК) – территориальных сочетаний предприятий промышленности, сельского хозяйства, транспорта или сферы услуг, которые имеют туристическую привлекательность и проводят экскурсии на свои производства. Границы кластеров проведены согласно административно-территориального деления, но достаточно условны, ведь их реальные границы постоянно меняются, поскольку появляются новые предприятия, развиваются новые направления производственно-туристической деятельности, изменяются маршруты транспортного сообщения. Представлена подробная отраслевая характеристика каждого производственно-туристического кластера, определена их специализация.

Так, в Сумском ПТК выделены машиностроительный туристический, химикопромышленно-туристический, легкопромышленно-туристический, пищепромышленно-туристический и др. Ахтырско-Тростянецкий ПТК отличается развитием майнингово-туристического и пищепромышленно-туристического сегментов. Роменский ПТК включает пищепромышленно-, легкопромышленно-, стойпромышленно- и машиностроительно-туристический сегменты. Конотопский ОТК – машиностроительно-туристический и пищепромышленно-туристический сегменты. В Глуховско-Путивльском ПТК преобладает легкопромышленно-туристический сегмент. В состав Шосткинского ПТК входят химикопромышленно-туристический, пищепромышленно-туристический, машиностроительно-туристический и лесопромышленно-туристический сегменты.

Ключевые слова: производственный туризм, производственно-туристический кластер, экскурсия, предприятие, Сумская область.

Problem statement. As a result of the gradual increase of living standards and an increase of leisure time, in many countries and regions there is a steady trend of growth in tourism. This prompts people to find new places and types of tourism. This phenomenon is social in its genesis, and diversification of types of tourism is a vivid sign nowadays. The emergence of industrial (production, manufacturing) tourism is just one of the manifestations of this objective process. Ukraine and Sumy region, in particular, fit into these global trends. This research is dedicated to the identification of local peculiarities, since tourism and recreational activities are differentiated geographically and organically associated with the properties of the geographical environment.

Review of recent publications. Despite the significant theoretical and methodological explanation for the development of industrial tourism in Ukraine (O.O. Beydyk, L.I. Zelens'ka, V.L. Kazakov, T.A. Kazakova, V.S. Patsyuk etc.), in many publications the problem of wrong identification of tourism and recreational activities with entertainment only [22; 24] is highlighted. However, industrial tourism has significant opportunities for assimilation of cultural, historical and social values [7; 19; 25] and for realization of spiritual and cultural needs. These are the needs of knowledge in the broadest sense, up to the knowledge about the world around us and searching for the place in it, for the meaning and purpose of our existence.

It is important to highlight that industrial tourism can become a vital means of ideological, political and patriotic education of the population. Actually, the origin of domestic tourism in most countries of the world, as a rule, was associated with the patriotic movement, the upbringing of love for the Motherland by learning more about the historical monuments, outstanding technical objects, original production skills, etc. Tourism is not only seaside tours, national parks visits or safari in African savannah. At the end of the twentieth century, there were not that much places left in the world that could surprise. This fact contributed to the development of new varieties of tourism, including industrial one. Basically, you can go to an industrial enterprise with a special tourist goal (business, professional, cognitive, environ-

mental, educational one, for vocational guidance). It even has become a trend to visit abandoned production sites, especially those associated with famous events. In Ukraine, trips to the Chernobyl Nuclear Power Plant (ChNPP) are now very popular. In addition to visiting the ChNPP itself, the tour program includes a tour of the city of Prypiyat and visits to villages, where locals, “self-settlers”, offer for the tourists to taste Ukrainian borshch and bread with fat [32].

Industrial (production) tourism is defined differently by different authors, but for all, there is a general view on its active character, the orientation towards the satisfaction of cognitive (including educational purposes), professional and business interests, as well as the possibility of visiting both functioning and non-operating enterprises. It is also important that most types of tourism have a seasonal nature (due to both natural and socio-economic factors), which creates a number of social and economic problems. The advantages of industrial tourism consist in its year-round nature, although there may be some unevenness of the recreational flow.

In Ukraine, the terms “industrial” and “production” tourism are actually used as synonyms [6; 7; 13; 19, etc.], although the latter is somewhat broader, as the term “production” combines all aspects of human economic activity, including agriculture, forestry, services cluster, etc. In the works of Belarusian researchers [1] we encounter more often the term “industrial tourism” in this context, which is more adequate definition for the Slavic countries.

The current stage of development of the world economy has demonstrated a number of examples where the old industrial areas did not withstand the competition of other countries (regions) with cheap labor force and new technologies, and therefore the industry gradually ceased. But the first coal mines, railways and locomotives or shipyards, which were saved in the museums, attracted many tourists and facilitated a rather painful restructuring of the economy. Such experience has been accumulated in the old industrial regions of Great Britain, Germany, Poland and other countries [22]. H.H. Savina with co-authors [20] devoted their article to the urgent issues of the formation of a positive image of

industrial enterprises and territories through the introduction and development of tourism activities, taking into account foreign and domestic experience.

Ye.Yu. Kolosynskyi and N.I. Kolosinska developed the concept of the development of industrial tourism in Ukraine [8]. An important positive aspect of the proposed concept is the attempt of its authors to change the widespread misconception of tourism and industry as incompatible spheres of life. The systematic discussion of theoretical and practical experience of the establishment of industrial tourism in Ukraine was launched at the First International Scientific and Practical Forum "Industrial Tourism: Realities and Prospects" (Kryviy Rih, 2013 [5]), where approaches to the classification of forms and types of industrial tourism were considered, leading trends of its development, peculiarities of the organization, key problems of the current stage of functioning of the domestic tourist market of Ukraine were discussed, etc.

But the phenomenon of industrial tourism requires much more effort, particularly in the area of studying its regional aspects. One of the first attempts to identify promising areas of industrial tourism in Ukraine is the work of V.H. Kulesh [13], however, there is absolutely no information about Sumy region.

The cluster approach to the development of national economies has long been used in the USA, Canada, Italy, the Netherlands, and New Zealand. In Ukraine at the beginning of the 21st century, the need for clustering the economy started to be discussed as well. The analysis of the world experience of increasing the tourist competitiveness of the regions through the implementation of the cluster policy of regional development and reasoning the purposeful creation of territorial tourism clusters for increasing the competitiveness of the regions of Ukraine deserves extra attention and is made by T.O. Tymoshenko [27]. In general, the question of the introduction of cluster models has the high interest among the scholars from various fields of knowledge for a quite long time [2; 27]. Tourism clusters are forming groups of enterprises that are geographically concentrated within a certain region, which share tourism resources, specialized tourism infrastructure, local labor markets, perform joint marketing, advertising and information activities.

A.A. Terebukh and N.B. Bandura define the tourism cluster as "a system of intensive industrial technological and informational interaction of tourism enterprises, suppliers of basic and additional services aimed at creating of a common tourism product" [26, p. 266]. In this publication, among the pioneers of the creation of cluster structures in Ukraine, authors mention the Sumy region as well. Further accumulation of experience can occur through the creation of experimental microclusters (it is known that the geographic scale of clusters can vary considerably), including tourism cluster.

The aim of the article is to analyze the industrial and territorial structure of industrial tourism in the Sumy region and to describe the ways of its intensification, study regional features of the clustering process of the tourism market, promotion of the Sumy region in the tourism market, etc. the last but not least, an important empirical component of this study is satisfaction of cognitive queries of potential tourists.

Presenting of the main material. The beginnings of industrial tourism are dated from the first half of the twentieth century, when separate enterprises began to organize excursions in their production shops. For example, the company "Peugeot" started to invite the first tourists to their factory in Sochau back in 1930, and "Kronenburg" has opened the doors into its Strasburg Brewery right after the Second World War. A peculiar breakthrough in entrepreneurial consciousness began at the end of the twentieth century. At that time, many enterprises began to open their passages for ordinary citizens, using it as a convenient and easy way to gain consumer confidence, present the quality of products and advantages over competitors, and thus expand their customer base. Excursions to industrial tourism facilities are made by skilled guides (unlike in Ukraine, where their functions are performed by engineers or technologists without proper training).

It is worth mentioning that some experience of the organization of industrial tourism in Ukraine is already accumulated, but the Sumy region, so far, remains a little bit away from this process. In the context of industrial tourism, the Sumy region is a multidisciplinary complex that brings together about 270 large and medium-sized industrial enterprises which specialization is related to the extraction of energy resources, the development of machinery building, the chemical and petrochemical industry, and the processing of agricultural products. There are 378 collective agricultural enterprises and 739 farms operating in the agroindustrial complex of the region [3], activity of which may be of interest to tourists.

Such a large number of potential industrial tourism objects, as well as the territorial heterogeneity of their location, have led to the allocation of industrial tourism clusters, i.e. territorial combinations of industrial enterprises, agriculture, transport or services industry that have a tourism attraction and conduct tours to their production sites. In addition, as part of such cluster, the necessary elements of the tourism infrastructure (transport, hotel and restaurant one, etc.) should be presented.

On the territory of the Sumy region we have allocated six industrial tourism clusters (ITC): Sumy (the town of Sumy, Sumy, Lebedyn, Bilopillia and Krasnopillia districts), Okhtyrka-Trostryanets ITC (Okhtyrka, Trostryanets, and Velyka Pysarivka districts), Romny ITC (Romny, Lypova Dolyna and Nedryhailiv districts), Konotop ITC (Konotop, Krolevets and Buryń districts), the Hlukhiv-Putyvl' ITC (Hlukhiv and Putyvl' districts, and Shostka ITC (Shostka, Yampil' and Sredna-Buda districts) (Fig. 1). Defining the cluster boundaries according to the administrative-territorial division is rather conditional, since their real boundaries is constantly changing, since new enterprises are emerging, new directions of industrial tourism activity are developing, transport routes are changing, etc.

Sumy ITC is the largest in the region. Its specialization is industrial (production) tourism, taking into account the presence of more than 300 industrial enterprises from machine building, chemical, light and food industries, which have significant export potential [12]. Therefore, in this ITC it is logical to allocate several segments: machine-building tourism, chemical industry

tourism, light industry tourism, food industry tourism, etc.

Machine building tourism segment. For tourists interested in machine building, it is worth visiting some of the production sites and the museum of PJSC “Sumy Scientific and Production Association”, which until recently was useful to be one of the largest machine-building complexes in Europe producing equipment for the oil, gas, nuclear and chemical industries. For those who would like to experience the atmosphere of the production shops and other “classics” of machine building industry, the great choice will be the PU “Sumy plant “Nasosenergomash”, which specializes in the production of pumping equipment, power units and complex hy-

draulic systems for various branches of energy, metallurgy, pipeline transport, housing and communal services, producing over 600 kinds of serial products. During a tour on the production site, tourists have the opportunity to contemplate the entire technological process of producing pumping and other equipment, ranging from the procurement shop, the molding shop, assembly, etc., up to the painting the final product [11]. The machine-building segment of this cluster includes the NIKMAS Concern, a large industrial-innovative structure whose enterprises specialize in the production of modern high-efficiency and energy-saving compressor equipment and spare parts for it.

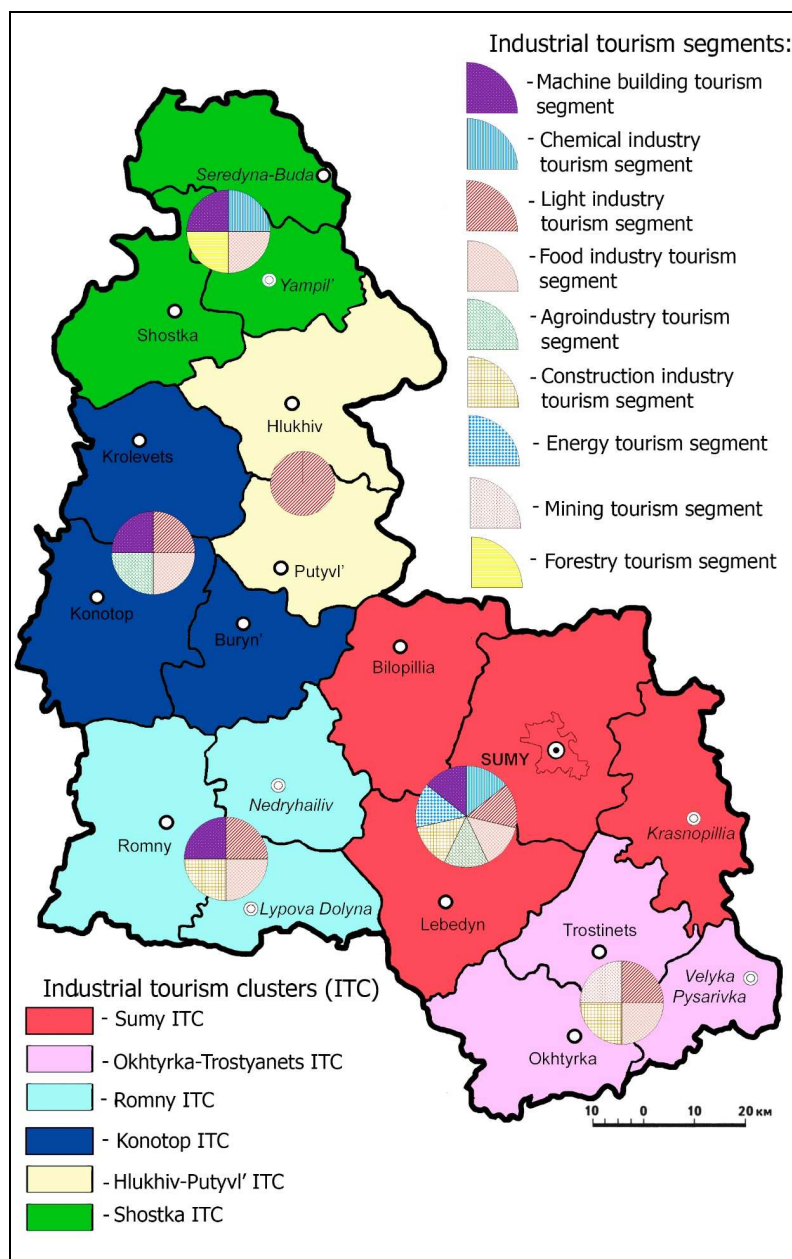


Fig. 1. Industrial tourism clusters of the Sumy region

In addition, this segment includes LLC “Ukrtranspnevmatyka” from Lebedyn, the company is producing brake equipment for rolling stock of the railway. Here tourists can get acquainted with workplace

and working conditions, communicate with employees and administration. Another enterprise, Lebedyn Motor Works “Motor Sich”, is manufacturing water-heating boilers and other equipment.

Chemical industry tourism segment provides excursions to PJSC “Sumykhimprom” where tourists can get acquainted with the production of mineral fertilizers, coagulants and additives to cement, acids, titanium dioxide, powders and other types of chemical products. A museum of the history of PJSC “Sumykhimprom” was created to get acquainted with this enterprise. You can get acquainted with the latest chemical and pharmaceutical technologies at the “KusumPharm” Ltd and Sumy Biological Factory. Due to the need to comply with sanitary norms, the latter is the best enterprise for an industrial excursion. Here one can get acquainted with the production and packaging of vaccines and other drugs used in agriculture [11].

Light industry tourism segment is represented by sewing and footwear producing enterprises. Sumy House of Models of Petro Soroka is presenting for their tourists the technology of creating clothes, from modeling of future products on the computer and cutting fabrics, to sewing and decorating the finished product. Not least interesting is the visit to PJSC “Lebedyn sewing factory”, where up to 3000 pieces of men's shirts and other products are being sewed per day. Today it is a modern enterprise, using with the best examples of domestic and foreign equipment in its production.

At the OJSC “Shoe factory “Remvzuttia” you can see the whole technological process of manufacturing leather shoes from modeling to finished products. And it is possible to buy it in a store that works at the factory. More modern production of footwear is presented at the “Premium Star” LLC (Sumy), which production is exclusively for export, specializing on leather shoes, sneakers and moccasins under the brand name of the Italian company “Grisport” ordered from the EU. However, excursions to this company are not organized yet.

The peculiarity of the *food industry tourism segment* is the difficulties of visiting due to sanitary requirements. The enterprise that freely conducts production excursions to its plant is LLC “Horobyna”, the only manufacturer of alcoholic beverages in the Sumy region. The enterprise constantly improves the technological processes of the alcoholic beverages production and shows the whole technological scheme for the production of alcoholic beverages under various trademarks. There is optional tasting at the end of the tour as well. Another interesting touristic company is “Guala Closures Ukraine”, which specializes in the production of a wide range of cortical materials used in the food industry [11].

With the organization of production in the fish processing industry you can familiarize yourself at the Sumy enterprise PE R.N. Koolemza (TM “Fish King”), which deals with the processing of raw fish (drying, smoking), the production of preserves and salads. There is an opportunity to visit the smoking, preservation and drying shops, as well as refrigerators and freezers. The “Eco-product plant” Ltd. (the village of Ivolzhanske, Sumy region) provides an opportunity to get acquainted with the production of beer and mineral water, which is made using the equipment of the Israeli firm “I.E.C. Engineering” and Italian firm “B.M. Beregy”. Near the city there is a modern enterprise PJSC “Sumy food products factory” (the village of Bezdrík), which is producing mayonnaise, oil under the trademark “Olivia”. Belopillia

Pasta Factory is producing not only pasta, but also groats and flour. The factory operates in two shifts, producing 8 tons of finished products per day.

In the agroindustry tourism segment there is an interesting tourist object, which is Stepanivka elevator of “Agroterminal Construction” Ltd, the largest elevator in Ukraine, which is part of the UkrLandFarming DK. The capacity of one-time storage of 488 thousand tons of grain is that in 15 hours can ship 54 grain-carriages. There are 6 grain dryers on the elevator, which are drying 40 tons of grain per hour [23]. Vorozhba Ltd. (town of Vorozhba) is a meat processing company, which is conducting slaughter of cattle, storage, processing and sale of meat, by-products, raw materials, producing more than 80 types of semi-finished products, sausages and smoked products using modern technologies. Also, tourists have an opportunity to visit an ostrich farm near Sumy in the village Verhnia Syrovatka, where you can see exotic birds, ride them and feed them with bread by hand. In May, with steady hot weather, you can taste an omelet made of an ostrich egg. In addition to ostriches there are many different animals and birds, including beavers, hares, foxes, storks, pheasants, etc. You can do fishing in the water reservoirs of the farm as well.

Among the enterprises of the *construction industry tourism segment* you can visit “Kerameya” Ltd (Sumy), a successful enterprise that is dynamically developing and becoming a leader in the market of building ceramic materials in Ukraine, expanding export markets, gaining popularity and recognition. The same applies to “Mykhailivsky Refractories” LLC (Krasnopilsky district), a manufacturer of lightweight refractory products.

Interesting objects of this ITC are the objects of the energy tourism segment, –small-scale power enterprises: Nyzivska hydropower plant (Sumy district) and Bobrovska and Mykhailivska hydropower plants (Lebedyn district), which are located on the Psel river.

Okhtyrka-Trostanets ITC is characterized by the development of extractive and food industries, which create corresponding segments of industrial tourism here.

Mining tourism segment. Nowadays Okhtyrka is known as the largest center of the oil and gas industry, which extracts up to 50% of all oil in Ukraine. The local oil and gas mining enterprise “OkhtyrkaNaftogaz” is working on 26 oil and gas fields, some of which can be visited for tourism purposes. In addition, the workers of Okhtyrka local lore museum developed a tour “Okhtyrka as an oil capital of Ukraine”.

In the light industry tourism segment, JSC Okhtyrka sewing factory” is one of the most interesting industrial objects for tourists. Its main products are suits, trousers, jackets, women's coats, skirts, bathrobes, mittens, slippers, blankets, as well as military uniforms, including clothing for the British Royal Guard (coats, trousers, jackets). The factory is equipped with a modern fleet of sewing universal and specialized equipment from firms “Siruba”, “Juki”, “Singer”, “Durkopp”, embroidery machines, wet and heat treatment equipment from firms “Veite”, “Silter”, “Malkan”, duplicating press from firm “Kannegiesser”, which makes it possible to execute orders quickly and with a high quality [18].

Food industry tourism segment. For lovers of beer tourism it is worth to offer an excursion to OJSC “Okhtyrka Brewery”, which is engaged in the production of not only beer, but also soda water and beverages TM “Obolon” (for example, “Zhyvchyk”). At the brewery, the tourists will get acquainted with the technological processes of sprouting hops, preparing malt and wort, mixing water with malt components with the formation of a bite, whisking and preparation for fermentation, maturation, filtration and spill. In addition, tourists can learn about the process equipment, namely, drill and burner boilers, plate coolers, yeast tanks, cylinder-conical tanks, separators, hydrocyclones, filters, bottling and packaging machines.

However, the most famous enterprise in the food industry segment is the “Mondelis Ukraine” chocolate factory, known for its trademarks “Korona”, “Ukraine”, “Milka” and others. The factory is located in Trostyanets, a district center, which recently became known as the tourist pearl of Sumy region. The highway Hlukhiv-Kharkiv and railway connection Vorozhba-Sumy-Kharkiv pass through the city. The local railway station Smorodino is one of the major railway hubs in the Sumy region, which improves tourist logistics. “Mondelis Ukraine” has one of the leading places on the market of chocolate products in Ukraine, has a closed cycle of chocolate production, from processing cocoa beans to packaging of finished goods and shipment. The factory also has packaging of coffee “Jacobs” and “Carte Noire” on its premises.

In 2016, a new biscuit shop for the production of Oreo cookies was launched here [28]. At the initiative of the chocolate factory in Trostyanets in 2012 a museum of chocolate was opened, which is divided into three halls, “Korona”, “Milka” and “Jacobs”. In total, the museum presents 1576 exhibits, including heavyweight chocolate products (certain sweets weigh around 30 kg). The tour includes the presentation of the story of the creation of chocolate and coffee, as some types of chocolate are made with the addition of this fragrant ingredient, as well as demonstration of the unique wrappers that are not produced by manufacturers anymore. The museum presents not only chocolate in its usual form of tiles, but also real delicious masterpieces in the form of various figures. The museum is located in an old aristocratic manor house, along with a picture gallery and local lore museum [17]. There is the administration of the NNP “Getmansky” located closely, where tourists could familiarize with the peculiarities of the creation and operation of the park.

Okhtyrka-Trostyanets ITC also includes *the construction industry tourism segment*, which is represented by the brick factory “VKP Notehs” Ltd. (Velyka Py-sarivka town). Visiting this factory will allow you to get acquainted with the technology of producing bricks, up to 2.5 million pieces a year. Ceramic brick is made from clay extracted from the local quarry and meets all the requirements for quality and environmental needs [31].

Romny ITC includes food industry, light industry, construction industry, and machine building tourism segments. There is one interesting fact and object of the visit, which is mount Zolotukha, near Romny, where in

1937 the first oil in the Left Bank of Ukraine was extracted [10].

Food industry tourism segment. One of the most attractive enterprises in the context of industrial tourism is “Romny Food Products” LLC, one of the largest enterprises in Ukraine that produces marmalade-pasty confectionery products, in particular marshmallows. The company's products under the TM “Romny-confectioner” (gingerbread, oatmeal cookies, crackers, toasts, cakes and pastries) are in demand both in the national and international markets. Also in the city there are other enterprises of the food industry, for example, “Romny Dairy Plant” of PE “Ros” (is the part of “Milkiland-Ukraine”). Nowadays, the company preserves raw materials and produces hard cheeses, such as “Boyarsky”, “Starosloviansky”, “King Arthur”, “Richard”, “Russian”, as well butters “Vologodske” (fat content 82.5%), “Extra” (82.5%), “Romenske” (73%), “Dobryana” (73%), dry skim milk, dry whole milk. In general, the company processes 75.500 tons of milk a year [30].

Light industry tourism segment. Until recently, Romny was a well-known center for light industry and in some sources it was called the capital of light industry of Ukraine. Although even nowadays the percentage of city enterprises in the production of curtain-tulle products in Ukraine is 75%, and footwear 34% [14]. PJSC “Romny Gardene-Tile Factory” is the only producer of curtain-tulle fabrics in Ukraine. The main area of activity is the production of curtain underlying paintings and pieces of them from jacquard fabrics, curtain fabrics, lace fabrics, curtains for the kitchen, sets of curtains for rooms, tablecloths, napkins, bedspreads, ritual funeral wares. Products and production technology the tourists can discover by visiting the workshops of this company [10]. Romny LLC “Talanprom” produces special footwear for the armed forces and other law enforcement agencies. The production is popular among some units of “Ukrzaliznytsia”, “MittalSteel Kryviy Rih”, PJSC “Ukrnafta”, metallurgical plants, etc. [25].

Among the enterprises of *the construction industry tourism segment*, JSC “Slobozhanska Construction Ceramics” is the largest manufacturer of wall ceramic materials, which takes over 40% of the Ukrainian market of wall ceramic bricks and 12% of the total Ukrainian brick market in terms of sales [25].

As part of *the machine-building tourism segment*, the Romny PJSC “Tutkovsky Plant” specializing in the manufacture of geological exploration equipment, drilling tools and spare parts for the oil and gas complex, as well as mobile carriages of buildings of various sizes and modifications, modular objects, should be named. But the most interesting object of this tourism segment is LLC “Kobzareno Plant” (Lypova Dolyna town), which ranks first in Ukraine in production of tractor trailers, as well as reloading bins, tanks for water, livestock and plant protection products. During the visit to production facilities, tourists can get acquainted with the production process, stages of production of modern agricultural machinery, state of the art equipment of the plant, welding works, machine tools and automatic machines, metal cutting plants. Tourists have an opportunity to observe how the metalwork and assembly works nowadays, as well as the process of assembly, installation, assembly of

spare parts and mechanisms. Also tourists have the opportunity to visit a new and modern sports hall of the plant with a lot of sports equipment.

Konotop ITC has a favorable transport and geographical location. The center of ITC is the city of Konotop, which is a major railway hub that provides freight and passenger transportation in 7 directions, including Moscow, Kyiv, Kharkiv, Gomel, Kursk, Poltava, Vitebsk. The 9th International Transport Corridor passes through the city as well. The city is connected with Kyiv and the regional centers – the cities of Sumy and Chernihiv by suburban transport system. This makes it advantageously different from other cities in the Sumy region. The leading segments in this cluster are *machine-building industry tourism* and *food industry tourism segments*.

The first of these should include LLC “Motordetal-Konotop”, the largest plant in Europe specializing in the manufacturing of cylinder liners for automotive, tractor, ship, diesel and stationary internal combustion engines. The vast majority of operations are carried out on modern equipment of world manufacturers. A production system of lean manufacturing was introduced on the “Motordetal-Konotop” (analogue of the system of defect-free production, created by “Toyota”). This allows to have the production of the highest class [16]. PJSC “Konotop Armature Plant” manufactures high-pressure steel pipe fittings, as well as forgings of carbon and alloyed steels weighing up to 2000 kg, volumetric stamping of various configurations weighing up to 250 kg [9]. Visit to the locomotive depot of Konotop must be of a high interest. Here you can see the exposition of the museum of the regional branch of the South-Western Railway and get acquainted with the work of the repair shop.

Among the enterprises of the *food industry tourism segment* in this ITC Dubovyazivka bakery plant must be mentioned, which holds excursions to its production site. Here you can see the unique equipment that allows you to make bread without human hands, learn all about the work of specialists, and trace the entire process of making bakery products. The highlight of the program is a small master class and degustation of freshly baked bread from the enterprise. This segment is also includes Buryn’ dry milk factory PJSC “Wimm-Bill-Dann Ukraine”. The products of this factory are known not only in Ukraine but also in Russia, Georgia, and Armenia.

An interesting attraction would be visiting a private horse farm in the village of Zholdaky, Konotop district. The lodge of green tourism “Northern Forest” is located here on the basis of the horse farm “Akhaltekynets of Ukraine”, which breeds horses. The manor has all the conditions for a wonderful holiday. Horseback riding, hunting, fishing on the river Seym, active sports activities are organized for guests.

The unique object in this ITC, which is worth visiting as well, is the Krolevets factory “Art weaving”, the manufacturer of artistic decorative woven artificial products and fabrics (towels, bedspreads, table linen, bed linen, etc.). The factory has a room-museum, where products of masters of the previous centuries are stored. Nowadays Krolevets towels still remain popular, they

are often used by ministries and banks, firms and enterprises as souvenirs for meetings at different levels, gifts.

Hlukhiv-Putylv’ ITC is distinguished by the fact that both of its centers have the status of state historical and cultural reserves. But in addition to historical and architectural monuments, they can interest visitors by the objects of specific segments of industrial tourism, including *scientific tourism*, *museum tourism*, and *spiritual tourism*. For example, in Hlukhiv there is a unique research and production institution of the Institute of Bubonic Cultures of the National Academy of Sciences of Ukraine. It is one of the oldest research institutions of the state, organized on the basis of the Ukrainian research station of bouillon cultures, in 1931 as the All-Union Scientific Research Institute of Hemp, where they created such sorts, which do not contain narcotic substances. The institute has a room-museum of bouillon cultures, where a small exhibition of hemp products is presented, including ropes, fabrics, clothes, shoes, etc. In addition, the institute itself is located in the old Tereshchenko's house (built in around 1870), which is the oldest preserved architectural heritage of the family of famous sugar-growers and patrons. The interior of the house partially preserved the original decoration, such as stucco ceilings, carved doors, tiled stoves, as well as stairs to the second floor, made in the style of cast iron decorative casting.

The *light industry tourism segment* in Hlukhiv is represented by one of the unique enterprises of Ukraine, the company “Linen of Desna”. The enterprise has a full cycle of production from flax growing and technical hemp, primary processing of linen and hemp raw material to finished products (twine, ropes, fuel briquettes, spreading heater, since 2016 linen cloth). Fibers are sold to countries in Europe and Asia for the needs of spinning and textile enterprises, the rest is processed on its own cotton mill. The town of Putylv’ is the tourist pearl of Sumy, famous for its monasteries and museums, and successfully complements the tourist attractions of Hlukhiv.

Shostka ITC is one of the first that has entered the path of cluster relations, the industrial park “Svema” has been created on the territory of the city, an industrial site, which is used for production needs by several independent enterprises from different industries. After closing “Svema” hundreds of buildings fully equipped with engineering items became unoccupied. During the period of operation of the park, a large volume of work on the construction, reconstruction of engineering and transport infrastructure, road surface and street lighting, adjacent territory was carried out. Among the advantages of the industrial park is the reduction of investment development time, the use of scientific potential of local educational institutions, the availability of a customs post, and the involvement of creative experts in the implementation of investment projects. Here a new educational-laboratory complex of the Shostka Institute of Sumy State University with a business incubator, an electronic library, and sports grounds was built [4].

The *chemical industry tourism segment* remains the main in this cluster. Interesting for tourists is PJSC “Farmak”, whose production base was established in 2002. During the excursion tourists can learn about the

history of the enterprise, which for several years produced a monoprodukt, mebhydrolin (a substance for the production of the finished medicine diazolin) and was the only one on the territory CIS to produce this substance, which has antihistamines properties. Tourists have the opportunity to visit production shop for active pharmaceutical ingredients and to see the cleaning buildings at PJS "Farmak". It is also possible to visit a local waste sorting site. In addition, they can learn what GMP is (Good Manufacturing Practice) and how medicines are produced [29].

In the food industry tourism segment PE "Rubanik" has to be mentioned, which has been working on the pasta market for more than 10 years and offers a wide assortment (more than 20 types) of pasta of different shapes in packaging of 1 and 3 kg, marked by the slogan "Made in Sumy region" [15]. "Bell" Shostka Ukraine" is a major enterprise, a well-known leader in domestic cheese making. Also this segment includes SPE "Praid" (the village of Ostroushky, Shostka district) specializing in canning of fish and vegetable products.

The machine-building tourism segment of this cluster is formed by the enterprises of the Yampil' district, in particular "Svesa pumping plant", located in the town of Svesa. It is one of the oldest enterprises in the Sumy region, created in 1858 as separate casting and mechanical plants of the titular adviser M.M. Nepluev. The plant produces about 200 brands of various pumping equipment.

The peculiarity of this ITC is the wide development of the forestry tourism segment. State enterprises "Seredyna-Buda forestry" and "Seredyna-Buda agrolishosp" deserve particular attention in this segment. In addition to various productions associated with preparation and processing of wood, enterprises are engaged in the organization of sports hunting.

Conclusions. Spatial-temporal dynamics of recreational needs of a person is a socio-historical product, as they may vary in time, which is reflected in the territorial

forms of the organization of tourism and recreational activities. Therefore, the study of recreational needs and resources for its implementation is necessary for studying the forms of territorial organization of recreational areas of all ranks and scales (both existing and perspective). In today's conditions (due to an increase in the cultural and educational level of the population), the need for recreational and cognitive activity is growing rapidly. One of the key elements of such activity is industrial tourism, the significant advantage of which is its versatility. The development of this type of tourism in Sumy, as a form of cooperation between the producers of goods and services, on the one hand, and tourism segment, on the other hand, is only beginning, therefore, needs further study.

The optimal form of such cooperation is industrial tourism clusters, which are quite capable of uniting and absorbing the socio-geographical categories of "territorial recreational complexes" and "tourism and recreational areas".

Therefore, in the Sumy region, six industrial tourism clusters (Sumy, Konotop, Shostka, Romny, Okhtyrka-Trostanets, Hlukhiv-Putyl') are quite justified in the current socio-economic conditions. The cluster is a relatively new tool for improving the region's tourism competitiveness and a unique catalyst for the development of specific sectors of the economy. However, the sphere of industrial tourism does not yet have a generally accepted methodology for organizing cluster structures and requires serious marketing research, in which we see the prospect of further scientific research on this topic.

The preliminary inventory of the objects of industrial tourism conducted in this article is a step towards further study of tourism opportunities in Sumy region and the creation of innovative tourism clusters, the formation of which will have a positive impact on the pace of modernization of the economic structure of the region and will contribute to increasing its tourist competitiveness.

References:

1. Glukhova, I.V. (2018). Razvitie proizvodstvennogo turizma v Respublike Belarus [Development of industrial tourism in the Republic of Belarus]. *Visnyk Natsionalnoho universytetu vodnoho hospodarstva ta pryrodokorystuvannya. Seriya Ekonomichni nauky. – Bulletin of the National University of Water Management and Nature Management. Series of Economic Sciences*, 1 (81), 24-32 [in Ukrainian].
2. Danko, N.I. (2014). Formuvannya turystychnoho klasteru yak shlyakh ekonomichnoho zrostannya regionu [Formation of the tourist cluster as a way of economic growth of the region]. *Visnyk KhNU imeni V.N. Karazina. Seriya «Mizhnarodni vidnosyny. Ekonomika. Krainoznavstvo. Turyzm».* – *Bulletin of the V.N. Karazin Kharkiv National University. Series «International Relations. Economy. Country Studies. Tourism»*, 1144, 157-161 [in Ukrainian].
3. Zahalni vidomosti pro Sumsku oblast [General information about the Sumy region]. (n.d.). <https://sumy.legalaid.gov.ua>. Retrieved from <https://sumy.legalaid.gov.ua/ua/i?id=905:zahalni-vidomosti-pro-sumsku-oblast> [in Ukrainian].
4. Industrialnyi park «Svema» [Industrial Park «Swema»] (n.d.). <https://tamtour.com.ua>. Retrieved from <https://tamtour.com.ua/rus/industrialnyj-park-svema> [in Ukrainian].
5. Industrialnyi turizm: realii ta perspektyvy: *Materialy I Mizhnarodnoho naukovo-praktychnoho forumu – Industrial Tourism: Realities and Prospects: Materials of the International Scientific and Practical Forum*. (2013). Kryvyi Rih, 228 [in Ukrainian].
6. Kazakov, V.L. (2013). Organizatsiya industrialnoho turizmu: systemnyi pidkhid [Organization of industrial tourism: a systematic approach]. *Industrialnyi turizm: realii ta perspektyvy. Materialy I Mizhnarodnoho naukovo-praktychnoho forumu – Industrial tourism: realities and prospects. Materials of the International Scientific and Practical Forum*. Kryvyi Rih, 17-21 [in Ukrainian].

7. Kazakova, T.A. (2009). Pro pyannya zmistu tekhnogennoho (promyslovoho ta industrialnoho) turyzmu [About questions of the maintenance of technogenic (industrial and industrial) tourism]. *Ekologiya – shlyakhy harmonizatsii vidnosyn pryrody ta suspilstva – Ecology – ways of harmonizing the relations of nature and society*. Uman: UDAU, 79-81 [in Ukrainian].
8. Kolosynskiy, Ye.Yu. & Kolosinska, N.I. (2012). Kontseptsiya rozvytku promyslovoho turyzmu v Ukraini [Concept of development of industrial tourism in Ukraine]. *Naukovyi visnyk Poltavskoho un-tu ekonomiky i torhivli – Scientific herald of Poltava Un-ty of Economics and Trade*, 2 (53), 76-79 [in Ukrainian].
9. Konotopskiyi armaturnyi zavod [Konotop Reinforcement Plant] <http://kaz.com.ua>. Retrieved from <http://kaz.com.ua/ukr/about.html/> [in Ukrainian].
10. Kornus, A.O. & Kornus, O.H. (2017). *Promyslovist Sumskoi oblasti (ekonomiko-geografichne doslidzhennya) [Industry of the Sumy region (economic-geographical research)]*. Sumy: SumDPU imeni A.S. Makarenka [in Ukrainian].
11. Kornus, O. (2017). Metodichni osoblyvosti vykladannya navchalnoi dystsypliny «Osnovy tekhnolohiy vyrobnytstva» [Methodical features of teaching discipline «Fundamentals of Production Technologies»]. *Chasopys sotsialno-ekonomichnoi geografii – Human Geography Journal*, 23(2), 59-69 [in Ukrainian].
12. Kornus, O.H. & Kornus, A.O. (2013). Suchasnyi stan promyslovoho kompleksu mista Sumy [The current state of the industrial complex of the city of Sumy]. *Chasopys sotsialno-ekonomichnoi geografii – Human Geography Journal*, 15(1), 145-153 [in Ukrainian].
13. Kuliesh, V.H. (2010). Perspektyvy rozvytku promyslovoho turyzmu v sviti ta Ukraini [Prospects for the development of industrial tourism in the world and Ukraine] (n.d.). <http://tourlib.net> Retrieved from http://tourlib.net/statti_ukr/kulesh2.htm [in Ukrainian].
14. Lehka promyslovist [Light industry] (n.d.). <http://www.novageografia.com> Retrieved from <http://www.novageografia.com/vogels-332-1.html> [in Ukrainian].
15. Lider u sferi vyrobnytstva makaronnykh vyrobiv na Shostkynshchyni [The leader in the field of pasta production in Shostkinshchyna]. (n.d.). <http://shst.sm.gov.ua> Retrieved from <http://shst.sm.gov.ua/index.php/ru/prioriteti/rozvitok-pidpruemstv/697-lider-u-sferi-virobnitstva-makaronnikh-virobiv-na-shostkinshchini> [in Ukrainian].
16. Motordetal-Konotop – kompaniya sehodnya [Motordetal-Konotop is a company today] <https://www.motordetal.com.ua> Retrieved from <https://www.motordetal.com.ua/?q=kompaniya> [in Ukrainian].
17. Muzei shokoladu [Museum of Chocolate] (n.d.). <https://zruchno.travel> Retrieved from <https://zruchno.travel/ObjectEntity/ObjectEntity?lang=ua&idCrm=502ba330-f4ae-4c7f-3d5a-58b6f5a698cb> [in Ukrainian].
18. Okhtyrskya shveyyna fabryka [Okhtyrsky garment factory] (n.d.). Retrieved from <https://ahtshveyynaya.business-guide.com.ua/> [in Ukrainian].
19. Patsiuk, V.S. (2008). Industrialnyi turyzm i perspektyvy yoho rozvytku v Ukraini [Industrial tourism and prospects of its development in Ukraine]. *Naukovi zapysky VDPU imeni Mykhaila Kotsiubynskoho. Seriya: Geografiya. Vinnytsia – Scientific notes of the Mikhail Kotsyubynsky VDPU. Series: Geography. Vinnytsia*, 15, 82-85 [in Ukrainian].
20. Savina, H.H. & Balychova, V.O. (Ed.). (2015). Promyslovyyi turyzm yak instrument formuvannya pozytyvnogo imidzhu [Industrial tourism and prospects of its development in Ukraine]. *Naukovyi visnyk Polissia – Scientific bulletin Polesie*, 4, 140-143 [in Ukrainian].
21. Slobozhanska budivelnna keramika [Slobozhansky building ceramics] (n.d.). Retrieved from <https://sbk.ub.ua/> [in Ukrainian].
22. Smal, I.V. & Smal, V.V. (2013). Turyzm vyrobnychoi spadshchyny u konteksti strukturyzatsii form i vydiv turyzmu pidkhid [Tourism production heritage in the context of structuring forms and types of tourism approach]. *Industrialnyi turyzm: realii ta perspektyvy. Materialy I Mizhnarodnoho naukovo-praktychnoho forumu – Industrial tourism: realities and prospects. Materials of the International Scientific and Practical Forum*. Kryvyi Rih, 27-35 [in Ukrainian].
23. Stepanovskiy elevator – bolshe ego v Evrope ne syshesh [Stepanovsky elevator – no longer will you find it in Europe] <https://latifundist.com> Retrieved from <https://latifundist.com/blog/read/494-stepanovskij-elevator--bolshe-ego-v-evrope-ne-syshesh> [in Ukrainian].
24. Siutkin, S.I. (2016). Formuvannya novykh rekreatsinykh potreb naselennya [Formation of new recreational needs of the population]. *Naukovi zapysky SumDPU imeni A.S. Makarenka. Geografichni nauky – Scientific Notes of Sumy State Pedagogical University named after A.S. Makarenko. Geographical Sciences*, 7, 140-144 [in Ukrainian].
25. Talan [Talan] (n.d.). <http://talan.in.ua> Retrieved from http://talan.in.ua/index.php?route=information/information&information_id=4 [in Ukrainian].
26. Terebukh, A.A. & Bandura, N.B. (2010). Turystychnyi klaster yak forma posyleniya konkurentnykh perevah regionu [A tourist cluster as a form of strengthening the competitive advantages of the region]. *Naukovyi visnyk NLTU Ukrainy – Scientific Bulletin of UNFU*. 20.12, 265-271 [in Ukrainian].
27. Tymoshenko, T.O. (2017). Klasternyi pidkhid do rozvytku turystychnoi haluzi Ukrainy yak priorytetnyi napryam derzhavnoi polityky pidvyshchennya konkurentospromozhnosti regioniv [Cluster Approach to the Development of the Tourist Industry of Ukraine as a Priority Direction of the State Policy of Increasing the Competitiveness of the

- Regions]. *Visnyk NADU pry Prezydentovi Ukrainy. Seriya «Derzhavne upravlinnya» - Bulletin of the National Academy of Public Administration under the President of Ukraine*, 2, 55-60 [in Ukrainian].
28. Trostyanetska fabryka – Mondelis Ukraina [Trostyanets Factory – Mondelis Ukraine] (n.d.). <https://ua.mondelezinternational.com> Retrieved from <https://ua.mondelezinternational.com/about-us/our-team/trost-factory> [in Ukrainian].
29. Farmfirm: kachestvo nashej produktsii – kachestvo vashey zhizni [Pharmacy: The quality of our products is the quality of your life] (n.d.). <https://pharmhim.com> Retrieved from <https://pharmhim.com/rd/> [in Ukrainian].
30. Filiia «Romenskyi molochnyi kombinat» Pryvatne pidpriemstvo «Ros» [Branch «Romny Dairy Plant» Private Enterprise «Ros»] <http://www.milkiland.ua> Retrieved from <http://www.milkiland.ua/about/plants/filiya-romenskyu-molochnyy-kombinat-p0ryvatne-pidpryemstvo-ros> [in Ukrainian].
31. Tsehelnyi zavod VKP «Notekhs» [The brick factory of the CPS “Nootex”] (n.d.). <http://notexs.sumy.ua> Retrieved from <http://notexs.sumy.ua/kirpichnyj-zavod/> [in Ukrainian].
32. Siutkin, S. & Kornus, A. (Ed.). (2017). Resources and opportunities for the development of event tourism in Ukraine. *Zeszyty Naukowe Wyższej Szkoły Turystyki i Ekologii*. (Tom 11). (Rocznik VI). (Vols. 1), (pp. 111- 126). [in Poland].

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