

# РОЗВИТОК ПРОДУКТИВНИХ СИЛ, РЕГІОНАЛЬНА ЕКОНОМІКА, ДЕМОГРАФІЯ, СОЦІАЛЬНА ЕКОНОМІКА І ПОЛІТИКА

UDC 338.483.13:338.48-6:502/504

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## METHODOLOGICAL BASIS OF CHOOSING TOURISM RESOURCES FOR ECOTOURISM DEVELOPMENT

**Setting the problem.** The current state of Ukrainian tourism has a clear focus on the export of tourism services, so we must solve the problem of increasing the number of inbound and domestic tourists. The situation developed over the last year, causes economic inability of most Ukrainian citizens travel abroad, that's why the research of resource base of different types of tourism has become more important. Therefore, to understand the potential ecotourism implementation it is necessary to determine which of tourism resources have the greatest impact on ecotourism development. Tourists' activity generally refers to the kinds of social practice with a distinct resource orientation, also ecotourism isn't an exception.

**The analysis of recent research and publications.** The issue of the definition of tourism resources is the subject of constant debate of both domestic and foreign scientists. A significant contribution to the development of certain aspects is made by O. Lyubitseva, E. Pankov, W. Stafiyuchuk M. Malska, I. Smal, N. Antoniuk, N. Ganych and others. However, the problem of tourism resources choice in the context of their usage in Ukrainian ecotourism was not considered before.

**Setting the objective.** The research aims to determine the method of tourism resources choosing for Ukrainian ecotourism development. The object of the research is the development of ecological tourism in Ukraine.

**The main material of research.** Tourism is always based on purposeful and rational usage of nature resources. Due to the fact that there are many views on the tourism resources definition, it is necessary to consider some of the approaches.

M. Malska [4] considers, that tourism resources are the specific properties of the environment, and also their combinations, the manifestations of human activity, natural, historical, social and cultural objects that attract tourists' interest, encourage them to travel, and can satisfy their needs in the refreshment and development of physical, emotional and intellectual conditions. Resource is not only a landscape or a historical monument, but also peace and quiet, clean air, the hospitality of residents, entertainments and etc. Tourism can't be developed in the place, where there are no any tourism resources.

In turn, academic A. Lyubitseva [2] notes that tourism resources are objects of nature, history, culture, current events, that can be used in the tourism product creation and implementation, as a motivational basis for his/her choice, for example, by type, season and other factors.

According to the scientist I. Smal [7], the structure of tourism resources allocates several components: natural, social, cultural, technological, which also are divided into several components, each with its own structure. Besides, S. Kyzik [1] divided tourism resources into two groups: nature-geographic and nature-anthropologic, which of them contains many elements.

Scientists Zyma O. and Naumik K. [9, p. 185], selected there critical issues: development of tourism, investment, development of municipal infrastructure as key factors for the further development of the economy of our country.

Despite the fact, that there are a lot of approaches to the tourism resources division, they don't match the statistic information which is gathered in Ukraine. As the result, it is impossible to understand the dynamics of development or regression process of these resources. That's why the authors propose to combine the classifications and analyze the most important their types using the expert method, under which professionals of the tourism industry from different regions of Ukraine were asked to determine the weight of such kinds of tourism resources as natural, technological, social and events. The main idea of such method

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is that it is supposed to compare pairs of selected alternatives to identify the most attractive of them. It comprises the following steps:

- decomposition of the problem;
- building a hierarchical structure of the problem;
- experts' assessment of benefits;
- building a local priorities;
- assessment of the consistency of judgments;
- synthesis of local advantages;
- conclusions and proposals for the decisions [3, p. 289].

The difference of this method from the ordinary scale estimation is that the experts are offered to give preference by evaluating two alternatives each time. During the evaluation, the expert puts his/her score in a questionnaire on the special scale. This method was clearly described V. Liamets [3, p. 290]. The main idea is to put the degree of importance from 1 to 9, where 1 is equal importance and 9 is an absolute advantage. In the degree of preference from one alternative to other scales 2, 4, 6, 8 are interim evaluation measure between neighboring values.

Thus, the study should identify the opinion of experts about which tourism resources are more important in evaluating the ecotourism potential.

First of all, we must determine the required minimum number of interviewed specialists of tourism industry in order to bring the representativeness of the research, using the formula [5, p. 217]:

$$n = \frac{n_0}{\frac{n_0 + (N - 1)}{N}} \quad (1)$$

$$n_0 = \frac{t^2 * \sigma^2}{\Delta^2} \quad (2)$$

where n – adjusted sample size;

N – the number of the general group elements;

$n_0$  – the estimated sample size without the repetition selection;

$t^2$  – tabular value corresponding confidence probability F(t), which guarantees the assessment of the general totality according to the sampling;

$\sigma^2$  – general dispersion;

$\Delta^2$  – permissible error is given by the investigator based on the required accuracy of the projected sample.

In case, if the maximum and minimum points are known beforehand, the standard deviation can be defined by the rule of "three sigma". In our case, the maximum score is 9 and the minimum is 1, hence it follows that error is 0,3 points, and confidential probability is 0,9802. This indicates that the results obtained in the study adjusted to 98% of the general totality characteristic. In turn, the entire totality is defined as the amount of tourism agencies and operators, which was registered on 01.01.2014. It is said that about 5346 subjects of tourist activity were operating at that period of time [6, p. 246]. Then, the adjusted sample size is defined as the number of professionals who are needed to be interviewed (one for each company). Here are the calculations for the aforementioned formulas:

$$n_0 = \frac{2,33^2 * 1,3^2}{0,3^2} = 101,9422 ;$$

$$n = \frac{101,9422}{\frac{101,9422 + (5346 - 1)}{5346}} = 100,0512 = 101.$$

As it can be seen from the calculations, in case of obtaining reliable results it is necessary to interview at least 101 specialists.

The research was attended by 101 experts that are why the calculations are carried out consecutively for each questionnaire, which resulted in values obtained structural analysis. Thus, in the processing of raw data determining, the criteria for assessing the factors, that influence the development of ecotourism, have been adjusted in accordance with the principles that have been referred to the International Ecotourism Organization [8]. Thus, we get the following results (Table. 1, Fig. 1)

Table 1

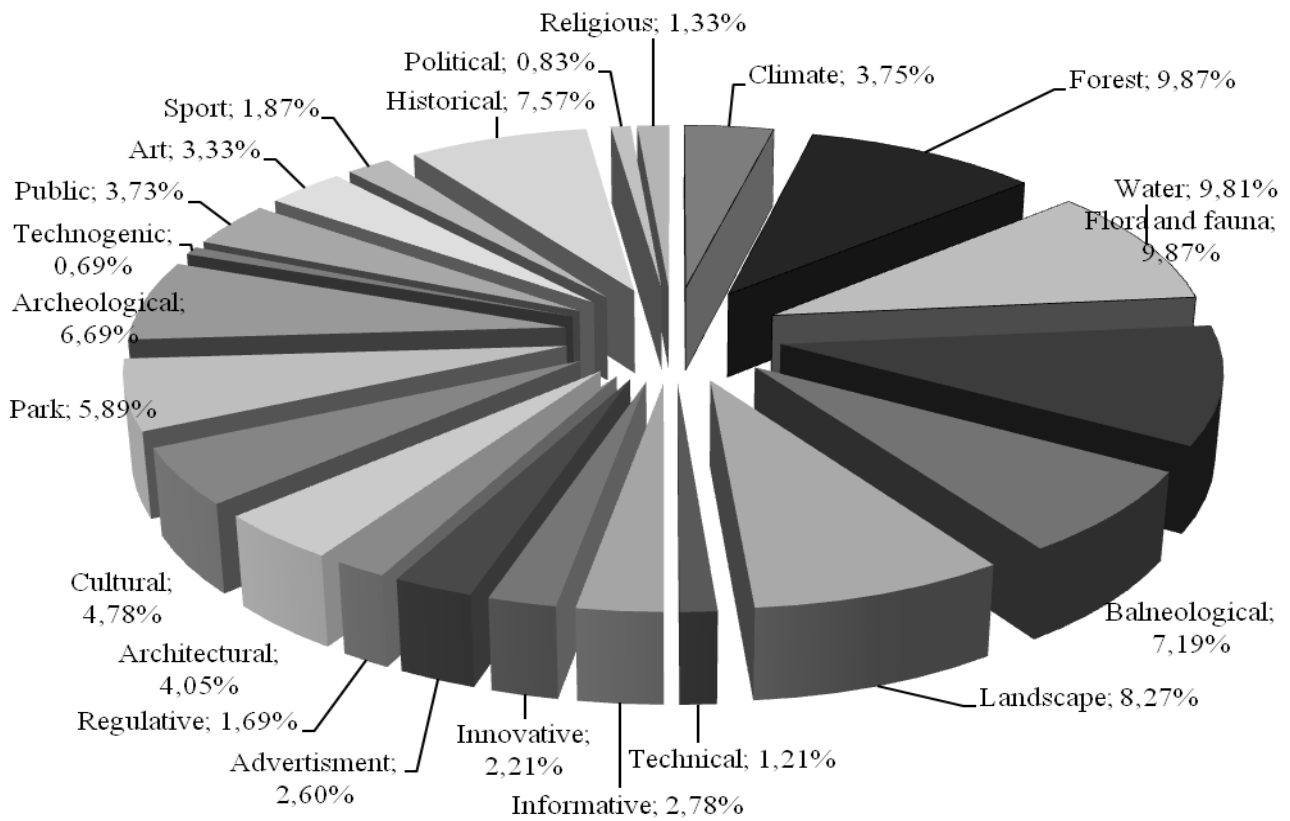
The result of research by the method of T. Saaty

Alternative types of tourism resources	The relative weight of the principles of selection criteria importance for evaluating factors				Adjusted relative weight
	greening	humanization	education	profitability for local people	
Forest	0,026653	0,022705	0,025666	0,023692	0,098716
Flora and fauna	0,026653	0,022705	0,025666	0,023692	0,098716
Water	0,026482	0,022559	0,025502	0,02354	0,098083
Landscape	0,022325	0,019018	0,021498	0,019844	0,082685
Historical	0,020427	0,0174	0,01967	0,018157	0,075654
Balneological	0,019405	0,016531	0,018687	0,017249	0,071872
Archeological	0,018054	0,015379	0,017385	0,016048	0,066866
Park	0,015891	0,013537	0,015302	0,014125	0,058856
Cultural	0,012917	0,011003	0,012438	0,011482	0,04784
Architectural	0,010932	0,009313	0,010528	0,009718	0,04049
Climate	0,010122	0,008623	0,009747	0,008998	0,03749
Public	0,010066	0,008575	0,009693	0,008948	0,037282
Art	0,008991	0,007659	0,008658	0,007992	0,0333
Informative	0,007501	0,00639	0,007223	0,006667	0,027781
Advertisement	0,007031	0,00599	0,006771	0,00625	0,026042
Innovative	0,005974	0,005089	0,005752	0,00531	0,022125
Sport	0,005055	0,004306	0,004867	0,004493	0,018721
Regulative	0,004571	0,003894	0,004402	0,004063	0,016929
Religious	0,003603	0,003069	0,00347	0,003203	0,013344
Technical	0,003256	0,002773	0,003135	0,002894	0,012058
Political	0,002238	0,001907	0,002155	0,00199	0,00829
Technogenic	0,001852	0,001578	0,001784	0,001647	0,006861

Source : made by authors basing on the expert method

The overall structure of the distribution of alternative selection is shown in Fig. 1.

As it can be seen, there are some tourism resources which effect on tourism development more than others (Table 1), that's why, it is important to analyze them accurately. In order to be able to do this, the authors optimize researching tourism resources according to the State Statistics (table 2).



**Fig. 1. The result of research by the method of T. Saaty**  
Source: made by authors basing on the Table 1

**Table 2**

**Changes in tourism resources classification**

Classification	Type of information in State Statistics
Forestry	area of forest
Floro-faunistic	the total number of species of flora in the region
	the total number of species of fauna in the region
Landscape	area of natural reserve fund
Historical	historic monuments of cultural heritage
Balneological; Water	length of rivers
	reservoirs area
Archaeological	archaeological sites of cultural heritage
Cultural	heritage monuments of monumental art
Events	
Architectural	monuments of cultural heritage and architecture
Parking	
Public	interaction with the media and public relations
Informative	
Advertising	

Source : made by authors basing on the expert method and [6]

As a result, we get a number of indicators, according to experts opinion, the biggest impact on the development of the territory potential and also captured in the State Statistics Service of Ukraine. However,

for a more complete analysis using the integral index it should be taken into account not only the positive indicators and indicators that affect the development of ecological tourism.

**Conclusions and further research.** To sum up, the analysis provides detailed information for the future research. It means, that a scientist can use the information of these tourism resources, because they clearly show the modern situation and prospects of ecotourism development. As the result, according to experts, a number of indicators was obtained, which most affect the ecotourism potential development. The analysis allows concluding that taking into consideration the influence of principles the assessment of the ecotourism should also include the method of integral index. This analysis will provide a detailed description of the regions of Ukraine, which will allow conducting an objective assessment of the ecotourism potential.

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#### Наумік-Гладка К.Г., Голуб М.О. МЕТОДИЧНІ ОСНОВИ ВИБОРУ ТУРИСТИЧНИХ РЕСУРСІВ ДЛЯ РОЗВИТКУ ЕКОЛОГІЧНОГО ТУРИЗМУ

**Мета** – визначення методів вибору туристичних ресурсів, які найбільшим чином впливають на розвиток екологічного туризму в Україні.

**Методика дослідження.** Для досягнення поставленої в роботі мети було використано комплексний та системний підходи, сукупність загальнонаукових, статистичних, економіко-математичних методів, зокрема: історико-логічний метод (при дослідженні науково-методичної бази); табличний та графічний методи (для наочного представлення результатів аналітичних розрахунків та конкретних результатів дослідження); метод аналізу ієрархій Т. Сааті (для вибору пріоритетних туристичних ресурсів, які використовуються під час

екотуристичних подорожей); метод інтегрального оцінювання (для визначення найвпливовіших туристичних ресурсів для розвитку екологічного туризму).

**Результати.** У результаті дослідження було сформовано туристичні ресурси, які, на думку експертів, найбільшим чином впливають на розвиток екологічного туризму. Окрім цього, авторами було визначено потенціал розвитку екологічного туризму в регіонах України.

**Наукова новизна.** Найбільш вагомими результатами, що визначають наукову новизну статті, є удосконалення методики оцінки потенціалу розвитку екологічного туризму, що, на відміну від існуючих, має об'єктивний характер, враховує системні зв'язки між видами економічної діяльності національного господарства.

**Практична значущість** дослідження полягає в тому, що сформульовані в ході дослідження висновки можуть слугувати базисом під час розробки програм сталого розвитку сфери туризму, а також дозволяють обґрунтувати проведення природоохоронних заходів.

**Ключові слова:** екологічний туризм, визначення потенціалу, метод аналізу ієрархій, метод інтегрального оцінювання, сталий розвиток, туристичні ресурси.

#### **Naumik-Gladka K.G., Holub M.O. METHODOLOGICAL BASIS OF CHOOSING TOURISM RESOURCES FOR ECOTOURISM DEVELOPMENT**

**Purpose** – to determine the method of tourism resources choosing for Ukrainian ecotourism development.

**Methodology of research.** To achieve the aim comprehensive and systemic approach, a set of general, statistical, economic and mathematical methods were used. Such as: historical and logical method (the study of scientific and methodological basis); tabular and graphical methods (for visual presentation the of analytical calculations and specific research results); T. Saati hierarchy analysis method (for selecting tourism resources used in the ecotourism travel); method of the integral evaluating (to determine the most important tourism resources for the ecotourism development).

**Findings.** In this article tourism resources was formed, according to experts point of view. In addition, the author has identified the potential of ecotourism in the regions of Ukraine and also outlines the areas that are the most perspective for the ecotourism implementation.

**Originality.** The most significant results, defining scientific novelty of the article, are the improvement of the assessing methodology of the ecotourism potential, which, unlike existing methods, takes into account the connection between the economic activities of the national economy.

**Practical value** of the study is that the results of the study can be used as a basis when developing programs for sustainable tourism development, and allow to justify environmental protection.

**Key words:** ecotourism, potential determination, hierarchy analysis method, method of the integral evaluating, sustainable development, tourism resources.

#### **Наумик-Гладкая К.Г., Голуб М.А. МЕТОДИЧЕСКИЕ ОСНОВЫ ВЫБОРА ТУРИСТИЧЕСКИХ РЕСУРСОВ ДЛЯ РАЗВИТИЯ ЭКОЛОГИЧЕСКОГО ТУРИЗМА**

**Цель** – определение методов выбора туристических ресурсов, в наибольшей степени влияют на развитие экологического туризма в Украине.

**Методика исследования.** Для достижения поставленной в работе цели были использованы комплексный и системный подходы, совокупность общенаучных, статистических, экономико-математических методов, в частности: историко-логический метод (при исследовании научно-методической базы) табличный и графический методы (для наглядного представления результатов аналитических расчетов и конкретных результатов исследования); метод анализа иерархий Т. Саати (для выбора приоритетных туристических ресурсов, используемых при экотуристических путешествий) метод интегральной оценки (для определения самых важных туристических ресурсов для развития экологического туризма).

**Результаты.** В результате исследования были сформированы туристические ресурсы, которые, по мнению экспертов, в наибольшей степени влияют на развитие экологического туризма. Кроме этого, авторами был определен потенциал развития экологического туризма в регионах Украины.

**Научная новизна.** Наиболее весомыми результатами, определяющие научную новизну статьи, является усовершенствование методики оценки потенциала развития экологического туризма, в отличие от существующих имеет объективный характер, учитывает системные связи между видами экономической деятельности национального хозяйства, а также охватывает не только положительные, но и негативные факторы.

**Практическая значимость** исследования заключается в том, что сформулированные в ходе исследования выводы могут служить базисом при разработке программ устойчивого развития сферы туризма, а также позволяют обосновать проведение природоохранных мероприятий.

**Ключевые слова:** экологический туризм, определение потенциала, метод анализа иерархий, метод интегральной оценки, устойчивое развитие, туристические ресурсы.