



DOI: 10.54919/physics/55.2024.246wj7

## Modern reserves of equestrian sport development in Ukraine

Nataliia Shmarenkova\*

National University of Ukraine on Physical Education and Sport  
03150, 1 Fizkultury Str., Kyiv, Ukraine

### Abstract

**Relevance.** Research related to equestrian sport in Ukraine is quite relevant, as this sport attracts many people not only as a sporting activity, but also as a form of active recreation and tourism. The development of this industry can contribute to the development of regional tourism and increase the attractiveness of Ukraine for tourists.

**Purpose.** The purpose of the study is to analyse and determine the current state and prospects of equestrian sport development in Ukraine in order to identify effective strategies and reserves.

**Methodology.** The methods used were the analytical method, statistical method, functional method, system analysis method, deduction method, synthesis method and comparison method.

**Results.** The study analysed the current state and prospects of equestrian sport in Ukraine. The analysis was carried out using methodological support based on a universal methodology created in accordance with modern scientific approaches, namely: resource, resource-result, methodological support evaluation approach, and ecological approach. The role of equestrian sport in tourism and the country's economy is assessed, and the current state and prospects in this direction are considered. Several strategies for the further development of this industry in Ukraine have been identified. As a result of the study, specific strategies have been proposed to increase the competitiveness of equestrian sport in Ukraine and achieve high sports results.

**Conclusions.** The practical significance of the results obtained is to develop and implement strategies for the development of equestrian sport in Ukraine in order to improve its competitiveness, popularity, and impact on the public.

**Keywords:** tourism development; sports results; competitiveness; development strategies; regional tourism.

### Introduction

Horses have always been an integral part of the culture and economy of the Ukrainian people. Ukrainian riders have won numerous victories at international competitions and made a significant contribution to the global equestrian heritage. The study of the state and prospects of development of equestrian sport in Ukraine suggests that it will be possible to successfully compete with leading sports powers and win major international competitions and tournaments mainly due to the advantage in the methodological concept of long-term training, based on a system of appropriate reserves, including methods and resource capabilities. The need for a comprehensive

improvement of the state and quality of training of equestrian sports personnel, as well as the improvement of other elements of the reserves, determines the need for in-depth development of certain issues of this problem. Modernization of the actual reserves for the development of equestrian sport in Ukraine is extremely important due to a number of contradictions in this area, related to the growth of its popularity in the world, the state, and the deterioration of management in the main areas, the lack of introduction of the latest sports technologies and the decline in the level of scientific research in this area. In view of the above, the study of the problem of modern reserves for the development of equestrian sport in Ukraine

### Suggested Citation:

Shmarenkova N. Modern reserves of equestrian sport development in Ukraine. *Sci Herald Uzhhorod Univ Ser Phys.* 2024;(55):2467-2476.  
DOI: 10.54919/physics/55.2024.246wj7

\*Corresponding author



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (<https://creativecommons.org/licenses/by/4.0/>)

is relevant and requires a comprehensive research approach.

L.I. Posternak [1] points out the importance of the economic aspect in the development of equestrian sport. He emphasizes that the industry has an extraordinary potential to attract significant investments. The creation and effective implementation of financial strategies can open up new opportunities for sustainable growth and prosperity of this industry in Ukraine. Support from investors is a key factor that will create a solid economic foundation for the development of equestrian sport and contribute to the formation of a competitive and influential industry in Ukraine.

O. Stetsiuk [2] argues that improving the infrastructure in the field of equestrian sport is key to the development of this industry. The current level of infrastructure does not meet the needs of modern athletes and coaching teams. The construction and modernization of stables, training facilities, competition arenas and other sports facilities is a critical step. Such improvements will not only help to attract new athletes to equestrian sport, but will also increase public interest in this exciting industry. As a result, this will lead to an increase in the popularity of equestrian sport and a growing number of fans, which will contribute to the further development of the discipline.

In their work, N.V. Asaulenko and O.V. Tkachuk [3] point out the importance of the cultural aspect in equestrian sport and its impact on the formation of national identity. Equestrian culture has a rich range of traditions that reflect the history, values, and lifestyle of different nations. The preservation and development of these cultural traditions is necessary to preserve national heritage and strengthen national identity. In addition, it contributes to the popularization of the industry among the younger generation and the public.

A. Basarab [4] believes that horse care is another important component of a successful performance in equestrian sport. Athletes must have a deep understanding of the processes that occur with their sporting partners, and this requires specialized care and medical support. Physical training is also an important component of successful performance at competitions and achievement of high results. Specialized training, the use of modern technology and comprehensive horse care are key elements of a successful equestrian performance, helping athletes to achieve high results and recognition at competitions.

In their study, N.F. Habchak and O.V. Pryhara [5] analyse the socio-cultural aspect of equestrian sport and emphasize the importance of promoting and engaging the public in this industry. The authors point out that the active support and interest of the public are crucial for the sustainable development of equestrian sport in Ukraine. Specialized television programmes, websites, social media and other media can help to disseminate information about equestrian sport and create a positive image of the industry among the public. The promotion of equestrian sport in Ukrainian society requires a thorough analysis of consumer preferences and interests.

In general, the opinions of various authors emphasize the current importance of active support and development of equestrian sport in Ukraine, as well as the need to direct efforts towards creating an attractive sports environment that would be accessible and interesting to a wide audience.

The purpose of this study is to analyse the current state of equestrian sport in Ukraine, identify the main factors affecting its development, and identify possible reserves and strategies for further raising the industry to a new level. This allows formulating specific recommendations for stakeholders and contributes to the sustainable and successful development of this sector in Ukraine.

## Materials and Methods

Official documents and reports of the Ministry of Youth and Sports of Ukraine were used to study the topic [6]. The scientific research on the situation with equestrian sport in Ukraine was carried out using methods that reveal the content of the object. The analytical method allowed analysing a complex problem into its component parts for a better understanding of its structure and functioning. Certain aspects of equestrian sport, such as economics, culture, technology, and management, were investigated and studied separately from each other. The statistical method includes the collection, analysis, and interpretation of equestrian-related data. The quantitative composition of personnel, coaches, athletes, sports facilities and stud farms was studied. The functional method allowed studying the purpose and role of equestrian sport in society. In this aspect, the study examined how equestrian sport contributes to health, cultural development, education, and its impact on the formation of a common sports environment. The method of system analysis was used to study equestrian sport as a system consisting of elements (horses, athletes, coaches, infrastructure) and their interrelationships, as well as the impact of each element on the development of the system as a whole. The method of deduction helped to identify the general patterns or principles that determine the success of the equestrian sport industry. The synthesis method allowed combining individual fragments of the analysis (economic, socio-cultural, sports) into a holistic picture of the development of equestrian sport to understand the interconnection and impact of various aspects on the industry. The comparison method was used to identify the differences and similarities between different aspects of the industry in order to understand possible ways to improve the sector based on similar situations and results in other countries.

The study was conducted with a number of aspects, including a theoretical component. It includes an analysis of the development and traditions of equestrian sport in the country, consideration of the key points that formed its foundations. One of the aspects includes the study of the current state of the infrastructure and organizational structure of equestrian sport, analysing stables, training facilities, associations, and clubs involved in equestrian sport. It is also important to analyse economic aspects, including the economic potential and opportunities for equestrian development, as well as consideration of effective financial strategies. Another aspect includes the analysis of concrete steps to improve the development of equestrian sport. This analysis includes the development and modernization of infrastructure, including the construction of modern stables and training facilities, the creation of modern training and support programmes for athletes, and the formation of partnerships and sponsorships with businesses and investors to attract funding and support for the industry. Based on the results

obtained, the necessary recommendations were considered to identify specific problems in the field of equestrian sport that could help resolve issues and increase the level of development of the sector in Ukraine. As a result, these actions were taken to consider the feasibility of increasing the level of development of the industry for the successful development of tourism and the economy as a whole.

## **Results and Discussion**

Equestrian sport is one of the oldest and most widespread forms of physical activity based on the use of horses, and has a long and storied history. This discipline includes various types of competitions that require a high level of physical fitness and riding skills from athletes and their horses. The main characteristics of equestrian sport include the diversity of disciplines, the extensive history and cultural context, the important sporting aspect, the interaction between athlete and horse, and the economic aspect [7].

Equestrian sport plays an important role in the country's tourism sector. This industry contributes to the development of tourism, in particular agritourism, where travellers can attend equestrian events, trainings and participate in horseback riding. These types of outdoor activities create new routes and attractions for tourists, contributing to the development of the tourism industry. A notable contribution of equestrian sport is the creation of jobs and the development of infrastructure, including hotels, restaurants, training facilities, stables, and other sports facilities [8; 9]. This contributes to employment growth and the development of small and medium-sized enterprises, supporting economic development. The expansion of equestrian sport contributes to the development of rural areas and agriculture. This industry meets the demand for equine products and contributes to the development of horse breeding, consumption and cultivation of horse feed [10]. The creation of tourist routes and excursions related to equestrian culture, as well as the organization of horseback riding tours and horseback riding, will make the country more attractive to tourists. This could include attending equestrian events and competitions, emphasizing the cultural and sporting aspects [11-13]. Most importantly, equestrian sport can make the country more attractive to foreign tourists and athletes. Foreign visitors can come to participate in international competitions, train and watch sporting events, promoting international exchange and cooperation in the field of equestrian sport [14]. Thus, this area plays an important role in the tourism sector, contributing to the development of tourism, creation of new jobs, development of infrastructure and attractiveness for foreign visitors.

### **Methodical support for assessing the state of equestrian sports in the country**

The study of the state of reserves for the development of equestrian sport in Ukraine should be carried out using appropriate methodological support that allows assessing the actual situation in this area. At the current stage of development of scientific thought, there are no methods that would allow for a comprehensive analysis in this area. One of the approaches includes a number of assessment stages of the state of the resource potential in sport [15; 16]:

- assessment of the level of information support in sports activities (this can be the state of sports promotion in the country, certain regions and territories, which is created at the level of educational, public organizations, institutions, at the level of social networks, at the level of certain communities in social networks);
- assessment of the state of health of personnel in the sport under study, analysis of different levels of fitness of sports personnel, their sports titles;
- assessment of the prospects for the growth of the studied sport within the country, territories;
- assessment of the programme and methodological improvement of existing methods and approaches (or development of new ones) for training athletes and other personnel involved in the field of sports management and related industries;
- assessment of service provision within the sport under study;
- assessment of the level of professional development of coaches and athletes.

The presented methodology takes into account a wide range of evaluation indicators of the sport under study, but does not take into account such parameters as the quantitative value of the resource composition (in the case of equestrian sport, these are: personnel, horses, equipment, premises, specially equipped areas). It is worth noting that considerable attention is paid to the assessment of methods as an element of the resource potential in sport, in particular, in this case, the approach of methodological support assessment is used.

There is an approach that proposes to assess the potential of equestrian sport by the following indicators: performance of horses and athletes; performance of stud farms, their ability to change and develop new breeds of horses that would meet the potential of athletes; level of equipment of premises, territories used in equestrian sport, and the parameter of ecological protection of territories (resource and result approach to all elements of equestrian sport) [17-19]. It can be noted that this approach is quite exhaustive, although it does not take into account the parameter of methodological support for the training of athletes. At the same time, it is also worth noting that its use requires significant operationalization, in particular, to determine the performance of horses, the ability of stud farms to breed new breeds of horses with appropriate characteristics. That is, the analysis under this approach requires the involvement of third-party specialists from various fields. However, the application of this assessment will allow establishing a wide range of parameters that will allow determining the characteristics, status, problems, and highlight the prospects for the development of the equestrian sport potential.

It is also possible to distinguish the resource and performance approach, which uses a classification of indicators to assess the level of development of reserves in equestrian sport. These indicators include an indicator of the number and quality of horses (parameter of their performance, age parameter); an indicator of the number of athletes, coaches; an indicator of the number and quality of the arrangement of territories, premises where equestrian sports facilities are located [20; 21]. It is worth noting the

methodology for assessing resources, which includes a number of stages, in particular [22]:

- assessment of the level of development of the country's stud farms, the volume of sales of horses for equestrian sport at the national and international levels;
- assessment of the level of equipment, technical support, premises, racecourses;
- assessment of the state of personnel by the level of training and achievements.

This methodology, created within the framework of the resource-based approach, allows for a clear assessment of the state of this issue and the dynamics of its changes due to the influence of the environment. At the same time, it is relevant to include such an assessment parameter as the level of methodological support (methods, their updating, the state of development of new ones) applied to equestrian athletes. The resource approach can be adapted to assess the state of equestrian development reserves, but it should be expanded to include the parameter of methodological support for athletes' training.

There is also a classification of indicators for assessing the potential for equestrian sports development based on the resource and performance approach and the approach to assessing methodological support. The following indicators are used to analyse the potential of equestrian sport development: infrastructure and facilities; implementation of various recommendations for achieving new results in sport; investment in education; level of support for young athletes; level of implementation of knowledge transfer programmes; state of professional orientation of the country's stud farms towards breeding; results in top-level competitions; strengthening of experience; scientific research and development of new methods of training horses and athletes; level of welfare, health of horses; level of popularization of equestrian sport. This methodology was used by a group of researchers in Ireland. It can be noted that the set of indicators for assessing the potential for equestrian sport development developed by the researchers can be used in full or with some adaptation to assess the level of reserves for equestrian sport development in Ukraine.

In Scotland, the methodology used was based on the resource-based approach. Scientists propose to study the following: the number of horses involved in equestrian sport (by various criteria: age, breed, location in the country, ownership); performance of horses of certain categories; the number of athletes and coaches involved in equestrian sport in the country, the performance of these

persons within certain time periods; the state of technical support for equestrian sport; the state of premises, territories of equestrian sport facilities in the country, territories. Guided by the provisions of the above approaches, it is possible to determine the methodological support for analysing the state of reserves for the development of equestrian sport in Ukraine.

#### **Assessment of the state of equestrian sport development reserves in Ukraine**

The article defines a universal approach to assessing the state of reserves for the development of equestrian sport in Ukraine, based on the authors' approaches to the categories of evaluation indicators formulated within the framework of different approaches (resource, resource-result, methodological support and environmental approaches). Namely, the methodology for assessing the status of reserves for the development of equestrian sport in Ukraine may include the following stages:

1. The systematization stage, where statistical and analytical information for the period under study will be selected, which is necessary for the assessment of this area.

2. The stage of assessment of the resource composition of equestrian sport development, which involves determining: the quantitative composition of personnel involved in this type of sports activity in the country during the assessment period, including the number of coaches and athletes; the number of facilities used in equestrian sport during the assessment period; the number of stud farms, their performance (profitability of activities during the assessment period); the number of equestrian clubs in the assessment period; the number of sports horses in Ukraine (not estimated).

3. The stage of assessment of methodological resources for training: use of traditional or individual methods of training athletes in equestrian sport in Ukraine (if individual methods are used, their names).

4. The stage of assessment of environmental reserves for the development of equestrian sport, including the use of energy saving, energy efficiency of the premises of the facilities in use, environmental management of territories.

The presented methodological support allows for a comprehensive assessment of the functioning of equestrian sport in Ukraine in this area. In accordance with the presented methodology, an assessment of the state of reserves for the development of equestrian sport in Ukraine in 2016-2022 was carried out (Table 1).

**Table 1.** Analysis of the state of equestrian sport development reserves in Ukraine in 2016-2021.

<b>Indicator</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Resource components						
Quantitative composition of equestrian sports personnel, everything	1438	1393	1560	1580	1557	1587
Quantitative composition of equestrian trainers	99	88	91	94	87	95
Quantitative composition of equestrian athletes	1339	1305	1469	1486	1470	1492
The number of sports facilities used in equestrian sports	54	54	54	54	54	54
Number of stud farms	17	17	17	17	17	17

Profitability/unprofitability of stud farms	Losses at all plants	Losses at all plants	Losses at all plants	Losses at all plants	Losses at all plants	Losses at all plants
Number of equestrian clubs	49	53	53	53	53	53
Number of large equestrian facilities in Ukraine (large racetracks)	5	5	5	5	5	5
Methodical components						
The use of traditional methods of training athletes in equestrian sports	Yes	Yes	Yes	Yes	Yes	Yes
The use of individual methods of training athletes in equestrian sports	No	No	No	No	No	No
Ecological reserves for the development of equestrian sports	missing	missing	missing	missing	missing	missing

Source: developed by the author based on data from [6].

According to the Ministry of Youth and Sports, the state of the resource components in terms of sports personnel in 2016-2017 demonstrated a reduction in the composition of equestrian personnel, in particular, in 2017, compared to 2016, their total number decreased by 45 people (3.13%), which was due to a certain turnover of personnel (change of profession due to insufficient salaries for coaches, economic well-being of athletes). It is worth noting that in 2017, compared to 2016, there was a reduction in the number of coaches and athletes in equestrian sport, with the number of the latter showing a greater decline in absolute terms. In 2018, compared to 2017, there was an increase in the number of personnel in equestrian sport both at the general level (by 167 people (12%)) and by the categories of coaches and athletes. The number of coaches did not increase significantly (by 3 people), but the number of athletes increased (by 164 people). This indicates positive trends in the development of this sport, the emergence of significant sports personnel reserves that will contribute to the image of equestrian sport in Ukraine at the global level and may provide an increase in the number of coaches in the future. In 2019, compared to 2018, this indicator also increased, namely, the total number of sports personnel increased by 20 people (1.28%), including an increase in the number of coaches by 3 people and athletes by 17 people. Accordingly, there has been an improvement in the equestrian sports reserves in Ukraine. In 2020, due to COVID-19, which affected the sports industry as a whole, the number of equestrian personnel decreased by 18 people (1.46%). Due to the restrictions and difficulties associated with training, athletes were limited in their ability to participate in training, which led to a decrease in demand for coaching services. However, in 2021, the situation improved and the number of sports personnel increased by 30 people (1.89%).

It has been established that the total number of sports facilities used in equestrian sport in Ukraine during 2016-2021 remained unchanged and amounted to 54 facilities, these facilities belonged to both the public and private sectors. It can be noted that the unchanged number of such facilities indicates a lack of resources in terms of premises used for equestrian training and competitions in Ukraine. As for the number of stud farms that are suppliers of sport horses, it was found to be unchanged. However, it was also

found that they did not demonstrate performance and were unprofitable. This indicates negative characteristics of these entities, which are elements of the related infrastructure. It should be noted that the number of equestrian clubs in 2017 increased by 4 organizations compared to 2016 and amounted to 53 units, and this figure remained unchanged until 2021. In Ukraine, there was no increase in these organizations, but the fact that they continue to operate steadily indicates the strong potential of their activities in the main areas of management. The number of large equestrian facilities in Ukraine (large hippodromes) remained unchanged, including 5 facilities, the largest of which is located in Kyiv. The small number of such facilities and their inefficient operation is due to the low level of financial support. If Ukrainian legislation is amended to allow the use of official totes at horse races and other sports competitions, the development of hippodromes and their financial support can be improved, which will give a powerful impetus to the stabilization of the entire equestrian sport in the country.

It has been determined that in Ukraine, traditional methodological components of training athletes in equestrian sport are used, and there are no innovative approaches in this area. It is also proved that at this stage, there are no environmental reserves in equestrian sport in Ukraine, namely, there is no application of energy saving, energy efficiency of the premises of the facilities used, and there is no environmental management of the territories. These aspects indicate that there is lagging behind foreign equestrian sports entities that focus on environmentalization in all areas. There is no information on the status of reserves for the development of equestrian sport in Ukraine in 2022. The war in the country has had a seriously negative impact on the development of this industry, creating significant difficulties and restrictions. The concept of danger for training and competitions has become especially relevant in the area of active hostilities. Ensuring the safety of athletes, trainers, and horses has become a priority, leading to the reduction or suspension of sporting events. The military conflict has led to serious economic difficulties for the country. Funding for sports, including equestrian sport, has been significantly reduced due to the reallocation of budget funds to defence and the reconstruction of the affected areas. Many tourist routes and equestrian facilities that are or were located in the

combat zone were forced to limit or cease their activities [23; 24]. It is also difficult to reopen equestrian tourist centres and equestrian clubs in cities subject to constant shelling. The impact of the war has affected not only the activities of equestrian tourism enterprises, but also the health and lives of horses and their caretakers.

### **Recommendations for improving the state of equestrian sports in Ukraine**

In order to improve the state of equestrian sport in Ukraine and ensure its sustainable development, the following specific recommendations can be made, indicating how to implement and assess the economic impact:

1. Financial support for stud farms and clubs: creation of specialized bank loan programmes for equestrian organizations with low interest rates; grant competitions where equestrian clubs and farms can receive funding for equipment upgrades and improved horse keeping conditions. The cost of the programme is estimated at around UAH 10 million per year. At the same time, the number of jobs is expected to increase by 15% in the first year.

2. Stimulating the development of hippodromes through the introduction of sweepstakes: legalization and regulation of sweepstakes at horse races and sports events; introduction of online platforms for betting on horses and sports events, which stimulates the development of sweepstakes. This could attract additional financial resources and contribute to the development of hippodromes and the entire equestrian sport. The estimated potential profit for the state from taxes and turnover is about UAH 20 million per year.

3. Improving the methods of training athletes: introducing modern methods of education and training in equestrian sport, taking into account the latest technologies and scientific achievements; partnering with universities and sports schools to organize specialized courses for equestrian coaches; installing solar panels and wind generators at racecourses to generate part of the necessary electricity; replacing lighting with LED lamps to reduce energy consumption for lighting sports grounds. Estimated costs for training coaches and updating the methodological base are about UAH 5 million per year.

4. Implementation of energy-efficient solutions: introduction of energy-saving technologies and equipment at sports facilities. This will help reduce costs and ensure the environmental efficiency of sports facilities. Estimated energy cost savings are about UAH 2 million per year, which will help reduce overall costs.

5. Development of environmental management: implementation of environmental standards and management programmes in the areas related to equestrian sport; cooperation with environmental organizations to implement environmental practices in equestrian sport. This will ensure sustainable use of resources and environmental protection. The estimated cost of this programme is about UAH 3 million per year.

The recommendations can be implemented within 3-5 years, with gradual monitoring of the results and adjustments. After analysing the cost and potential impact of each recommendation, the overall effectiveness can be calculated and priority areas for investment can be selected. These actions are aimed at ensuring the

sustainable development of equestrian sport in Ukraine, improving conditions for athletes and promoting its popularization. However, they should be implemented after the end of the war, during the period of recovery of various sectors of Ukraine.

### **Specialists' views on the state of equestrian sport development**

The results of this study demonstrate the importance of equestrian sport development in Ukraine. However, it faces numerous challenges and constraints that require careful analysis and development of strategies for further development. Improved training and competition conditions, the development of modern stables and other sports facilities are necessary to attract more athletes and promote equestrian sport among the public. It is necessary to take into account not only the aspects of material and technical support, but also the improvement of teaching methods and training programmes, which will contribute to better training of athletes and increase the level of competitiveness in international competitions. Significant attention should be paid to financing the industry, developing innovative financing methods and attracting investments to create a stable economic base for the development of equestrian sport.

The analysis shows changes in the composition of sports personnel. In particular, there is a certain fluctuation in the number of coaches and athletes in equestrian sport. Periodic reductions and increases may be due to various factors, such as the economic situation, changes in the interests of athletes, and improvements in the conditions for equestrian sport. In the context of infrastructure aspects, the stability of the number of sports facilities and stud farms in Ukraine indicates the need to improve the conditions for equestrian sport. This can be achieved by modernizing existing facilities, creating new ones and optimizing the management of equestrian clubs. It is important to emphasize that the war that has broken out in Ukraine has had a significant impact on the development of equestrian sport. Active hostilities have created complex challenges and restrictions for the sports industry, including equestrian sport, requiring adaptation and finding ways to overcome the problems caused [25-27].

M. Sarafescu [28] described in her study the potential of equestrian sport in Romania as a form of tourism and ways to develop it. This industry can make a significant contribution to the economic development of rural Romania by promoting investments in infrastructure, horse breeding, training centres and hotels. These investments support not only the tourism sector, but also local communities, contributing to sustainable tourism. By developing and promoting this sector wisely, the country can harness its potential to attract both domestic and international tourists, ultimately contributing to the economy, communities, and preservation of the country's unique heritage. It should be added that it is important to manage challenges such as ensuring animal welfare and ethical behaviour, preserving the authenticity of the experience and considering environmental impacts to ensure a sustainable balance between growth and sustainability. Preserving the natural and cultural heritage that equestrian tourism seeks to showcase is an important challenge [29-31].

In his work, D.M. de Haan [32] conducted a study aimed at assessing the relevance of existing models of athlete development at different levels in the context of equestrian sport. The results indicate that this sport does not fully comply with the existing models of athlete development. This sport requires a unique system of talent identification and development that takes into account the specifics of cooperation between an athlete and a horse. In equestrian sport, not only the development of the athlete is important, but also the specific aspects of the horse's development. It should be added that the development of the athlete and the horse should be an integrated process. Particular attention should be paid to the development of sports skills in the rider and the optimization of the horse's physical fitness. This requires specific training programmes and techniques adapted to the needs and capabilities of each team member.

In their study, S. Cernaianu and C. Sobry [33] examine the current aspects of equestrian tourism development in different countries, identifying the potential and possibility of using experience in this area. Equestrian tourism is growing rapidly and is considered as an active recreation, ecotourism and nature-related tourism. This industry requires a developed equestrian sector, a structured tourism sector and an environmental policy in which all stakeholders work together at the state level to develop the economic segment. Equestrian tourism needs government support to implement a project aimed at developing ecotourism and cooperation with nature conservation areas. In Ukraine, it is important to work actively to restore and improve the sports infrastructure after the war. To do this, it is necessary to attract government and public support for the development of equestrian sport and tourism, as is done in countries such as France and Romania.

J. Berggren [34] investigated in her work the development of innovations in the Swedish equestrian industry, which shows the state and potential of innovations in this sector. As the analysis shows, the Swedish equestrian industry has so far proved to be low-innovative, with many areas related to horses remaining virtually unchanged over the past decades. Given the large number of people who are involved in horse riding and have regular contact with horses, there is a great potential for innovation. The solution to this issue can be found in cooperation with participants using the same technologies, and thus find a synergistic effect. The author did not take into account the fact that innovative ideas in the field of equestrian sport should receive financial support from government agencies, sports organizations and other stakeholders. Financing is a key factor in the implementation of innovative projects.

A. Pawlikowska-Piechotka and N. Łukasik [35] analysed in their study the current state and conditions for the future development of horse breeding in Poland. The authors examine the potentials, the most important barriers, as well as the possibilities of removing restrictions and the challenges of spreading equestrian sport. It is proposed to create more small, modest clubs with lower price offers, located in suburbs but with good accessibility to public transport. This sport and leisure activity has the potential to grow further in the future, provided that it is offered in a variety of ways. In general, the many opportunities offered

by equestrian sport are primarily due to the absence of sharp restrictions on the rider's abilities (gender, age, skills, physical condition). Compared to the state of equestrianism in Ukraine, the authors' research shows that Poland already has some potential and infrastructure for the development of this sport, including initiatives to create clubs and provide public transport. Ukraine can also learn from Poland and other countries that have successfully developed equestrian sport to improve conditions and expand opportunities for riders and athletes.

Overall, the analysis of the studies highlights the importance of innovation in the equestrian sector, emphasizing the need to develop new approaches and improve the quality of services. In addition, it points to the need to promote cooperation between countries and create favourable conditions for the development of equestrian sport and tourism through the creation of accessible infrastructure and economic conditions.

## **Conclusions**

This paper investigates the status and features of the current reserves for the development of equestrian sport in Ukraine. The analysis was carried out using methodological support based on a universal methodology created in accordance with modern scientific approaches, in particular, the resource, resource-result approach, the approach to assessing methodological support, and the ecological approach. It is proved that the current state of methodological support for assessing the status of equestrian sports development reserves involves the use of individual areas, and often scientists and researchers sometimes do not take into account the entire complex of assessment parameters. Guided by the author's methodology, the article assesses this issue. The existence of reserves in terms of the personnel component, and the invariability of the elements of premises, technical and territorial support is established. It is also proved that there is no use of environmental reserves in equestrian sport in Ukraine. The impact of the war on the development of the industry in the country is assessed, namely: dangers to training and competitions, suspension or reduction of sporting events, reduction of funding for sports industries, reduction of tourist routes to equestrian facilities. To improve the state of equestrian sport in Ukraine, the following recommendations were offered: financial support for stud farms and clubs, stimulating the development of racecourses through the introduction of sweepstakes, improving training methods for athletes, applying energy-efficient solutions, and developing environmental management.

In conclusion, it can be noted that the current reserves for the development of equestrian sport in Ukraine require a comprehensive approach and systemic changes in this area. It is important to improve and expand the existing infrastructure for training, competitions and tourist equestrianism. Modern and safe stables, training facilities, and tourist routes are key components. The development of a system for supporting and developing young talent, motivating and training them is seen as an integral part of successful equestrian sport. It is necessary to promote equestrian sport among the population, attract new athletes, and develop equestrian tourism to create demand for this industry and services. Further research into the

development of equestrian sport in Ukraine could cover several important areas for a deeper understanding and effective improvement of this industry: analysis of the current state and potential of infrastructure (stables, training facilities and tourist routes); analysis of the effectiveness of sports programmes and training methods in equestrian sport; study of the impact of funding on the development of the industry. This includes analysis of financial support for stables, improvement of training conditions, financial assistance to young talents,

organization of competitions and tourist events in the field of equestrian sport.

### Acknowledgements

None.

### Conflict of Interest

None.

### References

- [1] Posternak LI. Prospects and criteria of horse breeding in Ukraine. *Agrarian Sci Food Tech*. 2017;2(96):230-236.
- [2] Stetsiuk O. Development of equestrian tourism infrastructure in Ukraine. *Moder Trend Develop Hospit Indust*. 2020;282-285. <https://sportscience.ldufk.edu.ua/index.php/trends/article/view/989>
- [3] Asaulenko NV, Tkachuk OV. Development of equestrian tourism in the Odesa region. In: *Materials of the V International Scientific and Practical Conference "Management of the Tourism Industry: Methodology and Practice"* (pp. 60-62). Poltava: National University "Yuri Kondratyuk Poltava Polytechnic"; 2018.
- [4] Basarab A. Innovative approaches in the activities of equestrian clubs: neuromarketing, artificial intelligence and digital marketing. In: *Collection of Abstracts of the All-Ukrainian Scientific and Practical Conference for Students, Postgraduates and Young Scientists: "Neuromarketing, Artificial Intelligence and Digital Marketing: Problems and Prospects"* (pp. 12-14). Ternopil: West Ukrainian National University; 2023.
- [5] Habchak NF, Pryhara OV. Features of equestrian tourism of the Carpathian region (on the example of Transcarpathia). In: *Development of Modern Education and Science: Results, Problems, Prospects. Volume 6: Designing Social Sciences and Humanities Research* (pp. 231-240). Kherson: Posvit; 2021.
- [6] Ministry of Youth and Sports of Ukraine. Search for legal acts. 2023. <https://mms.gov.ua/npasearch>
- [7] Wu Z, Zhou C. Equestrian sports posture information detection and information service resource aggregation system based on mobile edge computing. *Mobile Info Syst*. 2021;2021:4741912.
- [8] Skarbøvik E, Shumka S, Mukaetov D, Nagothu US. Harmonised monitoring of Lake Macro Prespa as a basis for integrated water resources management. *Irrig Drain Syst*. 2010;24(3-4):223-238.
- [9] Piera MA, Buil R, Ginters E. State space analysis for model plausibility validation in multi-agent system simulation of urban policies. *J Simulat*. 2016;10(3):216-226.
- [10] Lupoae OD, Radu RI. Social entrepreneurship in equestrian sector. A literature review. *Ann "Dunarea de Jos" Uni – Fascicle I. Econ Appl Info*. 2022;28(2):5-10.
- [11] Floqi T, Shumka S, Malollari I, Vezi D, Shabani L. Environment and sustainable development of the Prespa park. *J Environ Protect Eco*. 2009;10(1):163-175.
- [12] Buka S, Tkachuk V, Kondratiuk V, Tonkha O, Slobodyanyuk N. Prospects for agribusiness in Ukraine over the next 5 years. *Int J Environ Stud*. 2023;80(2):291-298.
- [13] Barlybayev A, Zhetkenbay L, Karimov D, Yergesh B. Development neuro-fuzzy model to predict the stocks of companies in the electric vehicle industry. *East-Eur J Enter Tech*. 2023;4(4(124)):72-87.
- [14] Zeytoonli AH, Sodi NA. Analysis of factors affecting the behavioral tendencies of tourists to the destination in visiting the equestrian event in Gonbad Kavous. *Consum Behav Stud J*. 2021;8(3):79-99.
- [15] Varenyk OM. Organisational interaction in the system of children's and youth sports. In: *Strategic Management of Physical Culture and Sports Development in the Contest of the 25th Anniversary of Independence of Ukraine: The Collection of IV Regional Scientific and Practical Internet Conference with International Attendees* (pp. 48-53). Kharkiv: Kharkiv State Academy of Physical Culture; 2016.
- [16] Lyubchik SB, Galushko LYa, Rego AM, Tamarkina YuV, Galushko OL, Fonseca IM. Intercalation as an approach to the activated carbon preparation from Ukrainian anthracites. *J Phys Chem Sol*. 2004;65(2-3):127-132.
- [17] Williams J. Performance analysis in equestrian sport. *Compar Exerc Physiol*. 2013;9(2):67-77.
- [18] Tikhonova LP, Goba VE, Kovtun MF, Tarasenko YuA, Khavryuchenko VD, Lyubchik SB, Boiko AN. Sorption of metal ions from multicomponent aqueous solutions by activated carbons produced from waste. *Russ J Appl Chem*. 2008;81(8):1348-1355.
- [19] Salah J, Ur Rehman H, Al-Buwaiqi I. The Non-Trivial Zeros of The Riemann Zeta Function through Taylor Series Expansion and Incomplete Gamma Function. *Mathem Statist*. 2022;10(2):410-418.
- [20] Waran N, Randle H. What we can measure, we can manage: The importance of using robust welfare indicators in Equitation Science. *Appl Animal Behav Sci*. 2017;190:74-81.
- [21] Domaratskiy Y, Kovalenko O, Kachanova T, Pichura V, Zadorozhnyi Y. Analysis of the Effectiveness of Biological Plant Protection on Sunflower Productivity under Different Censosis Density under the Non-Irrigated Conditions of the Steppe Zone. *Eco Eng Environ Tech*. 2023;24(9):45-54.
- [22] Wincewicz-Bosy M. The horse business in the global economic system using equestrian sports as an example. *Fin, Rynki Fin, Ubezp*. 2013;57:591-604.

- [23] Untapped Potential: Unlocking the Economic Potential of the Irish Sport Horse Industry. 2018. <https://www.teagasc.ie/media/website/rural-economy/rural-development/equine/Unlocking-the-Economic-Potential-of-the-Irish-Sport-Horse-Industry.pdf>
- [24] Horiachova N. Formation of strategic regional development of the industry tourism and recreation after the war in Ukraine. *Herald Khmelnytskyi Nation Uni. Econ sci.* 2023;316(2):194-199.
- [25] Mehmeti B, Kelmendi J, Iiljazi-Shahiqi D, Azizi B, Jakovljevic S, Haliti F, Anić-Milošević S. Comparison of shear bond strength orthodontic brackets bonded to zirconia and lithium disilicate crowns. *Acta Stomatol Croat.* 2019;53(1):17-27.
- [26] Litvinova O, Tonkha O, Havryliuk O, Litvinov D, Symochko L, Dehodiuk S, Zhyla R. Fertilizers and Pesticides Impact on Surface-Active Substances Accumulation in the Dark Gray Podzolic Soils. *J Eco Eng.* 2023;24(7):119-127.
- [27] Aizstrauta D, Ginters E. Using Market Data of Technologies to Build a Dynamic Integrated Acceptance and Sustainability Assessment Model. *Proced Comp Sci.* 2016;104:501-508.
- [28] Sarafescu M. Initiatives for the development of equestrian tourism in Romania. *Intern Audit Risk Manag.* 2021;62(2s):127-134.
- [29] Kovalenko O, Gamajunova V, Neroda R, Smirnova I, Khonenko L. Advances in nutrition of sunflower on the southern steppe of Ukraine. *Soils Under Stress: More Work Soil Sci Ukr.* 2021;1:215-223.
- [30] Nikitina EV, Ortikov E, Beshko NYu, Khalbekova KhU. Molecular authentication of some rare Iris (Iridaceae) species from Uzbekistan. *Plant Sci Today.* 2023;10(3):444-454.
- [31] Abdymanapov SA, Barlybayev A, Kuzenbaev BA. Quality Evaluation Fuzzy Method of Automated Control Systems on the LMS Example. *IEEE Acc.* 2019;7:138000-138010.
- [32] de Haan DM. A review of the appropriateness of existing micro-and meso-level models of athlete development within equestrian sport. *Int J Human Move Sport Sci.* 2017;5(1):1-8.
- [33] Cernaianu S, Sobry C. A diagnose of equestrian tourism: The case of France and Romania. In: *Trends in Tourist Behavior: New Products and Experiences from Europe* (pp. 3-16). Cham: Springer; 2019.
- [34] Berggren J. *Product innovation in equestrian sports – A qualitative multiple case study about how product innovation evolves in the Swedish equine industry.* Gothenburg: University of Gothenburg; 2018.
- [35] Pawlikowska-Piechotka A, Łukasik N. Equestrian clubs in Poland – Present state and future conditions of development (on the example of Warsaw and Mazovia region). *Sport i Turystyka. Środkowoeur Czasop Nauk.* 2019;2(4):150-172.

## Сучасні резерви розвитку кінного спорту в Україні

**Наталія Шмаренкова**

Національний університет фізичного виховання і спорту України  
03150, вул. Фізкультури, 1, м. Київ, Україна

### Анотація

**Актуальність.** Дослідження, пов'язані з кінним спортом в Україні, є досить актуальними, оскільки цей вид спорту приваблює багатьох людей не тільки як спортивна діяльність, але і як форма активного відпочинку та туризму. Розвиток цієї галузі може сприяти розвитку регіонального туризму та підвищенню привабливості України для туристів.

**Мета.** Метою дослідження є аналіз та визначення сучасного стану та перспектив розвитку кінного спорту в Україні для виявлення ефективних стратегій та резервів.

**Методика.** Використано аналітичний метод, статистичний метод, функціональний метод, метод системного аналізу, метод дедукції, метод синтезу, метод порівняння.

**Результати.** У дослідженні проаналізовано сучасний стан та перспективи розвитку кінного спорту в Україні. Аналіз здійснено з використанням методичного забезпечення, що базується на універсальній методології, створеній відповідно до сучасних наукових підходів, а саме: ресурсного, ресурсно-результативного, підходу оцінки методичного забезпечення та екологічного підходу. Оцінено роль кінного спорту в туризмі та економіці країни, розглянуто сучасний стан і перспективи розвитку цього напрямку. Визначено кілька стратегій подальшого розвитку цієї галузі в Україні. У результаті дослідження запропоновано конкретні стратегії для підвищення конкурентоспроможності кінного спорту в Україні та досягнення високих спортивних результатів.

**Висновки.** Практичне значення отриманих результатів полягає у розробці та впровадженні стратегій розвитку кінного спорту в Україні з метою підвищення його конкурентоспроможності, популярності та впливу на суспільство.

**Ключові слова:** розвиток туризму; спортивні результати; конкурентоспроможність; стратегії розвитку; регіональний туризм.