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ECOLOGICAL AND ECONOMIC CLASSIFICATION OF REGIONAL FOREST RESOURCES AS A BASIS FOR THEIR EVALUATION

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Annotation: Improving the economic statistics of forestry in the Republic of Uzbekistan is one of the key directions for the development of the forestry complex and the national economy as a whole. Statistical indicators related to the forestry sector form the basis of an information system for the accounting and evaluation of forest resources. Within this system, the classification of forest resources according to their economic and ecological roles plays an important role. This article examines the principles of ecological and economic classification that serve as the foundation for the ecological-economic evaluation of forest resources. This evaluation emerges as a central element in the economic mechanism of forest utilization and is based on the recognition of the equal importance of both ecological and economic components for societal life and development.

Keywords: public-private partnership, forest infrastructure, organizational-legal mechanism, competitiveness, transport network, project financing, legislative framework, private sector participation, investment attractiveness, sustainable development.

Annotatsiya: O‘zbekiston Respublikasida o‘rmon xo‘jaligi iqtisodiy statistikasini takomillashtirish o‘rmonchilik majmuasi va umuman mamlakat iqtisodiyotini rivojlantirishning muhim yo‘nalishlaridan biridir. O‘rmon xo‘jaligiga oid statistik ko‘rsatkichlar o‘rmon resurslarini hisobga olish va baholash bo‘yicha axborot tizimini shakllantiradi. Ushbu tizimda o‘rmon resurslarining iqtisodiy va ekologik roliga ko‘ra tasniflanishi muhim o‘rin egallaydi. Mazkur maqolada o‘rmon resurslarini ekologik-iqtisodiy baholashning asosi bo‘lgan ekologik-iqtisodiy tasnif tamoyillari o‘rganilgan. Bu baholash o‘rmonlardan foydalanishning xo‘jalik mexanizmidagi markaziy elementi sifatida namoyon bo‘ladi va jamiyat hayoti hamda rivoji uchun ekologik va iqtisodiy tarkibiy qismlarning teng ahamiyatga egaligini e’tirof etishga asoslanadi.

Kalit so‘zlar: davlat-xususiy sheriklik, o‘rmon infratuzilmasi, tashkiliy-huquqiy mexanizm, raqobatbardoshlik, transport tarmog‘i, loyihalarni moliyalashtirish, qonunchilik bazasi, xususiy sektor ishtiroki, investitsiyaviy jozibadorlik, barqaror rivojlanish.

Аннотация: Совершенствование экономической статистики лесного хозяйства в Республике Узбекистан является одним из важнейших направлений развития как лесного комплекса, так и экономики страны в целом. Статистические показатели, относящиеся к лесному хозяйству, формируют информационную систему учета и оценки лесных ресурсов. В этой системе важную роль играет классификация лесных ресурсов по их экономической и экологической значимости. В данной статье рассмотрены принципы эколого-экономической классификации, являющиеся основой для эколого-экономической оценки лесных ресурсов. Такая оценка выступает центральным элементом хозяйственного механизма использования лесов и основывается на признании равной значимости экологических и экономических компонентов для жизни и развития общества.

Ключевые слова: государственно-частное партнёрство, лесная инфраструктура, организационно-правовой механизм, конкурентоспособность, транспортная сеть, финансирование проектов, законодательная база, участие частного сектора, инвестиционная привлекательность, устойчивое развитие.

Forest resources are an integral part of the forest and, according to the main provisions of the current Forest Code of the Republic of Uzbekistan, they are defined as "wood reserves, other products, and components related to the vital activity of the forest, harmonized with its environmental-forming, water-protective, protective, sanitary-hygienic, recreational, and other functions." Forest resources have a number of features that distinguish them from other natural resources and are considered complex objects for accounting and evaluation. Nevertheless, it is essential to implement this process.

The economic valuation of natural resources is a central category in the economics of natural resource use. It forms the foundation for value relations in the paid use of nature, which in turn determines the efficiency of resource utilization and their role in the socio-economic life of society.

At the current stage of social development, nature - especially its ecological resources is playing an increasingly important role as a limiting factor. As a result, there is a growing need to shift from a purely economic approach to an ecological-economic approach in the valuation of natural resources. Ecological-economic valuation is based on recognizing the equal importance of ecological and economic components when determining resource value, with ecological aspects taking the leading role. This valuation serves the following purposes:

- to determine the value of natural resources as part of national wealth;
- to choose the most effective direction for using natural resources;
- to compare the outcomes of production and other processes across sectors and assess the effectiveness of economic activities;
- to economically incentivize the use and restoration of natural resources;
- to justify pricing and tax policy, and to reimburse natural wealth in monetary terms.

Ecological-economic valuation serves as a foundation for forming value relations in sustainable nature use. Most importantly, it lays the groundwork for the system of statistical indicators in natural resource statistics.

During the management of forestry enterprises and the sector as a whole, a continuous exchange of information occurs. This information flow can be vertical (e.g., from the regional forestry association to individual forest enterprises or vice versa) or horizontal (between different forestry enterprises). Sources of information can include administrative orders, reports from specific organizations, and other documents. No level of management can make accurate decisions regarding future actions without reliable statistical data. Having statistical information is essential in the transition period and the process of forming a new economic system, as it helps apply a pragmatic approach. Therefore, statistically rich and objective information serves as a tool for analyzing and evaluating enterprise management in the context of the external environment and overall state operations.

Currently, forest statistics represent a significant part of the information flow within the forestry management system. Achieving high efficiency requires restructuring the management system and ensuring its future effectiveness based on comprehensive information about the state of forest reserves, usage scope, and costs associated with reforestation. In other words, each forest management unit needs a statistical indicator system reflecting the condition of the forest resources it possesses. Forest statistics provide data on the availability, quantity, quality, and protection of forest resources. Unlike statistics from other sectors, forest statistics offer a much deeper and more complete reflection of the state and movement of forest resources.

Economic forestry statistics view forests primarily as economic resources. These statistics form the basis for the development of forestry and forest industry strategies, as well as for planning and organizing production and exploitation activities. This system, based on indicators reflecting the

state of forestry, enables coordinated management decisions. The classification and accounting of forest resources are carried out based on their economic and ecological roles. From the perspective of increasing national wealth and rational forest utilization, classification based on the degree and nature of their involvement in economic turnover is considered relevant. This classification includes the following groups:

- Exploited – actively used in communal production;
- Potential – suitable for use, but not currently utilized due to economic, technological, ecological, or other reasons;
- Recreational – areas such as green zones and resorts designated for rest and excluded from active economic circulation;
- Protected – natural complexes free from direct economic influence.

This economic classification can be further modified. For example, the state forest fund forests may be divided into two groups based on their economic, ecological, and social significance. The classification criteria include regional ecological-economic differences and the needs of the national economy and population for forest products. Each group should have a management system aligned with its primary function.

Group I forests – perform functions such as water conservation, protection, sanitation and hygiene, health improvement, and other socially significant tasks. These forests require a high-culture forestry management system (including selective felling for main use). Economic activity in these areas should focus on fulfilling hydrological, soil protection, and health-related functions.

Group II forests – forests with industrial (exploitation) significance. These require intensive management aimed at producing and increasing high-quality wood, with strict adherence to water protection requirements. The main tasks include forest accounting and organization, protection against fires and pests, timely use of existing reserves, and effective forest regeneration. Current trends show that the share of Group I forests is increasing, indicating a rise in their ecological (social) role. The ecological role of forest resources had not previously been considered a research subject within economic sciences.

However, today ecological needs are becoming a priority in the hierarchy of human needs. Therefore, in the classification of all natural resources, their ability to meet ecological needs is now taken as a primary criterion. This approach reflects the importance of natural resources - especially renewable types - in human life in a new perspective. Based on this criterion, natural resources are divided as follows:

Ecological resources – those that simultaneously meet economic and ecological needs and have the ability to regenerate naturally (continuous production);

Non-ecological resources – those that only meet economic needs, cannot naturally regenerate, and have a negative impact on the environment when used.

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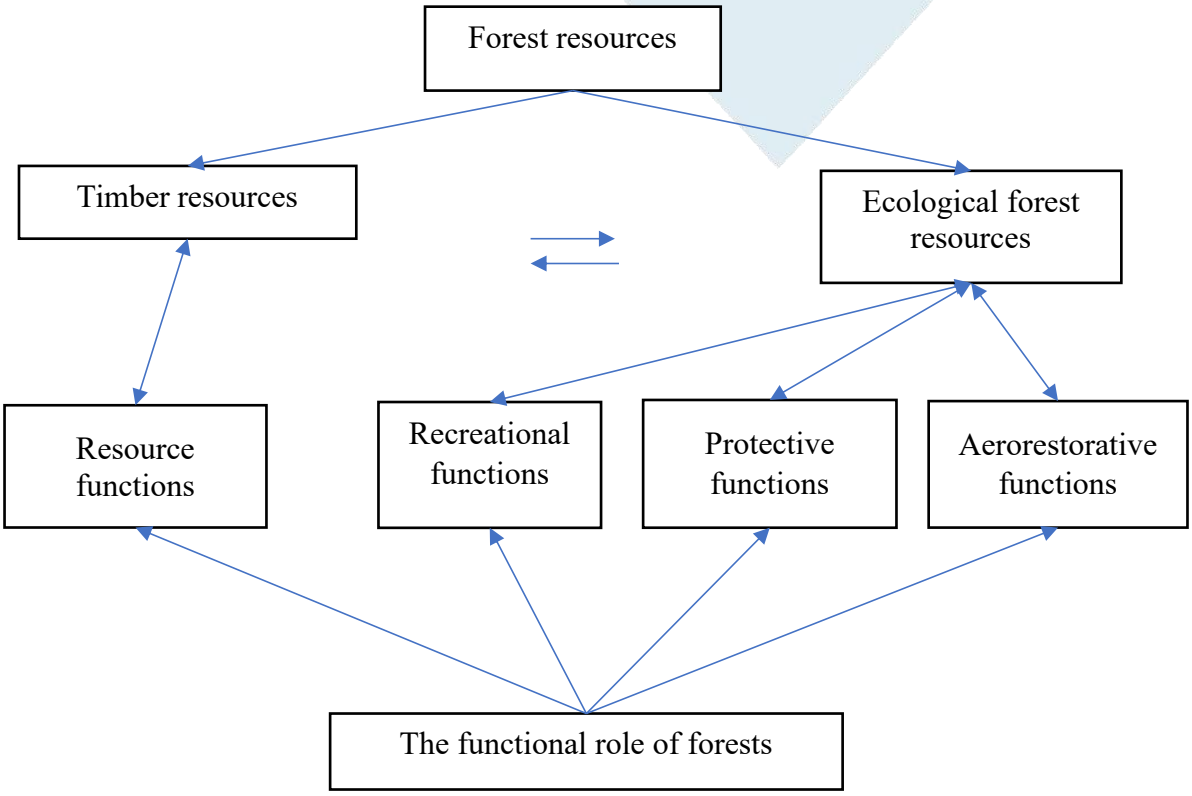

Figure 1. Ecological and Economic Classification of Forest Resources

Ecological forest resources are a set of environment-forming components of the forest as a biogeocenosis. Their regeneration is linked not only to the biological circulation of matter but also to economic processes that ensure ecological balance [4].

The economic aspect of ecological forest resources is not less important than their material content; it may, in fact, be even more significant.

Environment-forming resources are potentially always present — they exist as a function of ecosystems.

Only when there is a need to meet ecological demands and ensure their economic reproduction does a forest ecosystem acquire the status of an ecological forest resource.

The economic expression of an ecological forest resource can take various forms - from limiting economic growth to choosing alternative uses in order to maintain environmental quality.

Key distinguishing features of forest resources include:

- their regenerative characteristics,
- their functions in economic processes,
- the specific impact of biological and economic laws in forest utilization,
- the presence of both local and global effects resulting from the use of forest functions.

These aspects demonstrate the complexity of forest resources as objects of evaluation.

Regardless of the economic nature of forest resources and the functions they perform, their evaluation must consider the overall benefit to society.

In conclusion, the economic aspect of the ecological potential of forest resources is not less important than their material substance; it may even be more essential. The ecological and economic roles of forest resources are expressed in value form through ecological-economic

evaluation. This evaluation is a comprehensive measure that reflects the efficiency of multi-purpose use of forests in the national economy. Its main objectives are:
to reflect the contribution of forest resources to national wealth in value terms,
and based on this, to solve cross-sectoral problems of forest regeneration and sustainable use.
Ecological-economic evaluation is a new stage in determining the value of forest resources and serves as a central and connecting element in the economic mechanism of forest utilization. This evaluation is based on the recognition that the ecological and economic components of forest resources are equally important for the life and development of society.
Ecological-economic evaluation serves to:

- form a unified system for maintaining the state forest cadastre;
- conduct ecological-economic analysis of the forest fund's condition;
- promote rational use of forest resources;
- assess damage caused by forest fires, environmental pollution, and other natural or anthropogenic factors;

justify the financing of environment-forming functions of forests, conservation of biodiversity, and ensuring the sustainable productivity of forest ecosystems.
Without the above-described ecological-economic classification, it is impossible to properly account for and evaluate such types of natural resources.

References:

1. Neverov, A. V. Economics of Natural Resource Use: A Study Guide for Students Specializing in "Environmental Protection and Rational Use of Natural Resources" / A. V. Neverov. – Minsk: BGTU, 2009. – 554 pages.
2. Prokopovich, S. S. Conceptual and Methodological Foundations for Forming the System of Economic Statistics Indicators in Forestry / S. S. Prokopovich // BGTU Proceedings. Series VII, Economics and Management. – 2009. – No. 17. – pp. 229–231.
3. Saliev A.A., Fayzullaev M.A. Socio-economic Development of the Republic of Uzbekistan During the Years of Independence // Socio-economic Geography: Bulletin of the Association of Russian Geographers-Society Scientists. No. 2. Rostov-on-Don, 2013. – pp. 131–143.
4. Saliev A.A., Fayzullaev M.A. Formation of Natural-Economic Systems of the Karshi Steppe // Problems of Desert Development. No. 1-2. Ashgabat, 2010. – pp. 10–13.