Improvement of the Methodology for the Transport Infrastructure Assessment in the System Economic Revenue Assessment of Woody Forest Resources

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The article is devoted to the description of key areas for improving the methodology for assessing the transport infrastructure of the forest area. The paper presents a step-by-step algorithm for calculating and determining the basic elements of the transport infrastructure analysis of the forest area. Within the framework of the developed approach, the necessity to switch from the calculation of charge rates based on measuring distances to the direct calculation of the costs of delivering wood logs from the logging site to the customer's storage (woodworking enterprises) is substantiated by replacing the approach by «distance» in determining the charge rates to the approach by «cost» of round wood delivery. Analyzing the domestic system of economic evaluation of wood forest resources, the authors provide arguments about the inconsistency of the operating system, showing its key shortcomings.

The basis of the presented research results is the model of analysis of the transport component in the system of assessing the economic revenue of woody forest resources. The key element of the model is a step-by-step algorithm for calculating the basic elements of analysis of the forest area transport infrastructure.

The article presents a comparison of the current methodical approach for determining the charge rates and the approach proposed by the authors on the example of a forest plot. The proposed approach was successfully tested in three state forest enterprises, different in natural and resource, production and technological, and market conditions, located in the Novgorod, Kirov and Krasnoyarsk regions.

An approach was developed to assess the transport accessibility of forest areas as a tool for economic planning and forest management. Authors connect improvment of the forest management effectiveness with the need for environmental and economic justification for the efficiency of clear and selective cutting. Developed by the authors step-by-step algorithm for analyzing the transport infrastructure of the forest area, forms the validity of the determination not only the starting prices for auctions on forest plots leasing contracts and buying and selling of standing forest, but also to determine the differentiated payment for wood resources of the forest in the long-term lease of forest fund plots.