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THE ESSENCE OF ENVIRONMENTAL PROTECTION COSTS AND THE PECULIARITIES OF THEIR ACCOUNTING IN FORESTRY

СУТНІСТЬ ПРИРОДООХОРОННИХ ВИТРАТ ТА ОСОБЛИВОСТІ ЇХ ОБЛІКУ У ЛІСОВОМУ ГОСПОДАРСТВІ

The rapid development of production capacity has led to changes in landscapes across vast territories, the destruction of forest resources, and the depletion of soils due to the extreme intensification of agriculture and other types of economic activity.

Considering the crucial importance of forest resources in modern conditions of economic activity, the primary task is their preservation and the prevention of damage to forest ecosystems to ensure the sustainable development of humanity. Accounting, as a subsystem of management, is an important instrument for preserving forest resources and mitigating the anthropogenic impact on these slowly renewable natural resources, as it provides information on the costs of conservation, utilization, and reproduction of forest resources. To improve the methodical support for the accounting of forestry operations, a number of theoretical and practical issues need to be resolved.

The level of development of forestry has a direct impact on a country's economy, as it is one of its important sectors. The current state of this economic sector is at a rather low level compared to European countries. Therefore, there is a need not only for effective and rational forestry management but also for the proper reflection of its results in accounting, which is the main source of information for making effective management decisions [1, p. 47].

The problems of reflecting enterprises environmental protection activities in accounting are becoming increasingly relevant. The quality level of environmental protection activities in forestry depends on many factors, among which the completeness of reflecting environmental protection costs in accounting should be highlighted. Therefore, understanding the content of environmental protection costs and improving the classification of costs for

environmental protection activities in accordance with the objectives of their accounting requires further research.

We have established that unresolved theoretical problems exist concerning the difficulty in defining the term “environmental protection costs”. This is due to the practical challenge of distinguishing between costs incurred for environmental protection activities and other expenses. In the literature, there is a range of definitions and interpretations of the term environmental protection costs. In many cases, they are equated with ecological costs or costs of environmental activities and are often considered without taking into account the necessity of their accounting.

In our opinion, environmental protection costs are part of ecological costs, while the costs of enterprise’s environmental protection activities are, in turn, a part of environmental protection costs. The interrelation of ecological costs, environmental protection costs, and the costs of enterprise’s environmental protection activities, as well as their composition, are shown in Figure 1. [1, p. 53].

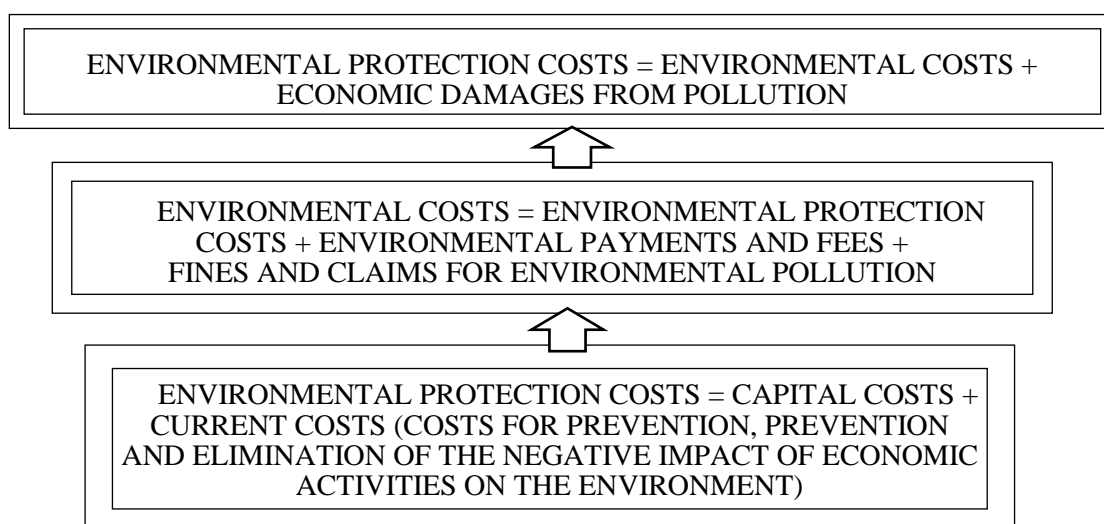


Fig. 1. Interrelation and Composition of Ecological Costs, Environmental Protection Costs, and Costs of Enterprise’s Environmental Protection Activities

Source: summarized by the author based on data [1, p. 53]

Thus, we propose that the enterprise’s environmental protection costs should be considered the totality of its expenses incurred for carrying out active environmental protection measures with the aim of preventing, precluding, reducing, and compensating for the negative impact of the production and economic process on the environment, as well as for eliminating the consequences of such impact.

An analysis of the accounting practice for environmental protection costs in forestry shows the impossibility of satisfying users for management needs, as enterprises do not keep separate and systematic records of environmental protection costs [3, p. 95].

For the classification of environmental protection costs, the following main directions are primarily identified:

- by intended purpose – costs for pollution prevention, costs for eliminating the consequences of pollution;
- by economic content – current (operating), capital (investment);
- by natural objects – costs for the protection of air, water, land resources, forest resources, etc.;
- by sources of reimbursement – reimbursed through prime cost (cost of goods sold), profit (retained earnings), or funds from ecological funds (environmental funds).

Environmental protection activity is defined by methods of pollution prevention and eliminating damage inflicted upon nature. Based on the study and generalization of theoretical research, and taking into account the practical experience of forestry enterprises, environmental protection measures have been systematized depending on their purpose, content, and the objects of environmental protection activity [3, p. 96].

The following are included as environmental protection measures in forestry:

- pertaining to forest fire prevention, timely detection, and control;
- preventing and eliminating windfalls (blowdowns), windbreaks, snow damage (snow breakage), and other natural disasters;
- aimed at protecting forests from illegal logging, damage, and other forest violations;
- pertaining to control over the adherence to timber harvesting rules by forest users;
- detection and control of harmful insects and forest diseases;
- regarding the construction and maintenance of permanent forest roads that ensure access to all sections of the forest area.

Considering the above and the industry specifics of forestry, the following classification groups of current environmental protection costs have been identified [2, p. 4]:

- 1) materials;
- 2) fuel and energy for environmental protection purposes;
- 3) wages/Salaries of employees engaged in environmental protection activities;
- 4) social security contributions (or Deductions for social insurance);
- 5) technical maintenance and current repair of environmental protection equipment;
- 6) depreciation of environmental protection equipment;
- 7) costs for the joint use of environmental protection fixed assets;
- 8) losses due to natural disasters;
- 9) utilization of raw materials (subtracted/deducted).

Thus, environmental protection costs, which are multidirectional and complex in their structure and factors of emergence, are classified according to various attributes determined by the general and industry-specific peculiarities

of this type of activity, as well as the economic nature of the costs. Information about the scope of environmental protection activity and the costs of its implementation is necessary for managing it. A detailed classification of environmental protection costs is essential for organizing their accounting, planning, and analysis. Considering the above and the industry specifics of forestry, we have identified classification groups for current environmental protection costs, which will allow for the formation of a system of their accounting objects.

One of the priority directions for the development of environmental cost accounting is the introduction of environmental accounting, which would integrate financial and non-financial indicators into the enterprise reporting system. In particular, it is advisable to develop internal standards and methodologies for reflecting environmental protection measures, which will enhance the reliability of assessing the environmental efficiency of business activities. The implementation of elements of environmental management and auditing will also contribute to the formation of an information base for managerial decision-making aimed at reducing the negative impact on the environment.

In addition, a promising direction for further research is the development of a system of indicators for assessing the efficiency of environmental protection expenditures in the forestry sector. Such a system should take into account not only economic results but also the environmental and social consequences of implementing environmental protection measures. A comprehensive approach to the formation of accounting information on environmental protection costs will contribute to ensuring the sustainable development of enterprises in the industry and enhancing their environmental responsibility.

References:

1. Zamula I. V., Tanasiieva M. M., Shavurska O. V. (2021). *Bukhhalterskyi oblik, analiz i audyt lisovykh resursiv i vytrat na yikh vidtvorennia ta vykorystannia: monohrafiia* [Accounting, analysis and audit of forest resources and costs of their reproduction and use: monograph]. Zhytomyr [in Ukrainian].
2. Pro zatverdzhennia Metodychnykh rekomendatsii z formuvannia sobivartosti produktsii (robit, posluh) na pidpriemstvakh, shcho nalezhat do sfery upravlinnia Derzhavnoho ahentstva lisovykh resursiv Ukrainy: Nakaz Derzhavnoho ahentstva lisovykh resursiv Ukrainy № 124 [On approval of Methodological recommendations for the formation of the cost of products (works, services) at enterprises falling under the jurisdiction of the State Agency of Forest Resources of Ukraine: Order of the State Agency of Forest Resources of Ukraine № 124]. Available at: <https://ips.ligazakon.net/document/FN011487> [in Ukrainian].
3. Drymanova L. M. (2024). Osoblyvosti oblikovoho vidobrazhennia hotovoi produktsii yak skladovoi lisovykh resursiv [Features of accounting display of finished products as a component of forest resources]. *Ekonomika, finansy, menedzhment: aktualni pytannia nauky i praktyky*, vol. 2 (68), pp. 93–112. DOI: <https://doi.org/10.37128/2411-4413-2024-2-6> [in Ukrainian].