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# THE METHODICAL APPROACH TO THE ASSESSMENT OF THE ENVIRONMENTAL MANAGEMENT AT THE ENTERPRISES OF FORESTRY SECTOR

Systematic knowledge formation as for enterprise management including environmental aspect determines its business success. Nowadays the environmental management system, which is documented by conformance certificate ISO series 14000, is a part of general management system of an enterprise and makes an effect on its competiveness also on the world market.

The peculiarities of forestry enterprise functioning of anthropogenic and natural character require specific approaches to introducing and using of environmental management system. Efficient usage and reproduction of forest resources are necessary conditions of forestry enterprise management, first of all under the condition of radiation pollution caused by Chornobyl' accident. Thereby important problem is the assessment of environmental management state at the forestry enterprises which must coordinate their activity with the principles of global forestry sector.

Sufficient contribution to the development of theoretical and methodological bases of practical recommendations on introducing, forming and functioning of the environmental management system was made by A. Deyneka [1], O. Drebot [2], S. Zadachyna [2], P. Kravets' [3], V. Lavrov [8], I. Lytsur [4],

I. Syniakevych [5], O. Furdychko [8], M. Shershun [9] and others. Nevertheless, numerous developments of methodical aspects of assessment of environmental management state at the forestry enterprises do not have unitary methodology. Taking into consideration peculiarities and specific character of forestry enterprises activity, it is necessary to note that the development of methodical approach to the assessment of environmental management state under the conditions of keeping the principles of global forestry sector is topical now.

The purpose of the study is to develop the methodical approach to the assessment of environmental management state at the forestry enterprises. The object of the study are the bases of forming and functioning of environmental management system. The subject are peculiarities of using the aspects of environmental management at the forestry enterprises activity.

The forming of environmental policy by domestic enterprises is a very important stage in introducing the environmental management system. Constant interaction of forestry enterprises with environment obliges the management to implement ecological standards into the economic activity of the enterprises. To confirm the ecological clarity of the forestry enterprises production, it is necessary to certify forests according to international ecological standards of environmental safety. Independent auditing company "Market Ecology Institute" (Switzerland) has been certifying forestry enterprises in accordance with FSC scheme since 2004, especially the directions of preventing environmental damage.

Environmental management at the forestry enterprises is the management oriented to development and self-development, because it is impossible to implement it at once. Its consecutive development depends on appearing of new knowledge and realization of this knowledge for new management quality in the context of environmental management. Thus, while forming environmental management system at the forestry enterprise and assessing its state, it is necessary to consider the international experience, that is to keep to the principles of FSC. This method has been tested at the state enterprise "Ovruch Specialized Forestry" in Zhytomyr district.

The essence of the methodical approach to the assessment of environmental

management state lies in using the certification scheme of FSC standards, which consist of 10 Principles; each of them contains 52 criteria divided into indicators. The total amount of indicators is 176 [7]. Principle 1 "Compliance with Current Legislation, Principles and Criteria of FSC" has 6 criteria and 17 indicators. Only 7 of these indicators are kept at the enterprise under study (indicators 1.1.1; 1.1.2; 1.2.1; 1.2.4; 1.3.2; 1.5.1; 1.5.2). Of the total number of the Principle 1 indicators it makes only 41%, or the coefficient - 0,41. As for the other FSC Principles, the state of keeping them by Ovruch Specialized Forestry is given in Figure 1.



Fig. 1. State of keeping FSC Principles by Ovruch Specialized Forestry

# Source: own research

In compliance with Principle 3 "Indigenous Peoples' Rights" there are no peoples, nationalities, and ethnic groups that answer to the definition of Indigenous Peoples given by United Nations Organization. That is why it is not applied in Ukraine.

According to the conducted analysis of the enterprise's state and the effectiveness of Ovruch Specialized Forestry activities, the average level of keeping to FSC Principles (0,48) is rather low. Let us investigate the state of meeting the requirements as for the impact of enterprise's activity on the environment in

compliance with Principle 6 "Environmental Values and Impacts".

The convincingness of this Principle among the FSC Principles in the presence of criteria and indicators list was maximum and represented 19.3%. Every criterion cogency of this Principle is defined as a fraction in totality of indicators. Thus, in criterion 6.1 five indicators were allocated , 42 indicators - on the Principle overall, so the convincingness of the criterion 6.1 was 11.9%. Pro ten to, in the conditions of the enterprise according to this criterion only 3 indicators were kept within. Considering the cogency of the criterion in the total amount of them and the compliance status in every criterion, coefficients of agreement were obtained.

As the analysis on FSC Principle 6 "Environmental Values and Impacts" shows the state enterprise "Ovruch Specialized Forestry" executes its environmental duties only at 57.2%. Significantly, the criterion 4 — uniqueness of ecosystems' preservation, criterion 7 — environmental wise removal of chemical and other waste products, criterion 9 — introducents usage — are not maintained at the enterprise at all. Let us represent the criteria of Principle 6 "Environmental Values and Impacts" compliance as a diagram (Fig. 2).



Fig. 2. Criteria of Principle 6 "Environmental Values and Impacts" maintaining at the state enterprise "Ovruch Specialized Forestry"

## Source: own research

Criterion 6 (regarding Foresting) must facilitate the development and usage of safe environmental non-chemical pest control methods and avoid usage of chemical pesticides. The usage of 1A- and 1B-pesticides (according to classification of World Health Organization), chloroorganic, stable, toxic and those with remaining bioactive decay products and products accumulated in food chain out of their target use, and also any of pesticides, forbidden by international agreements has to be abolished. Observing the environmental security features, associated equipment must be used and staff education must be provided if having chemicals usage for minimization of human and environmental health risks, since Ovruch region in Zhytomyr district has radionuclide contamination. Thus, the system of environmental management is directed towards forests upturn of Ovruch region in Zhytomyr district, however, it is now on the initial stage of environmental remediation and usage of new methods of management implementation.

**Study findings.** By conducted assessment, the system of environmental management at the state enterprise "Ovruch Specialized Forestry" must be included in the organizational set-up, in the part of the activity planning on procedures, processes and resources, must be depicted in corporate culture and responsibility, must be fundamentally oriented to "the new type of management" defining the harmony in people-nature relations, and at the same time including ecological regulation, must contribute to enterprise competitiveness on the native and foreign markets. Environmental management must cover the environment and all the aspects of business, coordinate them in prior lines of development and provide current and long-term competitiveness of forestry enterprises.

#### References

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