

Belarus and Poland as United Nations member states have signed in 2015 «the Agenda in the field of a sustainable development for the period till 2030», including working out of economic mechanisms of a substantiation of nature protection actions.

Climate change, atmosphere pollution, pollution of superficial and underground waters, degradation of soil under the influence of erosive processes, mineralization and burning out of peat soils, increase in weight of an industrial and household waste, reduction of a biological variety - all these environmental problems have transboundary character. Problem questions for Belarus and Poland is also the low ecology of agriculture, maintenance of protection of wood resources and a vegetative cover as a whole, maintenance of quality of atmospheric air, etc. is obvious that only the international cooperation of our countries will give the chance to develop uniform approaches to their decision.

Many scientists prosecuted subjects of economic efficiency of protection of environment. For example, I.V. Minaev has devoted many works to an estimation of efficiency of use of farmlands in Belarus. He has offered variants of actions for complex use of territories taking into account parametres of the general economic efficiency of capital investments. [1, p. 48].

Recently scientists of near and far abroad have offered methods of an estimation of a damage to environment and the compensated ecological damage from the point of view of their social and economic importance [2, p. 20; 3, p. 7]. They consider drawing or damage compensation on following major factors: air, water, the earth, the biological environment.

Considering it, we have calculated the specified kinds of damages according to Polessky region of Belarus [4, p. 4]. Calculation of bogs arising at drainage and the boggy earths of ecological damages is executed by us taking into account four basic ecological groups: a damage to water resources, air, soils and wildlife.

Air. At drainage of bogs generation of oxygen by marsh vegetation decreases and emission in atmosphere dioxide of carbon increases. Gas functions of the drained peat file change on opposite. The peat soil turns from the supplier to the oxygen consumer. It is known that at synthesis of organic substance of 1 kg the bog absorbs 1,65 kg of carbonic gas and allocates 1,37 kg of oxygen.

According to academician N.N. Bambalov [5, p. 3], the marsh hectare in 10 times clears air in comparison with wood hectare more effectively. Not casually experts name Polesye "lungs" of Europe. Calculations show that one hectare of a bog annually deduces from atmosphere nearby 7 t carbonic gas that is equivalent on the action of a large forest of 10-12 hectares. At the same time the drained hectare of a peat bog delivers for a year in atmosphere on the average 13 t dioxide of carbon that we can compare to emissions of this gas by all industry of Belarus.

Therefore drainage of peat bogs has the limits. For example, according to S.M.Zubova [5, p. 7] the admissible share of drainage of bogs makes about 7 %. Thus this share in republic makes about 48 %. Restoration of marsh ecosystems in the given conditions is one of ways of preservation of carbonic balance in atmosphere. Our calculations show that the full indemnified loss at activation of development of oxygen by marsh vegetation at full bogging averages about 42,28 € on 1 hectare a year.

Water resources. Involving in intensive agricultural use of considerable territories in reservoirs of the rivers of Polessky region also makes negative impact on a chemical compound of a surface water. Therefore prevention of pollution of natural waters represents an important economic problem.

The analysis of information sources on the maintenance of the dissolved substances in a surface water testifies to increase of their maintenance with increase in degree of land improvement of reservoirs. Fertilizers to a lesser degree influence the maintenance of the dissolved substances in a drain. [6, p. 379].

Calculations show that excess of maximum permissible concentration of the dissolved substances arises at average degree of land improvement of the water modular areas $\alpha > 0,70$. Thus the basic chemical element on which there is a danger of excess, the calcium hydrocarbonate is. At existing degree of land improvement of reservoirs $\alpha = 0,30$ threat of pollution of a surface water is not too big. The ecological damage can make about 7,43 € on hectare a year.

Peat mineralization. Anthropogenous evolution of the drained peat soils goes by the way of reduction of natural stocks of organic substance of peat. Drainage and the subsequent agricultural use change a direction почвообразовательного process of peat bogs to the opposite. The peat soil gradually loses major factors of the fertility, high heat-sink ability of a moisture and nitrogen stocks. Use of the drained

bogs under meadows only slows down processes of a mineralization of organic substance. The calculations carried out by us show that the indicator of a specific economic damage can make about 0,99 € on 1 hectare a year [6, p. 19].

Damage to environment. We can define a damage to wildlife (to natural complexes, plants, large forests, fauna) by G.I. Afanasika's technique with attraction of expert estimations [7, p.10] As a result of the calculations executed by us, is received that the damage on the average makes 31,95 € on 1 hectares a year.

The full ecological damage from drainage of marsh systems can make about 80 € on 1 hectare a year [8, p. 397]. The high practical importance of the analysed approaches for an estimation of damages to environment consists that damage indicators are represented in money terms. Thus we can estimate more objectively variants of actions for environment protection. Besides, we can develop system of the measures providing responsibility of legal bodies at the decision of questions of protection of environment at the international level.

List of the used sources:

1. Минаев, И.В. Осушительные системы XX века / И.В.Минаев, Б.С. Маслов - М., 1999.–180с.
2. Методика определения предотвращенного экологического ущерба. М.: Государственный комитет Российской Федерации по охране окружающей среды, 1999. – 117 с.
3. Методические рекомендации по совершенствованию экономических инструментов регулирования природоохранной деятельности в Республике Беларусь. Минск: БелНИЦ “Экология”, 1999. – 47 с.
4. Копытовских, А.В. Эколого-экономическая оценка осушения болотных экосистем в Белорусском Полесье / А.В. Копытовских, В.И. Бохонко, - Мелиорация и водное хозяйство – 2008 - № 5 – с. 17 – 19.
5. Агроэкологические проблемы антропогенно нарушенных болотных экосистем: Информ. бюл / БелНИЦ “Экология”. Минск., 1997. № 15 (22). – 32 с.
6. Копытовских, А.В. Оценка экологического ущерба от загрязнения поверхностных вод дренажным стоком с осушенных земель Полесья / А.В. Копытовских. - Экологическое состояние природной среды и научно-практические аспекты современных мелиоративных технологий: Сб. науч. трудов, вып. 2. Рязань, 2006. – С. 378-381.
7. Афанасик, Г.И. Обоснование принятия решений при планировании мелиорации / Г.И. Афанасик - Мелиорация и водное хозяйство. НТИ, 1991, № 2. - С. 9 – 12.
8. Копытовских, А.В. Эффективность осушения болотных экосистем в Белорусском Полесье / А.В. Копытовских, В.И Бохонко, - Сб. научн. тр., вып. 3 – Рязань, 2008. – с. 344-348.