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**THE EVOLUTION OF THE DEVELOPMENT OF FOREST
AMELIORATION LAND USE AND RESTORATION OF FIELD
PROTECTION FOREST STRIPS IN COMMUNITIES**

G. Sharyi, *professor, Doctor of Economic Sciences,*

Yuriy Kondratyuk Poltava Polytechnic National University

Email: sharyi.grigoriy61@gmail.com

ORCID ID: <https://orcid.org/0000-0001-5098-2661>

O. Kuznetsova, *senior teacher*

Cherkasy State Technological University

E-mail: kuznec-68@ukr.net

ORCID ID: <http://orcid.org/0009-0006-2189-7306>

T. Odaryuk, *senior teacher,*

Yuriy Kondratyuk Poltava Polytechnic National University

Email: olga23071980@ukr.net

ORCID ID: <https://orcid.org/0000-0003-0454-8615>

I. Yermakova, *candidate of technical sciences, senior lecturer,*

Yuriy Kondratyuk Poltava Polytechnic National University

Email: innae2024@gmail.com

ORCID ID: <https://orcid.org/0000-0002-2658-1857>

S. Shara, *graduate student,*

Yuriy Kondratyuk Poltava Polytechnic National University

Email: sv.shara12@gmail.com

ORCID ID: <https://orcid.org/0000-0002-6669-6667>

Abstract. *The work examines the evolution of the development of field-protecting forest strips (forest strips), the main component of the agro-landscapes of the steppe and forest-steppe of Ukraine, as well as the determined directions for the*

preservation of forest strips and the need to involve communities and the public in afforestation and restoration works.

One of the basic elements of preserving the productivity of agricultural landscapes, protecting soils from wind and water erosion.

The importance of forest strips as an important element of the ecological framework of the steppe and forest-steppe of Ukraine, which ensures a 20% increase in crop yields, forms a special microclimate in the agricultural sphere, and improves soil water supply, is emphasized.

The unsatisfactory and partly critical condition of the forest belts of Ukraine, especially in the combat zones, was determined, and possible legal and regulatory solutions at the state, regional and local levels were proposed. The need to strengthen state support for land afforestation and insufficient government measures in the field of afforestation are emphasized.

The paper proposes measures and mechanisms for solving the problem of protection, restoration and development of the forest belt system, which is relevant for Ukraine, and increasing the percentage of forests in the steppe and forest-steppe of Ukraine, due to forest reclamation. Problems affecting the functioning of forest strips and their protective functions are described.

It is proposed to transfer agroforests removed from collective property lands and created by the efforts of villages to communities as an incentive for the organization of communal forestry units in communities, which will make it possible to consolidate and revitalize most forest strips and carry out afforestation of communal and private land plots. The need to adopt state and regional target programs for the protection and development of forest plantations has been determined

Land payments to the budget, with the allocation of up to 50 percent of land payments from agricultural lands to the specified goals, have been identified as the main source of financing for forest reclamation works, restoration of forest strips and afforestation.

It was noted that agricultural producers who implement the methods of intelligent, combined and organic farming in most cases carefully take care of forest strips and maintain their functional properties. In the Poltava region, we can single out the enterprises "Astarta-Kyiv" and PE "Agroekology".

Keywords: *field protection forest strips, land use, communities, revitalization, afforestation, agricultural landscapes, land protection, organic farming, forest reclamation.*

Introduction. Forest protection forest strips (forest strips) are an important element of the ecological framework of the forest-steppe and steppe of Ukraine, along with natural virgin territories and natural fodder grounds, swamps and forests, ditch systems and river valleys.

Forest strips are placed on agricultural lands in order to protect the land from wind erosion, maintain the hydrological regime, preserve fertility, as a long-term factor in increasing the yield of agricultural crops.

The system of field protection forest strips contributes to the growth of the yield of crops by 15-20%, the productivity of pastures - by 20-30%.

In recent years, there has been a long pause in protective afforestation on the territory of Ukraine. In Ukraine, since 1988, restoration work on the expansion and modernization of forest belts has completely stopped. Forest strips, created by the great efforts of forest reclamationists, forest technicians, local population, collective farm workers and employees of state farms, are turning into bushes, and arbitrary felling and death of trees lead to the loss of protective properties of forest strips. [10] The relevance of consideration and research on this issue is caused by the fact that most of the field protection forest strips remain without a careful owner and a responsible user. The relevance of the problem is caused not only by the modern assessment of the ecological functions of forest strips in Ukraine over the past 30 years, but also by the aggravation of the problems of preserving biodiversity under the influence of global warming and military aggression. The rules for the maintenance and preservation of field protection forest strips located on agricultural

lands are defined by the Resolution of the CMU of July 22, 2020 No. 650, but the rules are not followed and more effective mechanisms of state regulation, control, restoration, reconstruction and maintenance of forest strips need to be developed.

On the territory of Ukraine, and especially in the Poltava region, a critically unsatisfactory state of forest strips has developed, caused by the aging of trees, their death for various reasons, arbitrary felling and lack of care.

Purpose: to investigate the evolution and state of development of land use under forest strips and to propose directions and mechanisms of conservation, protection, restoration of field protection forest strips in Ukraine.

Materials and methods of scientific research. During the scientific research, regarding the preservation of the productivity of agricultural landscapes and the restoration of field protection forest strips in communities, the following generally accepted scientific research methods were used: monographic method, expert evaluation method, mathematical and statistical methods, generalization method and comparative method.

Research results and discussion. To date, there is no information on the state of forest belts in Ukraine, and during the land reform, this important component of the functioning of agro-landscapes was overlooked by legislators. The institutional uncertainty of the status of forest strips, some of which remain without care and protection, has led to deterioration and partial destruction. The problems deepened as a result of military environmental aggression. The lack of an owner in the forest strip has turned into a critical problem of the state scale.

Short terms of tenure of heads of executive bodies and local self-government entail unpromising management, rare cases of granting permits for felling trees of forest strips and other forest protection plantations for the needs of heating and construction.

In Ukraine, forest belts have been planted on an area of 440,000 hectares, which by design protect 13 million hectares of arable land, but actually protect 30 million hectares of arable land in Ukraine [9].

Thus, in the Poltava region, according to publicly available information of the State Forestry Agency, during 2021, natural forest renewal took place on 104 hectares, in addition, the permanent forest user and forest owner of the State Forestry Agency planted 26 hectares of forest, in 2020, natural forest renewal took place on 119 hectares and 1 ha, respectively; in 2019 – 155.0 ha; in 2018 – 232.0 hectares and 38.0 hectares, respectively; in 2017 – 239.0 hectares and 65 hectares, respectively.

The creation of protective forest plantations on lands unsuitable for agriculture by planting forests was not carried out during the last four years (2018 - 2021). In 2017, 65.0 hectares of forest were afforested in this way, 38.5% more than in the previous year; in 2016 – 40.0 ha, in 2015 - 47.0 hectares.

In 2023, new green areas were created in the Poltava region at the level of the previous year, namely 52.0 hectares (in 2022 – 65.0 hectares, in 2020 – 71.0 hectares, in 2019 – 66.2 hectares, in 2018 - 1.8 ha). The area on which care for green areas was carried out also remained at the level of the previous year - 10,897.0 ha, (2022 - 10,897.0 ha, 2021 - 10,897.0 ha, 2019 - 10,543.0 ha, 2018 - 10,495.0 ha) .

Forest protection strips are an important element of the modern agricultural landscape, which plays one of the main roles in the modern agrosphere. After all, this is a unique type of plantings, which stand out due to their linear structure in the form of narrow strips and form the modern landscape of the Ukrainian Steppe and Forest Steppe. [10]

**Lands of the Poltava region that form the ecological and landscape potential
from 2000-2020 (thousand hectares)**

	Category of land and land	2000		2005		2010		2015		2020	
		thousands of hectares	%	thousands of hectares	%	thousands of hectares	%	thousands of hectares	%	тис. га	%
1	Lands of the forest fund	283,8	9,9	284,3	9,9	284,3	9,9	285,9	9,9	286,3	9,9
2	Agricultural lands	2248,4	78,2	2238,5	77,8	2228,3	77,5	2223,3	77,3	2241,4	77,9
3	Including arable land	1763,4	61,3	1760,7	61,22	17475,7	60,7	1774,7	61,7	1780,1	61,9
4	Including (hayfields + pastures)	349,3	12,1	346,6	12,05	364,1	12,6	359,6	12,5	361,0	12,5
5	Field protection strips	28,0	0,7	28,0	0,7	28,0	0,7	28,0	0,7	27,8	0,69
6	Internal waters, that's all	148,4	5,16	148,4	5,16	148,4	5,16	148,4	5,16	148,4	5,16
7	Recreational lands	0,64	0,02	0,82	0,02	1,16	0,04	1,1	0,04	1,19	0,04
8	Lands for health	0,61	0,02	0,57	0,02	0,55	0,02	0,4	0,01	0,44	0,01

	purposes										
9	Lands of historical and cultural purpose	1,26	0,09	1,26	0,04	1,75	0,06	1,8	0,06	1,8	0,06
10	Nature conservation lands	116,5	4,1	133,19	4,6	142,14	4,9	142,4	4,9	142,4	4,9
11	Total lands	2875,1	100	2875,1	100	2875,1	100	2875,1	100	2875,1	100

As we can see, the situation in the Poltava region is not systematically improving

is deteriorating, area statistics indicate a sharp plowing of natural fodder lands.

The areas of creation of new green spaces and afforestation are so small that they do not significantly affect the general state of affairs, but rather could improve the situation in one of the 60 formed communities in Poltava Oblast, rather than refer to the region.

V.Ya. was a pioneer in field protection afforestation in Poltava Oblast. Lomykovskyi, who, having acquired depleted land in 1809 on his Trudolyub farm in Myrhorod County, by 1837 created a unique "tree-cutting" economy: planting trees everywhere, both in groups and along the contours of fields and ravines around the farm [6]. From 1930, the farm's fields reaped high harvests, even in the dry years of 1834 and 1835. V. Lomykovsky demonstrated that he has not only a good harvest every year, but also firewood and building material. But in general, the creation of forest strips was episodic in the lands of Ukraine. [10]

In 1892, after a great drought, a special state expedition was organized under the leadership of V. V. Dokuchaev. V. Dokuchaev developed a comprehensive system of combating droughts, where forest strips were given one of the main places. Forest strips were supposed to be located on agricultural lands, protecting crops from erosion, from droughts, to improve the microclimate, accumulate moisture and keep snow in the fields. In three research areas, the scientist laid field protection strips. [3]

V. Dokuchaev's ideas are the basis of the Decree of October 24, 1948, known as the "Plan for the Transformation of Nature", a comprehensive program for the development of agricultural landscapes of the USSR. The plan was implemented from the late 1940s to the mid-1950s and provided comprehensive measures to

combat droughts and formed a system of land protection through reforestation through the creation of national and local forest strips.[4]

According to the plan, works were carried out to prevent droughts, sand and dust storms, by building reservoirs, ponds, planting forests, forest strips and implementing grass and anti-erosion crop rotations. It was planned to afforest more than 4 million hectares of land and create state forest strips with a length of 5,700 km and forest strips of local importance along the perimeter of each field, along the slopes of ravines, reservoirs, in bad areas, especially sand. As a result of the activities of 570 forestry stations, 2.3 million hectares of forests of the first category were created in the first three years, at the cost of incredible human efforts. Peasants of Poltava Region planted up to 100,000 hectares of forest plantations on farm lands. [5]

In the Poltava region, forest belts were planted on an area of 28,000 hectares, afforestation was carried out on collective farm lands, (agroforests) on 70,000 hectares, more than 2,000 ponds were built, hundreds of kilometers of embankments were poured and hundreds of forest border strips were planted, high-speed chutes, terraces were built and other anti-erosion objects. The measures significantly increased the ecological landscape potential of the territory, formed a microclimate, transforming the dry steppe into a forest-steppe landscape. [7]

The state agroforestry removed collective farms and undermined the initiative of the peasants, who lost both land and forests.

As a result of measures to afforest the territory, reforestation, irrigation of dry steppes, forest-steppe, and agro-reclamation, by the end of the 1950s, grain yield in Ukraine increased by 30%, vegetables by 2 times, herbs and fodder by 3 times. Since 1951, the production of livestock products has doubled in 5 years. [8]

In 1956, the 570 forest protection stations created in the country were liquidated, but the fight against adverse natural phenomena for many years in Ukraine was carried out based on the complex system approaches of agrotechnical and forest improvement measures based on the scientific developments of scientists K.A. Timiryazeva, V.V. Dokuchaeva, O.O. Izmailskyi, V.R. Williamsa B.Y., Loginova V.O. Bodrova, O.S. Kuzmenka, E.S. Pavlovsky, V.P., Tkacha and many others.

Ukrainian scientists continued the scientific developments and practices of V. Lemykovskiy, I. Danylevskiy, and V. Dokuchaev.[6]

Scientists V.O. made an invaluable scientific contribution to forest amelioration. Bodrov, H.M. Vysotskiy, P. Pogrebnyak, V. Yukhnovskiy, P.I. Gerasimenko, O.I. Pylypenko, G.B. Gladun, O.I. Furdychko, V.M. Maloga and many others.

Scientists S.S. Antonets, T.S. Malyshev, M.K. Shikula, L.Ya. Novakovskiy, A.M. Tretyak, V.V. Horlachuk, V.O. Leonets, Y.M. Dorosh, A.D. Yurchenko and others combined forest reclamation with modern farming systems, including organic farming.

A. M. made a significant contribution to research in the direction of economics of non-traditional agricultural land use in the context of climate change measures in Ukraine. Tretyak, considering non-traditional, as an economic and ecological system, which is a territorial complex of optimal relationships of soil, organisms and atmosphere due to the composition and structure of land, a system of organizations and methods of using land and other natural resources. .[11]

In Ukraine, the vast majority of forest strips were established by forestry stations, collective farms and state farms in the 1950s, which were in their use and maintenance.

Since 1991, a period of significant decline in forest reclamation began. With the beginning of land privatization in 1992 and the restructuring of collective farms and state farms, the fate of field protection forest strips was uncertain for many years. In the course of denationalization, forest strips were removed from shared lands in accordance with the Land Code of Ukraine (1992), during the unsoldering of lands, shares, reserve lands, reserve lands were determined, and forest strips remained outside the attention of legislators. With the restructuring and reorganization of farms from collective to market forms in 1999-2000, forest strips were transferred to local councils, but without any funding for maintenance and care.

The most effective way to protect land from wind and water erosion, to increase the ecological and landscape potential of the territory and the natural fertility

and water regime was developed in 1975-1985 in Ukraine, a soil protection system of agriculture with a contour-melioration organization of the territory, under the leadership of an outstanding scientist, an academician of the National Academy of Sciences L. Ya. of Ukraine Novakovsky and was successfully tested first on an area of 3.5 thousand hectares in the Obukhiv district of the Kyiv region, and then implemented in many farms of Ukraine. The specified scientific work in 1991 received the State Prize of Ukraine in the field of science and technology and protects and preserves hundreds of thousands of hectares of agricultural land to this day, preventing and reducing soil erosion by 5-6 times and ensuring an annual yield increase of more than 5 t/ha of grain [8].

In the Poltava region, a pioneer and leader of organic farming and the soil protection system and organization of the farm territory on the lands of the private enterprise "Agroekologiya" (7 thousand hectares), since 1975, Hero of Ukraine

S.S. Antonets ensured the perfect maintenance and preservation of the functional state of the forest strips and planted contour plantations along the contours of soil changes and slopes.

The company "Astarta-Kyiv" (V.P. Ivanchyk) keeps the forest strips in good condition, supporting the protective functions of the forest strips. But these are isolated examples.

Currently, some of the forest strips are used by agricultural enterprises, some by communities, but the majority remains without a user. The State Agency of Forest Resources joined the use of only the massifs planted by the peasants. on collective lands, agroforests.

The Cabinet of Ministers of Ukraine, by Resolution No. 650 of July 22, 2020, defined "Rules for maintenance and preservation of field protection forest strips". The rules are mandatory for all owners of land plots on which forest strips are located, but forest strips are not placed on the lands of land users and owners of personal peasant and state farms, just as there are no forest strips on leased plots. Forest strips are adjacent to the specified lands. In the resolution, forestry standards are written, but

the fate of the forest strips and sources of funding for the specified works have not been determined.[2]

State bodies of executive power must take into account that field protection forest strips are not located on the lands of rural land users and landowners, but only border agricultural lands.

Logically, forest strips accumulate moisture, protect crops from winds, even due to overgrowth or improper design height, plantations do not lose their field protection effectiveness, and land users of agricultural land must take care and allocate funds for the reconstruction of field protection plantations. But most forest strips are adjacent to many land users and landowners, most of whom do not want to take care of the forest strips or are unable to carry out the necessary work. In conditions of uncertainty, forest strips are left unattended, trees age and partially fall into an emergency state and die. Illegal logging continues. In an unsatisfactory condition, protective afforestation in the strip of railroad tracks, highways, in water protection zones and anti-erosion contour afforestation around ravines, rapid-flow channels, hydrotechnical structures, artificial and natural water bodies are also in an unsatisfactory state.

Most of the indicated forest plantations are also not assigned to forestry units and forest users.

The importance of forest belts for the sustainable development of rural areas in the face of global warming is undeniable, but even in 1990 in the Poltava region, the area of protective forest belts barely reached 1.2% of the area of agricultural land.

Currently, when part of the forest strips have been thinned out, and some trees have died and are in an emergency state, the percentage of productive forest strips barely reaches 1% of the area of agricultural land, the threat of dust storms and wind erosion covers about 400 thousand hectares of arable land of the Poltava region, which in case of dust storms there is a threat of a partial decrease in fertility and the transition to low-productivity lands.

This is worsened by the unsatisfactory crop structure due to the lack of grass-field crop rotations and perennial grasses.

We consider forest strips to be the main unifying element for the agrosphere and the biosphere, as forest strips perform a multifunctional role as elements of the ecologically sustainable framework of the territory, increasing the productivity of agrobiocenoses, and not requiring amortization deductions and additional costs.

According to S. Antonets, only the presence of forest strips will allow to master rational organic agriculture [7].

The Center of the Agrarian Union of Ukraine emphasizes: "Field protection forest strips are artificial plantations that demarcate arable land massifs, performing climate-regulatory, soil protection and water protection functions" [9].

The main problems of the existing forest strips are: aging and exhaustion of the protective resource of the forest strip; the insufficient area of forest strips relative to the area of arable land; inconsistency of the constructions of forest strips with agricultural lands and contours of soil changes and slopes on which they are located; unauthorized felling and cluttering; lack of state protection and control over the condition of forest strips; the intensification of agriculture and the growth of pollution by chemical preparations, emissions from vehicles and industrial enterprises; natural increase in air temperature, land dehydration, untimely care and lack of sanitary felling; negative impact of pests and diseases; military aggression, burning.

The forest cover, in particular field protection, of the modern agro-landscapes of the steppe and forest-steppe of Ukraine is 2 times behind the standard, which entails negative ecological processes. The analysis of existing forest field protection plantations indicates the insufficiency of forest strips, up to 2 times the zonal standards, with a norm of 3%, the fact is only 1.5%. That is, the area of existing forest strips and forest massifs that perform a reforestation function is half as much as that which will enable sustainable development of the environment and create conditions for rational management.

High agricultural potential requires sustainable development and increasing the sustainability of agroecosystems. The creation of a full-fledged system of field protection plantations, as a component of the ecological framework of the territory, is one of the most radical ways to ensure the sustainable development of the agricultural

sector. The ecological functions of forest strips in the agrosphere form a favorable environment in agrolandscapes, affecting the state of ecotopes and geochemistry of forest-agrarian landscapes, the spatial organization of agrobiocenoses in agrolandscapes, the state of ecotopes and geochemistry of forest-agrarian landscapes, the dynamics of biopopulations, biocenoses; determining energy flows and productivity of biocenoses. Even with partial degradation, forest strips continue to perform important protective natural functions.

The main problems affecting the functioning of forest belts and their protective functions are:

- excessive plowing of land;
- climatic changes and dehydration of the soil layer;
- deterioration of the state of the tree stand due to the violation of the optimal species and age structure;
- inconsistency of the contour and configuration of the forest strips with the soil differences and the angle of the winds;
- the incompleteness of the creation of the system of forest strips and the reduction of the volume of forest improvement works and maintenance measures;
- felling and improper economic activity;
- environmental aggression and war;
- lack of agroforestry improvement services and stations;
- lack of funding for scientific research in the field of forest reclamation on agricultural lands in terms of the destruction of forest strips and their loss of protective properties.

Forest strips, protecting land massifs, oblige agricultural producers to take care of forest strips, which form protective barriers against droughts, dust storms and dehydration.

Agricultural producers, whose lands are adjacent to and bordered by forest strips, must enter into a contract for the use, and not only the lease of land under the forest strips, and for the maintenance of field protection forest plantations, but the specified ideal institutional structure is far from reality due to the existing problems.

At the beginning of 2019, the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Solving the Issue of Collective Land Ownership, Improving the Rules of Land Use in Massifs of Agricultural Land, Preventing Raiding and Stimulating Irrigation in Ukraine" entered into force in Ukraine. Adoption of the mentioned normative legal act added a number of changes to the land sphere and expanded the powers of territorial communities, in particular regarding field protection forest strips. The law, for the first time, defined the legal status of land plots under field protection forest strips as agricultural lands and provided for the possibility of transferring land plots under them for use by individuals and legal entities under the conditions of preservation, restoration and maintenance of plantations. The lands under the forest strips became communal property of communities, which can be leased to individuals and legal entities. The only condition that must be ensured is the maintenance of forest strips in proper functional condition.

In our opinion, it is better if the community creates a communal forestry unit and secures forest strips for them for permanent use. The main thing is to solve the problems of the revitalization of forest strips and transfer the land under the forest strips to a special forestry enterprise for permanent use.

Existing communal organizations can also organize the maintenance of forest strips that are in communal ownership, because the law does not define what "specialization" consists of, it is logical that these can be communal enterprises engaged in the improvement (maintenance) of parks.

Forest protection forest strips are considered communal property, and nominally the communal owner must be determined, and the creation of an economic structure that could conduct proper care is not prohibited by law. In the rules for maintaining and preserving field protection forest strips located on agricultural land, defined by the Resolution of the CMU of July 22, 2020, it is indicated: "forest management, logging ticket", which is the competence of state forestry structures, but the latter have removed themselves from the problems of afforestation of territories and maintenance forest strip [2]

The situation with forest strips requires a review of the general legislative approaches to forest strips that are not part of the forest fund lands, which, in general, will make it possible to create a legal foundation that will contribute to the further development of agrarian forest plantations. Forest protection strips belong to forest improvement plantations, but the sources of financing and their maintenance are also not defined. In the lands exposed by hostilities, it would be expedient to provide for the improvement of the state management system by the development of agroforestry improvement and the increase in the amount of state financing of measures to create protective forest plantations, their accounting and control, which will make it possible to stabilize natural processes in agro-landscapes.

It is necessary to make appropriate changes to the regulatory and legal acts, to take into account in the state targeted programs for forestry, the issue of optimization of the areas of protective linear type plantations according to the zonal principle, and to target the funds of the state budget for the protection of arable lands in the liberated territories.

This requires Ukraine to improve state approaches to policy regarding forest strips and to adopt a state program for the preservation, protection and development of protective forest plantations. The proposal to create separate subdivisions in state forestry farms - forestry stations for reconstruction and planting of forest strips and transfer of saplings to users and monitoring of care is worthy of attention, because field protection forest plantations are one of the main elements of the framework of the agricultural landscape and an element of the ecological framework of the territory of the community, district, region and of Ukraine.

In communities, in order to restore order in the forest strips, it is necessary to conduct an accounting of the forest strips, determine their condition and measures for restoration, revitalization and reconstruction, by means of rejuvenation (every 4-6 years) and assign them to the forest users.

The reconstruction of forest belts must begin with the formation of a stable ecological framework of the territory of Ukraine, oblasts, districts and communities. It is necessary to determine particularly valuable forest strips that are elements of

eco-corridors, bringing their row to 50 rows of trees, handing them over to the state State Forestry Farms or communal forestry units, and securing the land to protected natural objects.

Forest strips adjacent to the lands of large agricultural land users, farms and owners of transport infrastructure can be secured by them on lease terms.

Forest strips adjacent to hydrotechnical facilities and water protection zones should be assigned to water management entities. Forest strips adjacent to small land users within the boundaries of settlements and communal lands must be secured by communal enterprises of communities.

In Ukraine, afforestation of territories, restoration, reconstruction and revitalization of forest belts must be brought to the rank of economic state policy within the framework of which:

- to develop the State program of afforestation of Ukraine, which foresees the growth of the area of forest belts by 5% annually;

- to determine the state forest strips, which are elements of the eco-network, as ecologically sustainable corridors that form a stable framework of landscapes;

- to redesign forest strips and other linear objects taking into account military and defense actualities, especially in the border strip;

- to create a forestry service in the State and relevant departments in the regions and districts, and forestry stations in the liberated territories;

- to increase the preparation of forest planting material in State Forestry Farms, for the purposes of afforestation and development of forest strips and restoration of forest plantations destroyed by the war;

- to oblige highway services and Ukrzaliznytsia to carry out work on the reconstruction of linear forest plantations;

- to prepare draft laws regarding the return of agroforests seized from peasants to the ownership of communities;

- to initiate legislative incentives for preferential land payments on the land of forest belts leased, to stimulate afforestation of communal and private lands, to form

state mechanisms of compensation and incentives, regarding the costs of land acquisition for afforestation, costs of afforestation and their care.

Recommend to communities:

- create forestry units;
- to secure forest strips located within the boundaries of settlements, in massifs of communal land, contour forest strips that perform water protection, anti-erosion, water commuting and recreational functions, forest strips adjacent to a large number of small plots of land;

- to lease to large and medium-sized land users forest strips that ensure the protection of the land user's agricultural lands, subject to compliance with forestry standards and rules for the use and maintenance of forest strips, forest strips that have a high value as eco-corridors and elements of the eco-frame:

- together with state structures and enterprises, develop measures to increase the area of forest strips to 2.5-4% and revitalize the environmental protection functions of existing plantations;

- to activate the public on the need to restore protective forest plantations and expand areas under afforestation;

- allocate plots of land for priority afforestation from communally owned lands;

- to stimulate the afforestation of private lands and to determine the compensation mechanisms for the costs of afforestation and their care.

To agricultural enterprises and farms, recommend:

- lease the forest strips adjacent to the massifs of land in use and ownership;
- carry out the necessary surveys, design and implement forest engineering measures for the reconstruction and restoration of the protective functions of forest plantations.

Conclusions and proposals. The issue of consolidation, redistribution and rational use of land under forest belts and allocation of new areas for forest reclamation, taking into account the unsatisfactory state of forest belts, part of which died in the combat zone, the existing small land and the absence of permanent land

users, require regulation and adoption of forest reclamation measures at the state level with the adoption of proposed relevant normative - legal acts and state programs.

It is timely for the military administrations to initiate and develop regional programs for the restoration of field protection forest plantations, taking into account security goals, including military ones, and for Ukraine to gradually foresee an annual expansion of the area of forest belts by 600-1000 hectares, which will allow to bring the total area of forest belts to 4%, and the increase of the area, especially lines of plantations in the border strip.

The incentive to create communal forestry units in communities can be the return to communal ownership of lands of collective forest plantations of former agroforests nationalized by the state.

Financing of maintenance, conservation and protection of forest strips, reconstruction felling and creation (restoration) of forest strips can be ensured by transferring 50 percent of land taxes from agricultural lands (returning funds from land to land).

Only the mobilization of communities and society will make it possible to restore protective forest plantations and carry out the revitalization of forest strips and ensure the standards of afforestation of the steppes and forest-steppe of Ukraine.

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Г. І. Шарий, О. В. Кузнецова, Т. С. Одарюк, І. А. Єрмакова, С. Ю. Шара

ЕВОЛЮЦІЯ РОЗВИТКУ ЛІСОМЕЛІОРАТИВНОГО ЗЕМЛЕКОРИСТУВАННЯ ТА ВІДНОВЛЕННЯ ПОЛЕЗАХИСНИХ ЛІСОВИХ СМУГ У ГРОМАДАХ

Анотація. У роботі розглядається еволюція розвитку полезахисних лісових смуг (лісосмуг), головної складової агроландшафтів степу і лісостепу України та визначені напрямки збереження лісосмуг та необхідність залучення громад і громадськості до робіт по залісненню та відновленню.

Одна із елементів основи збереження продуктивності агроландшафтів, захисту ґрунтів від вітрової і водної ерозії.

Підкреслено значення лісосмуг, як важливого елементу екологічного каркасу степу і лісостепу України, що забезпечує 20% приросту врожайності культур, формує особливий мікроклімат в агросфері поліпшує водозабезпечення ґрунтів.

Визначено незадовільний та частково критичний стан лісосмуг України, особливо в зонах бойових дій, та запропоновано можливі нормативно-правові регуляторні рішення на державному, регіональному і місцевому рівні. Підкреслено необхідність посилення державної підтримки заліснення земель та недостатні урядові заходи в сфері заліснення.

В роботі запропоновано заходи і механізми розв'язання актуальної для України проблеми охорони, відновлення і розвитку системи лісосмуг, підвищення відсотку лісистості степу і лісостепу України, за рахунок лісомеліорації. Описано проблеми, що впливають на функціонування лісосмуг і їх захисні функції..

Запропоновано передати в громади, вилучені із земель колективної власності та створені зусиллями села агроліси, як стимул організації у громадах комунальних лісотехнічних підрозділів, що дасть змогу закріпити і ревіталізувати більшість лісосмуг та проводити заліснення комунальних і приватних земельних ділянок. Визначена необхідність прийняття державних та обласних цільових програм охорони та розвитку лісових насаджень

Визначено головним джерелом фінансування робіт з лісомеліорації, відновлення лісосмуг і заліснення, земельні платежі до бюджету, з направленням на указані цілі до 50 відсотків земельних платежів із земель сільськогосподарського призначення.

Відмічено, що сільськогосподарські товаровиробники, які впроваджують методи розумного, комбінованого та органічного землеробства у більшості дбайливо доглядають лісосмуги і підтримують їх функціональні властивості. В Полтавській області можна виділити підприємства «Астарта-Київ» і ПП «Агроекологія».

Ключові слова: *полезахисні лісові смуги, землекористування, громади, ревіталізація, заліснення, агроландшафти, охорона земель, органічне землеробство, лісомеліорація.*