



At the National Association of Agricultural Advisory Services of Ukraine



Forest Policy Report

APD/FPB/03/2020

# **Ukrainian Timber Market**

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#### On the Project "German-Ukrainian Agricultural Policy Dialogue (APD)

The project "German-Ukrainian Agricultural Policy Dialogue (APD)" is being implemented with the support of the Federal Ministry of Food and Agriculture (BMEL) since 2006 till 2021 through the contractor GFA Consulting Group LLC, as well as the working community, consisting of IAK Agrar Consulting LLC (IAK), The Leibniz Institute for Agrarian Development in Countries with Economies in Transition (IAMO) and AFC Consultants International LLC. The recipient of the project is the National Association of Agricultural Advisory Services of Ukraine "Dorada". Concerning the implementation of important measures for the development of the land market, the use of state land areas and the privatization, the APP works in cooperation with the LLC for the management and sale of land (BVVG). The beneficiary of the project is the Ministry of Agrarian Policy and Food of Ukraine.

The project should support Ukraine in the development of sustainable agriculture and forestry, efficient processing industry and increasing international competitiveness in accordance with the principles of market and regulatory policies, taking into account the development potential and challenges to be addressed within the framework of the EU-Ukraine Association Agreement. To this end, the Project should provide information on German and European experience in the development of a framework for agricultural political conditions and the organization of the corresponding agricultural political institutions.



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#### Introduction

According to the terms of reference, the task of the consultant was to prepare a 25-30 pages report containing data characterizing:

- dynamics of timber harvesting and made goods from it;
- dynamics of foreign trade in forestry products;
- legislative and economic instruments regulating the situation in the timber market (including legislation, taxes, subsidies and investments);
- dynamics of prices for roundwood timber

The main source of information was the data of the state statistics prepared by the Statistical Service of Ukraine for the period since 2010 till 2019. In addition, to detail the information and obtain longer time series as well as to compare Ukraine with other countries, there were used the data of departmental statistics of the State Forestry Agency (data on taxation and some aspects of trade) and international databases - Comtrade Database, FAOSTAT and EUROSTAT - containing information on production and external trade in forestry products.

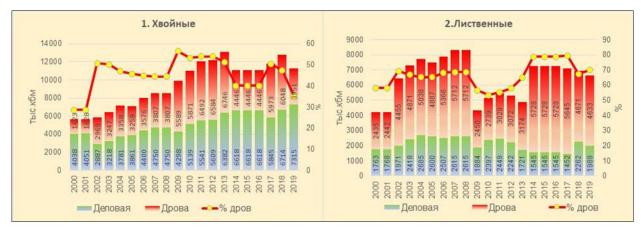
All actual data specified in the terms of reference, except for prices for roundwood timber, are given in the appendices to the report. The data on prices in official Ukrainian sources of information have not been published until recently. They are taken from various sources, which are indicated in the corresponding section of the report.

All the cost indicators are converted into US dollars in accordance with the official exchange rate of the National Bank of Ukraine.

#### 1 Raw material base

The official data of the State Statistics Service of Ukraine on timber harvesting in the country in the period since 2010 till 2019 are shown in Appendix 1. Similar FAO data since 2000, supplemented on the basis of country statistics of recent years, served as the basis for constructing the graphs shown in Figure 1.

Figure 1: Dynamics and structure of marketable coniferous and deciduous wood harvested in the third millennium on the territory of Ukraine



Source: Data from FAO and the State Statistics Service of Ukraine

The attention should be paid to:

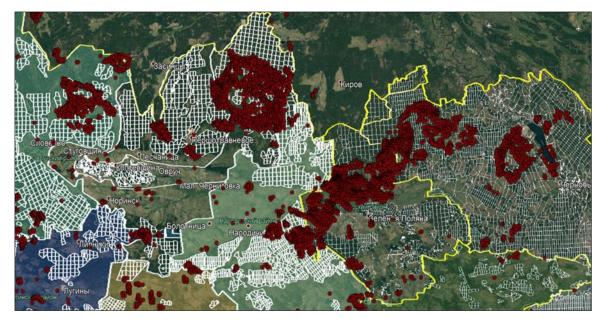
- a very high average share of firewood in the total harvesting volume: for conifers -40-50%, for deciduous - 70-80%;
- steady growth in conifers harvesting, the first maximum of which occurred in 2011-2013 and coincided with a sharp drop in deciduous harvesting;
- a sharp decrease in the input of firewood during the harvesting of conifers in 2019.

The State Forest Agency and the official Ukrainian forestry science are trying to justify the low quality of harvested wood by the influence of climate change and mistakes of the past. In fact, gross mistakes made already in independent Ukraine have a much greater influence. The main ones are as follows:

- 1. Exclusion of 50% of the area of Ukrainian forests from planned forestry. In this area, felling is possible only at the stage of drying out and decay of plantations;
- 2. Minimization of thinning of plantings aged 20-60 years;
- 3. Refusal from the basic principles of timber classification by its size, quality and intended use.

The first two factors led to the accumulation of large areas of low-value forests, the felling of which is not profitable, as well as the massive weakening of all forests in the country, which had been growing for more than 20 years without proper care, leading to the loss of their stability and quality. As a result, the risk of catastrophic situations similar to the "Windfall century" that hit the forests of Poland in August 2017, the drying out caused by bark beetle in recent years in the Czech Republic, and the fires of April this year in the forests of the north of Zhytomyr and Kyiv regions of Ukraine (Fig. 1.2) increases.

Figure 2: In April 2019, about 100 thous. hectares were covered by fire in the northern regions of Ukrainian Polissia



Forestry is not ready to adequately respond to the situation: neither financially, nor organizationally, nor technically.

The third factor is directly related to trade, so it makes sense to dwell on Ukrainian know-how in timber classification in more detail.

Figure 3: Ukrainian place in the ranking of European countries with a high level of forestry, in terms of indicators characterizing the output of firewood during logging.

Страна	Ликвид, кбм	Страна	Дрова, млн.кбм	Страна	% дров в ликвиде	Страна	дрова/ балансы
Sweden	72 880	Germany	22 388	Ukraine	61	Ukraine	8,4
Germany	65 717	Ukraine	11 618	Denmark	54	Denmark	2,9
Finland	63 279	Finland	7 949	Bulgaria	47	Bulgaria	1,5
Poland	45 313	Sweden	7 500	Switzerland	37	Switzerland	3,5
Czechia	19 387	Poland	5 248	Germany	34	Germany	2,1
Ukraine	18 915	Romania	4 914	Romania	34	Romania	2,9
Austria	17 647	Austria	4 909	Estonia	31	Estonia	1,2
Spain	16 911	Estonia	3 106	Austria	28	Austria	1,5
Romania	14 492	Bulgaria	2 989	Slovenia	23	Slovenia	1,1
Latvia	12 896	Czechia	2 376	Un.Kingdom	19	United Kingdom	1,0
Norway	12 187	Spain	2 269	Latvia	17	Latvia	0,6
Jnited Kingdom	10 921	Latvia	2 200	Norway	14	Norway	0,4
Estonia	9 948	United Kingdom	2 096	Spain	13	Spain	0,2
Slovakia	9 361	Denmark	2 061	Finland	13	Finland	0,3
Bulgaria	6 405	Norway	1 724	Czechia	12	Czechia	0,4
Slovenia	4 509	Switzerland	1 645	Poland	12	Poland	0,2
Switzerland	4 484	Slovenia	1 039	Sweden	10	Sweden	0,3
Denmark	3 842	Slovakia	591	Slovakia	6	Slovakia	0,2

Source: FAO data for 2017 (before the onset of the windblow cycle and drying out caused by bark beetle in Europe)

Without this, it is difficult to understand how a country with excellent conditions for the cultivation of highly productive, high-quality forests and a good level of forestry, according to statistics, became the European leader in the "art" of forestry "for firewood" (Figure 1.3).

In terms of the volume of firewood harvesting, Ukraine is second only to Germany, while having four times less volume of the total harvesting. The share of firewood input from the total volume of marketable timber harvesting has been constantly increasing in Ukraine over the past 25 years, in the last decade it reached 60% average in the country and even exceeded this figure. According to the statistics, firewood has long become the main product of the Ukrainian forestry.

The ratio between commercial firewood and pulpwood is surprising, which is a raw material for the forest industry, which generates the main income generated by the forest sector. The volume of firewood in Ukrainian timber harvesting is 8.4 times more than the pulpwood. There is no such ratio in any of the forest countries of Europe.

Guided by the figures, one might think that Ukrainian timber, due to its extremely low quality, cannot serve as a raw material base for the development of the woodworking industry. In fact, this is not the case. Large quantities of Ukrainian fuel wood are bought by board factories, pulp mills and even lumber manufacturers in many European countries.

All over the world, firewood is considered to be wood used for combustion or for the production of products intended for combustion, separating it from the composition of industrial roundwood used in the woodworking industry. In the mid-90s of the last century,

by order of the Ministry of Forestry of Ukraine /1/, a new type of wood was added to the category of "fuel firewood" – "firewood for industrial use". In practice, there are three main types of firewood for industrial use:

- wood for the production of boards;
- coniferous sawlogs, harvested during sanitary felling of drying out plantations. It is used for the production of container boards, pallets and other low quality lumber;
- "parquet oak" (beech, ash, maple, etc.) trunks with curvatures and other flaws, suitable for the production of short lumber, primarily parquet friezes, furniture blanks, packaging boards, etc.

Such a decision contradicted international practice, customs classification of goods and even Ukrainian textbooks of the disciplines "Wood Science" and "Forest Commodity Science"; however, it was beneficial for forest enterprises. Rent payments to the budget for the use of firewood are many times lower than similar payments for the use of the cheapest assortments of industrial wood /for more details, see the "Taxes" section/. Calling millions of cubic meters of commercial wood "firewood", the Ministry of Forestry left potential taxes at the disposal of enterprises, significantly increasing the profitability of low-quality timber harvesting and the economic indicators of their activities in general.

The order of the Ministry of Forestry had other consequences much later after its adoption:

- the structure of data presentation of the official statistics of logging has changed: until 2018 (inclusive), millions of cubic meters of "fuel wood for industrial use" were taken into account in the "fuel firewood" category. This category accounted for about 4.5 million cubic meters of wood;
- after the adoption of the moratorium on the export of commercial timber (Customs Code 4403), enterprises were left with the possibility of exporting it under the guise of "fuel firewood";
- ideal conditions were created for the large-scale introduction of corruption schemes
  of forestry trade based on "misgrading" manipulations based on the inconsistency
  of the Ukrainian name of forest products with their real market value.

In 2010-2013, within the framework of the FLEG project, funded by the EU, work was carried out to justify, prepare and audit the transition of forestry in Ukraine to European standards for wood classification. This work was not demanded by the State Forest Agency, but the transition to new standards did take place. The reason for this was the public accusation of the State Forest Agency in organizing the export of commercial wood (4403) to boards and other European industries under the guise of fuel wood (44011). An illegal change in international customs classification codes has been proven. This forced the State Forestry Agency to develop new standards, which came into force in 2019.

In the State Forestry Agency report for 2018, the meaning of the changes is explained as follows:

"If earlier industrial wood (roundwood timber) in Ukraine was distributed into three grades (I, II, III) and had a number of assortments according to their purpose, then since 2019 it has been divided into four quality classes (A, B, C, D), as in European countries, with no definition of the direction of their use.

...quality class D should include forest materials from which lumber can still be obtained for further use;

- all other roundwood forest materials, from which it is impossible to obtain lumber for general use, are classified as:
  - a) firewood for industrial use, 2-4 meters long (for the production of technological chips or chopped fuelwood);
  - b) firewood for non-industrial use, up to 2 meters long (can be sold to individuals or legal entities as fuel)"/ p.24

The transition of the State Forest Agency enterprises to new standards did not affect the state statistics data for 2019.

Obviously, as a matter of fact, the new classification system continues to be "pseudo-European" and serves as a source of disagreements and conflicts. Its main feature is attribution of fuel wood to firewood, used for the production of wood-based boards, paper and lumber.

# 2 Products of the forestry sector: production and foreign trade

The data of the State Statistics Service on the production of the forest sector products of Ukraine in 2010-2019 are given in Appendix 2. The figures of the State Statistics Service, characterizing the foreign trade in goods traditionally related to the products of the forest sector, are shown in:

- Appendix 3 timber and wood products (customs code 44)
- Appendix 4 pulp, wood pulp, waste paper (47)
- Appendix 5 paper and cardboard (48)
- Appendix 6 furniture (94)
- Appendix 7 forestry products in comparison with total foreign trade.

Appendices 3-6 show the dynamics of the sales value and weight size of exports and imports for categories of goods designated by four-digit customs classification codes. For group 94, only wood products were analyzed. Sales value is given in thousands of US dollars, weight is shown in tonnes.

Below is a visualization of external trade flows of major forest products and an assessment of their domestic consumption. Trade analysis was carried out according to the UN Comtrade Database. Domestic consumption was calculated based on the FAOSTAT database and data from the State Statistics Service of Ukraine. The analysis period, in most cases is from 2001-2005 to 2018 = 2019.

Graphs in figure 2.1. show the dynamics of exports and imports of goods in the basic segments of the forestry sector.

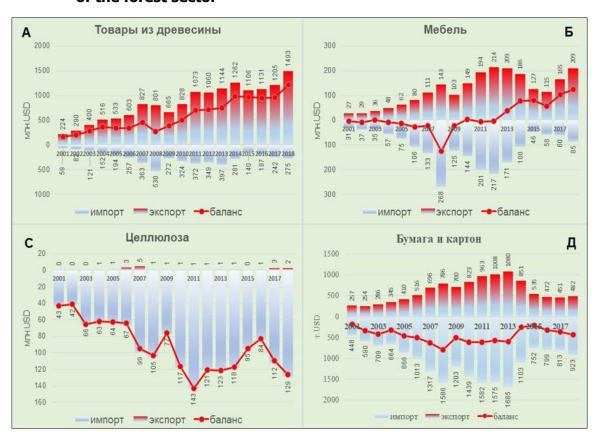


Figure 4: Dynamics and balance of foreign trade in goods of the basic segments of the forest sector

I have begun working on an in-depth analysis of the production and consumption of certain types of timber products, which are not provided for by the TOR. Examples of this are the currently completed section 2.1 and section 2.2, which are currently under being reviewed.

#### 2.1 Cellulose and other fibers

A characteristic feature of the modern forestry sector in Ukraine is the complete absence of cellulose production. This has not always been the case. In the Ukrainian SSR, a complex cellulose and paper industry existed and was being actively developed. It specialized in the production of technical types of paper and board. Bulk types of paper products were imported from other republics of the USSR.

In the early 90s, three cellulose and paper mills and a wood pulp plant operated in the country. Their total productivity reached 200 thousand tons of cellulose and wood pulp. However, this was not enough. The country has always had a large shortage of fresh fiber, which was compensated by imported products and the use of secondary raw materials.

Ukrainian cellulose and paper mills, initially focused on Russian coniferous wood and other raw materials (wood of fast-growing species and reeds), could not withstand competition in the new economic conditions and ceased to exist. For over 15 years, the production of paper and cardboard in Ukraine is based on waste paper and imported raw materials.

Ukraine is a net importer of wood fiber. The main goods of this group imported into the country are sulphated cellulose and waste paper (Figure 2.2.).

4703 - сульфатная целлюлоза 4707 - макулатура Б 450 90 400 80 350 600 300 夏 250 500 J/QSD 400 A 40 150 30 200 100 20 100 50 C Д 4703 - сульфатная целлюлоза 4707 - макулатура 80% 80% 70% 70% 60% 60% 50% 50% 40% 30% 20% ■РФ ©Польша □Венгрия ■Словакия "Румыния ■Молдова □Другие ■Швеция ВСША В Австрия = Финл

Figure 5: Dynamics of imports of raw materials for the production of paper and cardboard

Waste paper is the main source of raw materials for Ukrainian enterprises for the production of paper and cardboard. Its procurement is carried out by collection points for recyclable materials, and there are more than a thousand of them in the country. Waste paper sales operations are exempt from value added tax. The bulk of the collected raw materials falls on "mixed" - a mixture of various types of paper and cardboard. The second place is taken by cardboard, the third is for office paper.

According to experts, Ukraine can theoretically meet the needs of its waste paper processing plants using its own resources. However, in practice, the shortage of raw materials is growing. Reasons are as follows: underdeveloped waste paper collection infrastructure; primitive sorting or the absence of it; low general culture of waste management.

There is no official data on the volume of waste paper collection in the country. According to experts, it is 800-850 thousand tons. More than a third of the demand for raw materials is met through the import of cellulose and waste paper. Their volumes are growing. The Russian Federation remains the main importer, although its share has noticeably decreased. In the last 5 years, the import of waste paper from Europe has noticeably increased, primarily from Poland. In 2019, imports of waste paper fell by 100 thousand tons, while imports of cellulose increased slightly.

#### 2.2 Timber and timber products

It is a group of timber products under customs code 44. In the past 5 years, against the background of a general recession in the economy and trade, its share in Ukrainian foreign trade turnover has been increasing. In total exports, it varies in the range of 2.8-3.2%, imports of 0.4-0.5% (Figure 2.1; Appendix 7). The group includes products classified as the 21st category. The general idea of their foreign trade is given by the data in Figure

2.5 reflecting the value structure (mln USD) of exports and imports for 2013 and 2019. The main categories identified by a 4-digit code are sorted in the chart by the total value of the trade turnover (export + import). The comparison of the current (2019) structure of export and import with indicators for 2013 allows us in general to outline the changes that have occurred as a result of the conflict with the Russian Federation, as well as under the influence of the decision on a 10-year moratorium on timber exports which came into force in 2016-2017. The graphs of foreign trade dynamics of basic timber products are shown in Figure below. In this context, it is important to identify the main categories of goods that determine the income and needs of the forest sector. These are shown below along with the customs classification codes and a brief description of the content of each category. Below there are the graphs of foreign trade and domestic consumption of the main types of timber products.

2013 4407-шилом атериалы 4407-шиломатерия 4403 - круглая древесина 20,3 189 4 4418 - двери, окна. 134,1 37,1 4411 -ДВП 4418 - пвери, окна. 63,4 4410 - ДСП 4411 -ДВП 111,8 4401 - дрова 4401 - дрова 27,8 - 60,2 4412- фанера 4,7 67,9 4415 - тара 4412- фанера 4402 - древесный уголь 4402 - древесный уголь 6.7 42 8 4421 - пное 14,5 - 22,4 4409 - фриза и др 8,5 — 19,8 3,2 — 18,6 4409 - фриза и др 4416 - бочки и др ,1 8,4 4415 - тара 4417 - ручки, оправы 4.9 4417 - ручки, оправы 3,4 -1,2 4419 - посуда 4419 - посуда 4405 - превесная шерсть ,3 -3,0 2,9 -4420 - сувениры 1,0 - 2,4 2,8 - 0,6 4419 - посуда 4404 -бондарная превесина 4405 - древесная шерсть 4420 - сувениры ,7 - 2,1 1,5 - 0.1 4416 - бочки и др 5 0.6 4414 - рамы 4414 - рамы -0,1 1,0 -0,0 4403 - круглая древесина 6--04 4404 -бондарная древесина 4413 - др. прессованная .1 0,1 ,6 0,0 4413 - др. прессованная 150 150 250 150 млн.USD млн.USD ■экспорт Импорт

Figure 6: Value structure of foreign trade in timber products (mln USD)

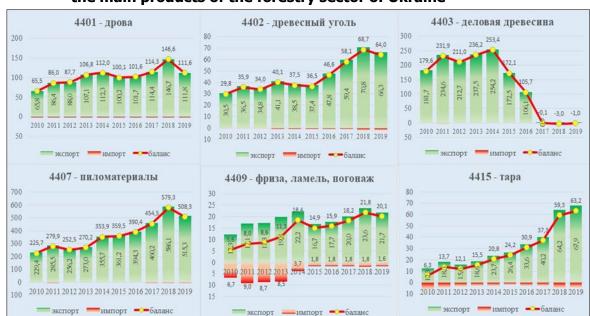


Figure 7: Dynamics of the value (mln USD) and the balance of foreign trade in the main products of the forestry sector of Ukraine

#### 3 Legal and normative regulation of roundwood trade

For ease of presentation, the measures of legislative regulation of timber trade in Ukraine, within the framework of this report, are conditionally divided into two groups: measures that determine the rights of ownership of timber and the rules of timber trade (1) and prohibitive and control measures aimed at combating corruption protecting Ukrainian producers and conservation of forests (2). Each of these is discussed in a separate subsection of Section 3 of this report.

According to the current Forest Code, permanent users of the forest have the exclusive right to harvest timber, as well as the ownership right on harvested products and income from their sale. According to the Civil Code of Ukraine, the owners own, use, dispose their property at their own discretion and have the right to perform any actions regarding their property that do not contradict the law. The state does not interfere with the owners' exercise of property rights. The owners' activities may be limited or terminated only in cases and in the manner prescribed by law.

It would seem that the law gives the right to enterprises, the owners of wood, to independently decide how to use it and makes them independent sellers of wood. However, it does not:

- 1. The owners of more than 80% of the marketable timber officially harvested in Ukraine are state forestry enterprises acting in concert and managed by the State Forestry Agency.
- 2. State forestry enterprises are not free to use the proceeds from the sale of timber, since they are obliged to ensure the restoration, security and protection of forests, having no other means for this and being responsible for forest management before the law.

3. Contrary to the Civil Code, the State Forest Agency, relevant ministries, the Verkhovna Rada, the Cabinet of Ministers, the Presidential Administration and even the governors are constantly violating the rights of timber owners, using different methods for this. Among them are the main ones: the imposition of rules and forms of trade on the owners; introduction of legislative and regulatory order restrictions on trade and movement of timber, contrary to the current legislation; informal, shadow methods of imposing trade partners and prices on state enterprises timber owners (Figure 3.1) [3].

# Figure 8: Fragments of the informal order of the State Forestry Agency management to the heads of state forest enterprises, on the procedure for concluding agreements for the sale of timber

- "... export contracts and direct contracts to sign exclusively with companies of the agreed list within the price parameters from the table ..."
- "...it is prohibited to sign new contracts with companies outside the list or with companies from the agreed list, but outside the agreed prices ..."
- "... monthly plans are subject to agreement with Ukrainian Forest Consulting no later than the 20th day of the month preceding the planned one" ...
- "... the head of the department is responsible for execution ..."

The main official document regulating timber trade in the period from 2007 to 2018 was the order of the State Forestry Agency as of February 19, 2007 Nº42 "On improving the mechanisms for the sale of untreated wood" [4]. The order enacted "The regulation on the organization and conduct of auctions for the sale of untreated timber" according to which:

- the regulation concerns the procedure for the sale of all unprocessed wood harvested by enterprises with the exception of fuel firewood, as well as wood for own needs of permanent forest users, individual repair and construction, meeting the needs of the social sphere and industrial woodworking divisions of permanent forest users;
- the sale of untreated timber by all permanent forest users is carried out through exchange auctions;
- auctions for the sale of untreated timber are held once a quarter on the basis of commodity exchanges located in regional centers, created in accordance with the Law of Ukraine "On Commodity Exchange" and the Economic Code of Ukraine;
- participation in the auction can be taken by economic entities that are engaged in wood processing;
- technological raw materials, pulpwood and raw materials for the manufacture of rotary cut veneer are sold only to business entities that have their own board, plywood, cellulose and paper production at specialized exchange trading in one auction session with another unprocessed wood;
- untreated timber not sold on commodity exchanges is sold by enterprises being permanent forest users under direct contracts at prices not lower than those established at the last auction.

Throughout the entire period of validity of this document, its provisions were never implemented, but were criticized and served as a source of constant conflicts [5]. The main claims of representatives of the woodworking sector were as follows:

- significant volumes of timber are not included in the exchange trading;
- speculators who are not related to the woodworking business are allowed to trade;
- the pricing system does not even provide for the theoretical possibility of reducing the starting price, which is systematically overstated in the interests of sellers;
- the bidding procedure does not guarantee wood processing enterprises purchase of wood of the required volume and quality.

In 2014, the process was initiated aimed at the improvement of the rules of timber trade, which have not yielded results to date. In 2017, order Nº 42 was canceled by a court decision as illegal. The created legal vacuum was filled by the Decree of the President of Ukraine as of July, 09, 2019 Nº 511/2019 "On some aspects of forest conservation and rational use of forest resources" according to which it is envisaged to prepare and submit for consideration by the Verkhovna Rada of Ukraine a draft law which provides for the introduction of the basis. To date, the Verkhovna Rada has submitted two bills with the same title "On the timber market" awaiting consideration.

According to the decree of the Cabinet of Ministers of Ukraine as of December, 04, 2019 Nº1178 "On the implementation of a pilot project for holding electronic auctions for the sale of untreated timber" provides for:

- the approvement of the Procedure for the implementation of a pilot project for conducting electronic auctions for the sale of individual consignments of untreated timber;
- for the duration of the pilot project, the appointment of the state enterprise "Prozorro.Prodazhi" ("Прозорро.Продажі"), the administrator of the trading electronic system through which at least 25% of the harvested timber should be sold;
- the obligation of the state forestry enterprises to participate in the project, the net income of which, according to the results of 2018, amounted to at least 10 mln UAH. The rest of the enterprises must sell timber at other electronic auctions;
- the establishment of the condition under which the participants in the pilot project put up for auction lots in the amount of at least 150 cbm, worth at least 200 tsnd UAH;
- the lots that do not meet these requirements to be sold at other electronic auctions.

The experiment has been conducted. Its results have not been summed up, but it can be argued that the majority of market participants have a negative attitude towards it.

Thus, the search for ways to optimize the timber trade has been going on for the seventh year. Its results are unpredictable.

According to the author of the report, most of the difficulties in introducing an adequate market system for the sale of timber in Ukraine are associated with the flaws of the legal model of forest management implemented in Ukraine, which contains systemic conflicts of interests that hinder the adoption of effective decisions for the country taking into account the situation in the economy, ensuring the advanced development of forestry sector and equally fair in relation to sellers and buyers of timber.

#### 4 Taxation in forestry

In relation to taxes, entities operating in the Ukrainian timber market can be divided into three groups:

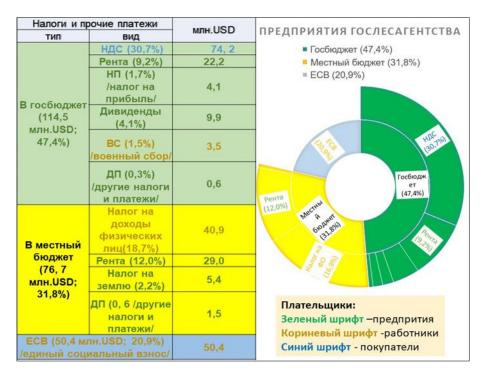
- sellers and buyers (legal entities being business entities) working on the general taxation system;
- individual entrepreneurs of the III group (individuals being entrepreneurs working on a single tax) at a single tax rate of 5;
- individual entrepreneurs of the III group at a single tax rate of 3% + VAT

Individual entrepreneurs whose total annual income does not exceed 5 mln UAH, are referred to the o individual entrepreneurs of the III group. (188.18 tsnd USD) (since April 2, 2020, the amount of income increased to 7 mln UAH (263.46 tsnd USD). They play a significant role in the forest sector of Ukraine, engaged in "yard" (farm) sawmilling providing services to the sphere of logging and sawmilling to larger business entities including state-owned forestry enterprises.

The rest of the timber market participants both buyers and sellers have the same taxation system with the only difference that regular users pay rent for the timber they harvest after which it becomes their property. Below is a brief description of the tax system and the results of its application at the enterprises of the State Forestry Agency in 2019.

Data in Fig. 4.1. give an idea of the general classification of taxes according to their type, payer and recipient.

Figure 9 Taxes of enterprises and institutions of the State Forestry Agency in 2019



Appendix 8 shows the actual data on the tax payment of enterprises and institutions of the State Forestry Agency since 2010 till 2019. Figures 4.2-4.3 show data for each tax in the form of graphs.

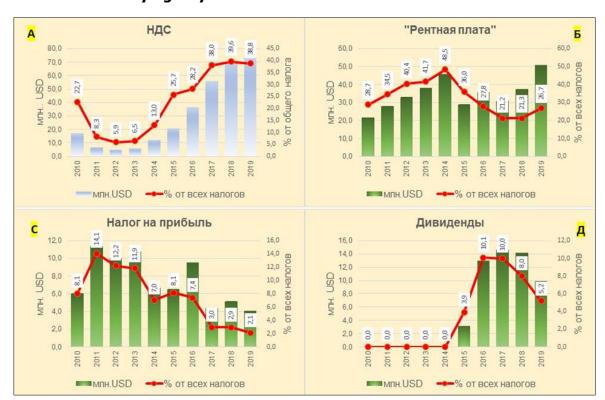


Figure 10: Dynamics of the main taxes of forest enterprises of the State Forestry Agency

**The VAT (value added tax)** is an indirect tax, the payers of which are practically all participants in business transactions (with the exception of the 3<sup>rd</sup> of group sole proprietorships operating on a single tax and not being VAT payers). In relation to tax, they are divided into active (registered with the state tax authorities) and passive (all other) VAT payers.

The object of taxation is the sale of goods and services. The VAT rate is 20%.

All state and communal enterprises - timber sellers - are active VAT payers. In relation to the tax, they are payers and tax agents. By purchasing goods and services, they pay the VAT and accumulate a "tax loan" (TL). When selling their products, the company receives the VAT from the buyer as a part of its price, forming its "tax liability" (TL). The amount of the VAT to the State budget is the difference between the tax liability and the tax loan (TL-TL). By transferring it to the budget, the enterprises enter into the role of tax agents.

In forestry companies selling timber, tax liabilities are many times higher than tax loans. This is well illustrated by the dynamics of the VAT payments by the enterprises of the State Forestry Agency (Fig. 4.2.A). Between 2011 and 2014, the VAT fee for the sale of roundwood timber was abolished. During this period, the share of the VAT in general taxation was 5-6%. The transition to the payment of the VAT increased it to 38%, due to the growth of tax liabilities of forest enterprises, which are formed at the expense of timber buyers.

When selling timber products in foreign markets, enterprises have the right to demand from the state compensation for the VAT paid to the budget in the production of exported goods. The amount of the compensation must be confirmed by a package of documents that are checked by the tax authorities. Numerous conflicts are associated with the VAT refunds for wood products in Ukraine, the essence of which ranges from the fraudulent behavior of exporters in calculating the VAT to the demand for kickbacks for agreeing to pay the VAT by tax officials.

"Rent payment for the special use of forest resources" is the most important tax payment of forest enterprises (Fig. 4.2B). Its full name is "rent for the special use of forest resources". There is no such tax in any market country in the world. It is not related to the real price of harvested timber, in its economic essence it is not a "rent" and is a kind of fee for the felling permit, which is closest to the stumpage rates used in the planned economy of the USSR. The tax is paid to the owner of the forest (the people of Ukraine) and transferred to the state and local budgets.

The payers of the rent transfer the amounts of the rent to the accounts opened with the bodies carrying out treasury services of budget funds, ensuring the distribution of these funds in the ratio determined by the Budget Code of Ukraine, as amended by the Law of Ukraine as of November 22, 2018 Nº 2621-VIII "On Amendments to the Budget Code of Ukraine", namely:

- 37 percent of the rent to the general fund of the state budget;
- 37 percent of the rent to the general fund of local budgets;
- 26 percent of the rent to the special fund of the state budget.

The funds of the special fund of the state budget are used to finance forestry.

This tax is extremely important as a tool for leveling differences in the conditions of growth, harvesting and delivery of wood for forestry. In addition, it is designed to properly motivate permanent forest users, orienting them towards sustainable, non-depleting forest management.

**Income tax** is 18% in Ukraine (Fig. 4.2C). After its deductions to the budget, state enterprises must pay dividends. (Figure 4.2D), paid from the net income of enterprises. They were insignificant, but due to the sharp increase in the budget deficit caused by the conflict with the Russian Federation, they were raised in 2015 to 75%, and in 2019 to 90%. In May 2020, the percentage of contributions to the budget of net income of state-owned enterprises was reduced to 80%. This rule is valid from January 1, 2020.

The withdrawal of such a high share of profits, against the background of the deepening economic crisis, was one of the important reasons for the deliberate minimization of profits by state forestry enterprises. Its obvious manifestation is a drop in the absolute values of dividends and a decrease in the profitability of enterprises. According to the latest indicator, according to the results of 2019, a new anti-record was set: the average profitability of the State Forest Agency enterprises in 2019 reached a historical minimum - 1.9%. Moreover, more than 130 enterprises had a profitability of less than 1%, and five were unprofitable.

Figure 11: Dynamics of taxes paid by employees and other taxes of the State Forestry Agency enterprises



**Income tax and military tax.** According to the Tax Code of Ukraine, the income tax, the full name of which is "individual income tax", refers to national taxes. Payment of such taxes is mandatory throughout Ukraine.

The object of taxation is the total monthly (annual) taxable income of individuals. The tax rate on income of employees of enterprises received in the form of salaries has not changed since January 1, 2016 and is equal to 18% (Section 167.1 of the Tax Code).

The military tax is paid on the entire income of employees, without any preliminary deductions. (before income tax and other deductions). The military tax rate is set at 1.5%. It is the same for all types of workers and does not depend on their income level.

**Other taxes.** This group of taxes includes the tourist tax, the tax on radio frequencies and a number of other taxes that are not paid by all enterprises and which in aggregate do not exceed 2% of the total tax payments. The composition of this group of taxes is not permanent. During periods of changes in the taxation system, sometimes this group included military tax and other small taxes, which complicates the analysis.

**Land tax.** In 2018, in accordance with the Law of Ukraine "On Amendments to the Tax Code of Ukraine and some laws of Ukraine regarding the stimulation of the creation and operation of family farms" (entered into force on August, 15, 2018), the tax was introduced in Ukraine for lands of forestry importance, which is a part of the land tax being a part of the property tax and is credited to the local budget. Its payers are the owners of land plots and land users, who simultaneously have the status of permanent users of the forest.

Within the limits of the authority determined by the Tax Code of Ukraine, the rates of property tax, including the part of the land tax for forest lands, are determined by local councils. They should not exceed the restrictions established by law, namely:

- should not exceed 0.1% of the normative and monetary value of one hectare of forest and non-forest lands of forestry importance, if this assessment has been carried out;
- should not exceed 0.1% of the normative-monetary value of one hectare of arable land in the corresponding area, if the assessment has not been carried out.

In 2019, the amount of tax on forestry land in permanent use of state forest enterprises amounted to 5.4 mln USD, or 2.2% of their total taxation.

It should be noted that many experts believe that the emergence of a tax on forestry lands is a violation of the principles of one-off taxation and fairness. The rationale for this is as follows: first, the new (1918) provision of the Tax Code, according to which "the tax on forest land consists of land tax (1) and rent (2), determined by tax legislation"; secondly, the fact that tax is imposed on all forest lands without exception, including those whose economic use is prohibited (reserves, etc.) or impossible (felling, young plantings, etc.).

**Pension and social contributions (USC).** Since 2011, the "unified social contribution" (USC) has replaced the previously existing compulsory state social contributions: pension, as well as insurance contributions in case of unemployment, illness or accident. USC is a consolidated premium collected by the national insurance system on a mandatory and regular basis.



Figure 12: Dynamics of deductions of pension and social contributions (USC) by the State Forestry Agency enterprises

The basis for calculating the amount of USC is salaries. Since 2011 till 2015 inclusive, the size of USC has been 34.7%, and since 2016 till the present, 22% of the salary fund.

In case if the salary is equal to or less than the minimum level established by the country, the rates for calculating USC are fixed. In 2019, they were equal to 918 UAH, in 2020 - 1044 UAH.

USC is not a tax. In its economic essence, this is a part of the wages of employees, which is compulsorily deducted to the insurance fund and is used to pay pensions and insurance payments to the employee in case of disability for one reason or another.

In the economic assessment and self-assessment of the activities of the state forestry enterprises subordinated to the State Forest Agency, it is customary to credit them with the entire volume of taxes and mandatory payments transferred to budgets and funds, and also to complain about excessive taxation. At the same time, the fact is ignored that in a number of cases, enterprises transfer other people's money, acting as tax agents. The data shown in Fig. 4.4 clearly illustrate the change in the dynamics and structure of taxes

and mandatory payments sent to the budgets and funds by the state forestry enterprises, taking into account who is their real payer.

Figure 13: Dynamics of the size (mln USD) and structure (%) of taxes and obligatory payments transferred by the State Forestry Agency enterprises to the budgets and funds



Obviously, the main reason for the increase in deductions from forest enterprises to budgets and funds is the increase in the VAT, the amount of which increased from 5-6 mln USD in 2012-13 to 70-74 mln USD in 2018-2019. The share of this VAT in the total payments of enterprises, in the same period, increased from 3 to 30%. The reasons for the increase in the tax are the abolition of the moratorium on the payment of the VAT on the sale of roundwood timber, which was in effect from 2011 to 2015, and the moratorium on the export of timber, which allowed enterprises to minimize the VAT payments. The actual VAT payers are woodworking enterprises - wood buyers (blue in the graph). The role of state-owned enterprises is reduced only to transferring their money to the budget.

A part of payments to the budgets (income tax and military tax) are made by employees of enterprises from their salaries. The size of these payments is completely determined by the number of employees and the level of salaries. Their share in total payments is relatively stable. Some of its increase in recent years is due to the introduction of the military tax and the outstripping growth of wages in 2014-2017 in most enterprises of the State Forest Agency.

The total amount of other taxes (rent, income tax, dividends, other taxes) and USC shows a downward trend. If in 2012 and 2013 enterprises transferred 137.4 and 148.2 mln USD under the above-mentioned articles respectively, then in 2018 and 2019 it amounted to 111.4 and 123.0 mln USD, that is, more than 20 mln USD less.

The sharp increase in corporate taxes in 2019 against the background of a decrease in the volume of timber harvesting, attracts attention. Its main reason was the increase in rental payments and the introduction of a land tax. When assessing the impact of these innovations on forestry, it should be borne in mind that 26% of the total rent payments, starting in 2019, are directed to financing forestry.

In general, the taxation system operating in the forestry sector of Ukraine is completely unbalanced and not fair. The reasoning behind this conclusion is beyond the scope of this paper.

#### 5 Subsidies and investments

#### **5.1** Subsidies (external funding)

The main and probably the only official sources of subsidies for forestry in Ukraine are the state and local budgets. Their significance is incomparable: subsidies to local budgets are not predictable and are less than subsidies from the state budget.

Data on the level and dynamics of budget subsidies for forestry are given in Appendix 9.

Budget financing of forestry up to 2014 inclusive was allocated on the basis of the target state program "Forests of Ukraine". Its recipients were forest authorities, as well as forest enterprises and organizations under the management of the State Forestry Agency of Ukraine. Communal forestry enterprises, as well as state forestry enterprises, did not have other subordination to budgetary funding.

The codification and list of budget items directed to the needs of forestry have changed. The main changes took place in 2011 and are as follows:

In connection with the transfer of forest schools and colleges to the system of the Ministry of Education, the article "Training of forest specialists and bachelors" was excluded

The funds previously allocated to science under three budget items such as "Applied scientific research" (1), "Fundamental scientific developments" (2) and "Training of scientific personnel" (3), are combined in one article "Scientific research and training of personnel".

The funds allocated under the articles "Creation of protective forest plantations (forest belts)" and "Protection of the natural reserve fund" are combined with the funds allocated under the article "Forestry and hunting".

Thus, since 2012, forestry has received budget funds under three items:

- 1. "Management (maintenance) in the field of forestry", financing of the activities of the State Forestry Agency and regional departments of forestry and hunting;
- 2. <u>"Conducting forestry and hunting",</u> financing of work performed by forest enterprises and institutions related to forestry, protection and security of forests.
- 3. <u>"Scientific research and training of personnel"</u>, financing the activities of research institutes subordinate to the State Forestry Agency.

Until 2014, the State Forest Agency was the manager of budgetary funds allocated for forestry. Later, this status was lost and passed to a higher authority: first to the Ministry of Agrarian Policy and Food, then to the Ministry of Environmental Protection and Energy, and eventually to the Ministry of Environmental Protection. Since 2019, the State Forest Agency has ceased to receive funds under the article "Scientific research and training of personnel" which are now directed to the corresponding article of the relevant ministry.

Thus, at present, the forestry of Ukraine is financed only under two items: management of the industry (1) and forestry and hunting (2). The dynamics of funds allocated for them over a 10 year period, in hryvnia and dollar equivalent, is shown in Figure 5.1. The funding allocated under the item "Forestry" in 2010 and 2011 is calculated as the amount of funds

allocated for forestry, the creation of protective plantations and the protection of the nature reserve fund.

800 100,0 A 738 B млн.USD млн.грн 85.8 90.0 700 80.7 Ведение лесного 597 500 80,0 хозяйства 70,0 488 Управление лесной 500 32,5 отраслью 60,0 MIH. USD

23

2018 2017 2016

50,0

40,0

30.0

20,0

100

400

300

200

100

Веление лесного

2013 2014 2015

хозяйства Управление лесной

отраслью

Всего

20.6

Figure 14: Dynamics of budgetary financing of forestry management costs and maintenance in hryvnia (A) and US dollars (B)

The charts show the project of financing the forestry industry, given in the draft budget for 2021 (as of October 30, 2020).

The catastrophic decrease in funds allocated to support forestry and hunting in 2014-2016 is due to a number of objective and subjective reasons, the main of which are: the end of the period of the state program "Forests of Ukraine" (1) and non-professional management of the industry (2).

Since 2015 till 2018, budget funds were allocated only to budgetary organizations and forestry institutions, the bulk of which was related to National Natural Parks and Reserves. As a result, many enterprises in the industry that did not have production forests and were deprived of the opportunity to independently meet their needs were brought to the brink of bankruptcy. Most of these enterprises are located in the steppe, arid, southeastern zone of Ukraine, where there are very few forests and they perform exclusively protective, ecological and social functions. During this period, to ensure their survival, not typical forms of subsidies were used not provided by legislation: employees of relatively prosperous enterprises transferred their one-day wages to the needy every month; prosperous enterprises took "patronage" over the poor and gave them part of their products free of charge with the right to sell them; the collection and transfer of funds for support were carried out by trade union organizations.

In 2019 and 2020, the budget support for enterprises was increased. In hryvnia equivalent, it approached the pre-crisis level, and according to the draft budget for 2021, it will even exceed it (Figure 5.1.A). However, this increase does not take into account inflation processes, and therefore its degree is significantly exaggerated. The estimate in US dollars (Figure 5.1B) reflects the real picture: against the background of deteriorating conditions for the sale of timber, a decrease in income and a simultaneous increase in the need for financial investments in maintaining the sustainability of forests, the financial support of the state forestry has decreased by 3-4 times.

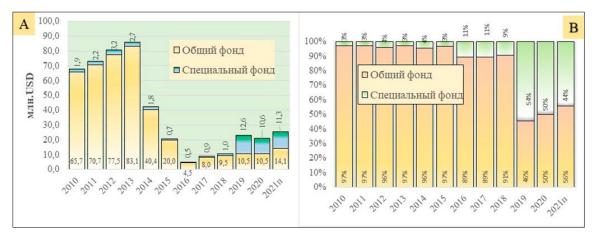
General and special funds are allocated in the budget of Ukraine (Table 1)

Table 1: Components of general and special budget funds

List of components of the general fund of the budget	List of components of the special fund of the budget
All budget revenues, except for those intended to be credited to a special budget fund	Budget revenues (including own revenues of budgetary institutions), which have a target direction
All budget expenditures carried out from the revenues of the general fund of the budget	Budget expenditures, which are carried out at the expense of specific revenues of the special budget of the budget (including own revenues of budgetary institutions)
Budget lending (return of loans to the budget without defining the target direction and granting loans from the budget, carried out at the expense of the general budget fund) budget)	Budget lending (return of loans to the budget with the determination of the target direction and the provision of loans from the budget, carried out at the expense of specific receipts of the special budget fund)
Funding of the general fund of the budget Funding of the special fund of the budget	Financing of the special budget fund

Figure 5.2.demonstrates the dynamics of financing of the state forestry of Ukraine from various budget systems is shown.

Figure 15: Dynamics of budgetary financing of expenses for forestry management and maintenance from general and special budget funds in US dollars (A) and % (B)



The charts show the project of financing the forestry industry, given in the draft budget for 2021 (as of October 30, 2020).

Until 2018, inclusive, the special budget fund allocated for the needs of forestry was replenished mainly at the expense of the own revenues of budgetary organizations and institutions, in particular, payment for the contractual work performed by them with economic entities, as well as transfers related to hunting management (payment for hunting cards, licenses, etc.). Most of these funds were difficult to plan for. Their total volume was insignificant and until 2015 did not exceed 3% of the total budget financing. Its slight relative increase in 2016-2018 (Figure 5.2 B) is illusory. In fact, in absolute terms, funding from the special fund has decreased, but to a much lesser extent than funding from the general fund.

The dramatic increase in the share of the special fund in 2019 is due to changes in the Tax Code, according to which 26% of the rent for the special use of forest resources is transferred to a special budget fund. This measure makes it possible to link budgetary support for forestry with the volume of tax payments, and thus to be able to redistribute funds between regions. However, the possibilities of further increase of funding from this source are extremely doubtful, since in order to increase the size of the special fund by 1 mln USD and direct this money for forestry in sparsely forested steppe regions, taxes will need to be increased by almost 4 mln USD and, consequently, reduce the income of all forest enterprises, especially those that harvest large volumes of wood.

In general, the existing system of budgetary support for state forestry in Ukraine should be recognized as ill-considered and inadequate. In fact, its further use is a direct path to further deterioration of the state of forests, an unreasonable increase in felling, bankruptcy of state forestry enterprises in low-wooded regions of the country. The main flaws in the system of budgetary support for state forestry include:

- inconsistency of the amount of allocated funds with the tasks facing forestry, external conditions of management and the own capabilities of forestry enterprises;
- lack of a system of management and control over the distribution and use of allocated budget funds;
- chronic non-financing of activities carried out in the interests of the state as a
  whole (inventory and accounting of forests, protection and security of forests,
  accounting and control of the sale of timber harvested in state forests,
  afforestation, development of forest infrastructure, etc.)

#### 5.2 Investments

To assess the investment of external investments in the forestry sector of Ukraine is difficult. This is due to the fact that investments in various segments of the forestry sector are assessed in conjunction with other activities that are not related to it. For example, investments in forestry are aggregated with investments in agriculture and fisheries, and investments in furniture production with investments in other products, as well as repair and installation of machines (Figure 5.3). Investments in woodworking are combined with investments in the production of cellulose and paper products and printing. Although all these activities are included in the "forest cluster", they are strongly removed from each other and should be considered separately.



Figure 16: Dynamics of external investment (equity) in forest-related activities

Assessing investments in the forestry sector according to the media and other unofficial sources, the following can be noted:

- Apart from international projects aimed at promoting the development and reform
  of the forestry sector, there have been no external investments in forestry to date.
  Separate attempts to implement investment projects at the beginning of the
  millennium were made by the Austrian state forest company ÖBf AG and the World
  Bank, but they did not receive support in Ukraine.
- 2. Investments in wood processing, primarily the development of sawmill and panel production, as well as the production of biofuels, increased significantly after the ban on the export of roundwood, but remain insufficient. According to data for the last 5 years, more than 65% of investments are in four countries: Cyprus (30%), Austria (14%), Poland (12%), Switzerland (11%).
- 3. It is currently not possible to estimate investments in furniture production.

Overall, external investment in the Ukrainian forest sector is much less than expected. The main reasons for this are the high corruption load on the promotion of investment projects and the lack of guaranteed access to the volumes of raw materials necessary to ensure the smooth operation of woodworking enterprises.

Figure 5.4 demonstrates the data reflecting the dynamics of domestic capital investment in the development of various segments of the forestry sector. In contrast to the data shown in Figure 5.3, domestic investments in forestry and harvesting are shown separately, and investments are shown in millions of US dollars.



Figure 17: Dynamics of domestic investment (capital investment) capital) in activities related to the forest sector

The main source of capital investment is the own funds of enterprises. In forestry, there were isolated precedents for the targeted allocation of budget funds for the purchase of fire fighting equipment and the construction of roads. Usually they are associated with large fires, are relatively small and are directed to the disposal of the affected forest enterprises and do not have a systemic impact on the development of the industry.

Capital investments include costs in the amount of more than 20 thd UAH (about 700 USD), which are directed to the reproduction and development of the production process, including the repair of equipment and buildings, the purchase of equipment, new construction. The financial accounting system used in forestry does not make it possible to assess the structure of capital investments by directions of their use, as is done in Germany and other countries.

A joint analysis of official statistics and data from other sources allow us to state the following:

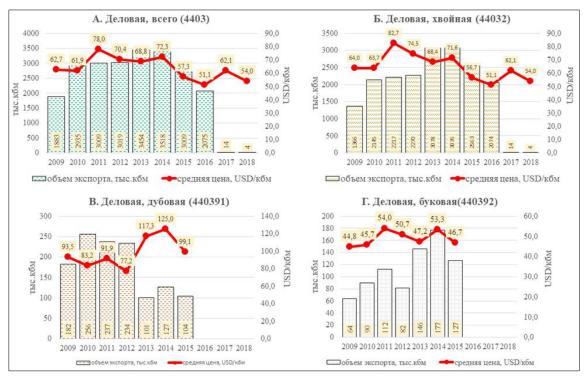
Investments in forestry and harvesting are extremely small, as evidenced by the widespread use of outdated production technologies, the presence of a large number of old (more than 10-20 years) equipment and mechanisms in the vehicle fleet, and insufficient development of forest infrastructure.

Since the adoption of the moratorium on timber exports, there has been an accelerated investment in wood processing. The funds are mainly directed to the development of sawmilling, production of wood chips and pallets, as well as drying facilities.

#### 6 Prices for roundwood

In Ukraine, there are no official sources of information on the level and dynamics of timber prices on the domestic market. The data on the value of exported timber for the period from 2010 to 2017-2018 are summarized in the graphs in Figures 6.1 - 6.3.

Figure 18: Dynamics of volume and average prices of commercial roundwood timber exported from the territory of Ukraine since 2009 till 2018



The main volume of Ukrainian exports of products of the customs code 4403 falls on coniferous wood, which, when recorded, is not divided by species. Its main volumes are supplied to three countries: Romania, Turkey and China. The terms of delivery and average prices for softwood shipped to different countries are different, but the general trends in price changes are similar (Figure 6.2).

Figure 19: The volume and average price of commercial conifer timber exported to the countries being main buyers

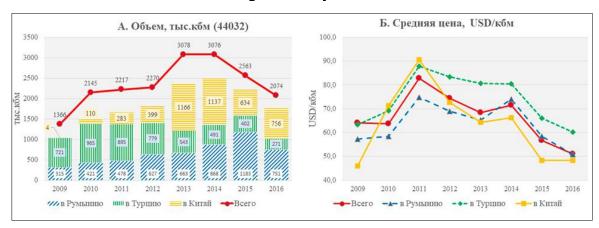
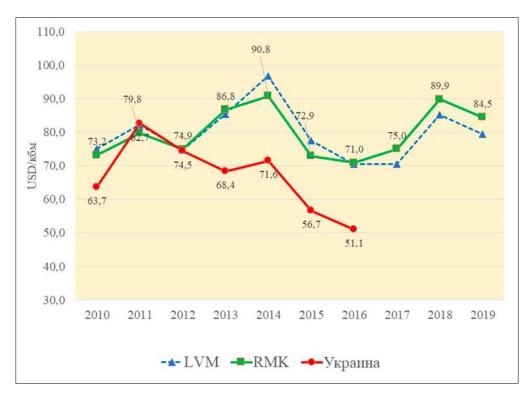


Figure 6.3 compares the average prices of softwood sold by state-owned enterprises in Latvia and Estonia (by the road, excluding VAT) with export prices for similar Ukrainian timber.

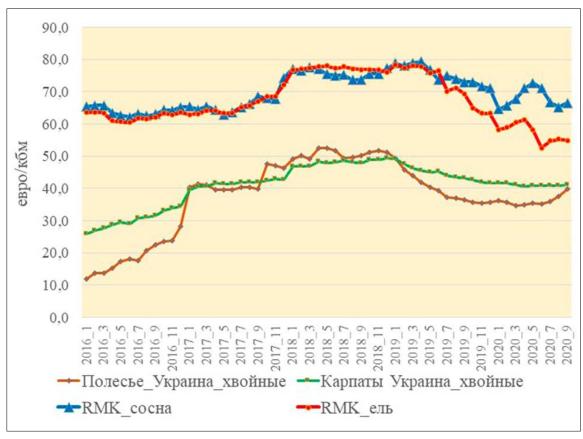
Figure 20: Dynamics of average annual prices for pine sawlogs with a diameter of more than 18 cm, sold by state-owned enterprises of Latvia (LVM) and Estonia (RMK) and conifer wood exported by Ukraine



It is noteworthy that the differences in the compared ones increased sharply after 2012, which is undoubtedly due to the large-scale introduction of large-scale corruption schemes in the trading practice of state-owned enterprises, associated with the understatement of official schemes and the development of the practice of paying the buyer for "marketing services" or trade through registered offshore intermediaries.

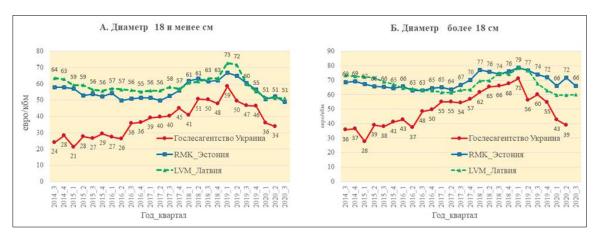
The comparison of average annual prices does not give a complete idea of how much the prices of the export-oriented Ukrainian market depend on fluctuations in world and European prices for timber. The dynamics of monthly or quarterly prices is much clearer. The graphs below show the comparative changes in prices for softwood in Ukraine and the Baltic countries. We emphasize that the prices for Ukraine are calculated as the average for the enterprises of the State Forestry Agency of forest regions (Polissia and the Carpathians) and are recalculated in euros. It should be noted that in Polissia almost the entire volume of coniferous wood is represented by pine. Various conifers are harvested in the Carpathians, but spruce prevails in quantitative terms.

Figure 21: Dynamics of average prices for sawlogs with a diameter of more than 18 cm in the domestic market of Ukraine by natural zone and similar pine and spruce timber sold by the State Forestry Center of Estonia (RMK)



The graphs in Figure 6.5. demonstrate the comparison of prices for pine wood of different diameters, harvested by the state forestry structures of Latvia, Estonia and Ukraine.

Figure 22: Quarterly dynamics of average prices for pine sawlogs of different diameters, harvested by state-owned enterprises of Ukraine, Estonia and Latvia



In all cases, the price level of Ukrainian timber is much lower than in the Baltic countries, and the patterns of their dynamics are significantly different. This is due to a number of reasons, including the main ones:

- different approaches to wood sorting;
- lower quality of Ukrainian timber in average;
- deliberate understatement of prices, in order to obtain unlawful benefits.

Below, according to the sales data of coniferous and oak roundwood for the third quarter of 2020, the average prices of coniferous and oak timber in the domestic market of Ukraine are shown, depending on the diameter and quality class (Figure 6.6).

Figure 23: Dependence of average prices in US dollars for commercial conifer and oak timber on size (diameter) and quality (quality class)

		•		<u> </u>	
	Круглый	лес хвойн	ый		
Диаметры/классы	A	В	C	D	Итого
D1a (10-14)	0,0	26,6	21,2	20,6	21,5
D1b (15-19)	40,2	32,4	29,1	22,6	26,3
D2a (20-24)	40,2	36,9	33,3	26,6	31,9
D2b (25-29)	42,1	38,9	35,2	28,2	34,1
D3a (30-34)	43,9	40,4	36,8	29,1	35,7
D3b (35-39)	46,1	41,4	38,5	29,6	37,0
D4 (40-49)	47,0	42,9	40,1	30,1	38,1
D5 (50-59)	48,1	45,3	43,3	30,2	38,8
D6 (>=60)	48,5	48,6	46,7	30,6	38,2
Итого	43,8	39,0	34,3	26,9	33,0
	Круглый	лес дубов	ый		
Диаметры/классы	A	В	С	D	Итого
D1a (10-14)	0	0	36	38	38
D1b (15-19)	0	97	62	44	46
D2a (20-24)	141	113	90	64	72
D2b (25-29)	231	194	131	78	99
D3a (30-34)	311	252	176	93	132
D3b (35-39)	392	310	208	107	162
D4 (40-49)	525	378	231	120	199
D5 (50-59)	558	426	260	130	235
D6 (>=60)	591	445	287	141	259
Итого	440	324	194	98	152

Attention is drawn to the unsignificant by European standards, prices of coniferous and very high prices of oak wood. Evaluating this fact, it is useful to assess the size-quality structure of the sale of coniferous and oak wood (Figure 6.7.)

Figure 24: Sales structure of conifer and oak timber in the 3rd quarter of 2020 by size and quality

	Кругль	ий лес хвой	иный		
Днаметры/классы	Α	В	С	D	Итого
D1a (10-14)	0,0	0,0	0,1	0,2	0,3
D1b (15-19)	0,1	1,4	4,8	6,4	12,8
D2a (20-24)	0,7	4,7	8,0	7,7	21,1
D2b (25-29)	0,8	6,7	9,6	8,4	25,6
D3a (30-34)	0,9	4,9	6,5	5,6	17,9
D3b (35-39)	0,8	3,1	4,0	3,6	11,
D4 (40-49)	0,6	1,6	2,1	2,1	6,4
D5 (50-59)	0,1	0,2	0,3	0,4	1,0
D6 (>=60)	0,0	0,0	0,0	0,1	0,2
Итого	3,8	22,8	37,0	36,3	100,0
	Кругль	ий лес дуб	овый		
Диаметры/классы	Α	В	С	D	Итого
D1a (10-14)	0,0	0,0	0,0	0,1	0,:
D1b (15-19)	0,0	0,0	0,1	1,3	1,4
D2a (20-24)	0,1	0,2	2,1	6,4	8,
D2b (25-29)	0,2	0,9	3,6	11,2	16,0
D3a (30-34)	0,3	1,5	5,5	12,4	19,8
D3b (35-39)	0,3	2,1	6,9	12,7	22,0
D4 (40-49)	0,7	2,6	6,9	11,5	21,0
D5 (50-59)	0,4	1,2	2,3	4,0	7,9
D6 (>=60)	0,2	0,4	0,6	1,2	2,3
The state of the s					100,0

#### **List of References**

- 1. Popkov M. Forest policy and strategy of Ukraine: assessment, problems and solutions. FLEG Report, World Bank, Kyiv, 2014.
- 2. Order of the State Forestry Committee of Ukraine as of February, 19, 2007 № 42 "Regarding the improvement of mechanisms for the sale of untreated wood"
- 3. Podkorytov V.I. Problems of the Ukrainian timber market related to the trade in roundwood timber. FLEG Report, World Bank, Kyiv, 2014.

## **Appendix**

Приложение 1 Заготовка древесины в Украине по видам лесной продукции (2010-2019)

										тис.м <sup>3</sup> )
Заготовлено	2010	2011	2012	2013	2014 1	2015 <sup>1</sup>	2016 <sup>1</sup>	2017 <sup>1</sup>	2018 1	2019 <sup>1</sup>
Bcero <sup>2</sup>	18065	19746	19764	20341	20672	21924	22613	21923	22530	20870
Ликвидной древесины	16146	17510	17507	18022	18333	19268	19606	18914	19696	17887
деловой древесины	7536	7989	7851	8102	8159	8303	8311	7297	8976	9303
хвойных	555	277		7.07	6615	6647	6763	5845	6713	7315
лиственных	272	15.22		13.22	1544	1655	1549	1452	2263	1989
в том числе										
пиловочник и фанерный кряж	5732	6300	6306	6645	7054	7020	6946	5909	6021	6237
хвойных	4526	4987	5025	5416	5774	5706	5684	4719	4458	4881
лиственных	1205	1313	1282	1229	1279	1313	1262	1190	1563	1357
балансы	1102	1118	1026	986	722	812	873	761	878	263
хвойных	609	682	687	706	526	549	637	573	700	182
лиственных	493	436	339	280	196	263	236	189	178	81
Другие сортименты	703	572	519	471	384	471	492	626	2077	2803
хвойных				322	315	393	441	553	1556	2252
лиственных			***	8153	68	78	51	73	522	551
Топливная древесина	8610	9521	9656	9920	10174	10965	11294	11617	10720	8583
хвойных	7.7.7				4446	4880	5462	5973	6048	3951
лиственных	2.22	322		122	5728	6085	5832	5645	4671	4633
Неликвидная древесина	1919	2236	2257	2319	2339	2657	3007	3009	2834	2983

 $<sup>^{1}</sup>$  Не учтены данные по оккупированным территориям Крыма, Донецкой и Луганской областей

 $<sup>^2</sup>$  В 2019 году учет заготовленной древесины проводился по новым правилам сортиментации

Приложение 2

	Product name hy the Nomenclature of	tha					Годы				
Продукция	products of industry (the Nomendature)	измерения Unit	2011	2012	2013	20141	2015	2016	2017	20181	20191
Пиломатериалы ели и пихты	Spruce wood ( <u>Picea abjes</u> Karst.), fir wood ( <u>Abjes</u> alba Mill.) sawn or chipped lengthwise, sliced or peeled, of a thickness > 6 mm	TMC.M <sup>2</sup> /	283	232	244	239	274	294	274	342	229
пиломатериалы сосны	Pine wood (Pinus sylvestris L.) sawn or chipped lengthwise, sliced or peeled, of a thickness > 6 mm	TMC.M2 / thsd.m3	684	719	741	773	776	897	1412	1996	1192
Пиломатериалы других хвойных	Coniferous wood sawn or chipped lengthwise, sliced or peeled, of a thickness of > 6 mm (excl. spruce "Ricea abjes Karst.", silver fir "Abjes, alba Mill." and pine "Pinus sylvestris L.")	тис.м² / thsd.m²	411	392	339	301	398	438	409	367	329
Пиломатериалы лиственнх	Wood, sawn or chipped lengthwise, sliced or peeled, of a thickness > 6 mm (excluding conferous and tropical woods and oak blocks, strips and friezes)	TMC.M <sup>2</sup> / thsd.m <sup>2</sup>	423	398	384	373	396	458	480	478	308
пиломатериалы, всего		thsd.t	1801	1741	1708	1686	1844	2087	2575	3183	2058
хвойный погонаж, фриза (хвойные)	Coniferous wood continuously shaped (including strips and friezes for parquet flooring, not assembled)	TMC.I./ thsd.t	9,9	7,1	9,1	11,3	14,1	13,5	18,8	30,6	27
хвойный погонаж, фриза (пиственные)	Wood, incl. strips and friezes for parquet flooring, not assembled, continuously shaped "tongued, grooved, rebated, chamfered, V-jointed beaded, moulded, rounded or the like" along any of its edges, ends or faces, whether or not planed, sanded or end-jointed (excl. coniferous wood and bamboo)	TMC.T./ thsd.t	40.2	42.8	50,4	53.2	69.1	63.9	64.3	101	101
ДСП	Radicle board, of wood	TMC.M3 / thsd.m3	1545	1433	1389	1313	1269	1304	1388	1437	1279
Фанера	Other plywood, veneered panels and similar laminated wood, of other wood <sup>2</sup>	TMC.M3 /	168	167	175	191	186	181	180	190	177
Паркет щитовой	Assembled parquet panels of wood for mosaic floors	TMC.M2 / thsd.m2	184	371	313	364	448	523	419	363	304,8
Окна, двери, рамы	Windows, french windows and their frames, of wood	thsd.pcs.	905	875	1305	1025	1013	875	1096	1002	1049

Продолжение приложения 2

	Product name by the Nomenclature of ed.	- Нә					Годы				
Продукция	products of industry (the Nomenclature)	измерения Unit	2011	2012	2013	20141	2015	2016	2017	2018	2019*
Дверные блоки	Doors and their frames and thresholds, of wood	TMC.UUT /	1105	7.76	1467	1203	1092	864	957	968	1115
Бумага и картон <sup>2</sup> дд. графики	Graphic paper, paperboard: mechanical fibres ≤ 10%, weight ≥ 40 g/m² but ≤ 150 g/m², in rolls	IMC.I./ thsd.t	33,2	14,6	13,7	8,7	3,5	2,8	1,3	1,4	
Бумага для быта	Paper stock for household: others	TMC.I./ thsd.t	113	129	121	124	119	115	120	127	126
Бумага и картон плотностью менее 150 г/м²	Other uncoated paper and paperboard, in rolls or sheets, weight ≤ 150 g/m² (excluding products of HS 4802, fluting paper, testliner, sulphite wrapping paper, filter or felt paper and paperboard)	TMC.I./ thsd.t	170	153	345	317	298	300	321	325	264
Бумага и картон плотностью от 150 до 225 г/м²	Other uncoated paper and paperboard, in rolls or sheets, weight > 150 g/m² and < 225 g/m² (excluding products of HS 4802, fluting paper, testliner, sulphite wrapping paper, filter or felt paper and paperboard)	TMC.I./	295	319	152	125	93.7	99,4	114	120	93
Бумага и картон гофрированные	Corrugated paper and paperboard in rolls or sheets	TMC.I./ thsd.t	158	159	168	146	149	149	160	149	147
Коробки из гофрированного картона и бумаги	Cartons, boxes and cases, of corrugated paper or paperboard	TMC.I./ thsd.t	446	458	493	464	395	430	452	476	452
Коробки и ящики из негофрированного картона	Folding cartons, boxes and cases of non-corrugated paper or paperboard	JMC.I./ thsd.t	81,9	84,6	102	92,7	78,5	81,2	124	129	94
Туалетная бумага	Loilet paper.	INC.I./ thsd.t	93,1	104	111	115	102	104	106	105	102
Мягкие стулья с деревянным каркасом	Upholstered seats with wooden frames (including three piece suites) (excluding swivel seats)	TMC.LLIT. / thsd.pcs	1115	1202	1034	980	565	421	410	440	475
Жесткие ступья с деревянным каркасом	Non-upholstered seats with wooden frames (excluding swivel seats)	TMC_LUT /	527	587	724	998	756	565	999	433	-

	-	,		4			,		Продолже	Продолжение приложения 2	эжения 2
	Product name by the Nomenclature of A. Product name by the Nomenclature of A.	ед.	Дукции де	pegooobao	атывающе	alo cektop	Годы				
Продукция	products of industry (the Nomenclature)	измерения	2011	2012	2013	20141	2015	2016	20171	20181	2019*
Офиска мебель деревнная	Wooden furniture of a kind used in offices	TMC.LLIT /	929	555	651	399	376	495	650	623	595
Мебель дл. тоговых предпритий деревнная	Wooden fumiture for shops.	TMC.LLT /	276	269	297	209	133	194	275	223	198
Мебель дд кухонь	Kitchen fumiture	MOH.LLIT /	1,1	1,1	1,3	1,1	6'0	1,1	1,3	1,2	ТЯ
Мебель для спален деревянная	Wooden bedroom furniture (excluding builders' fittings for cupboards to be built into walls, mattress supports, lamps and lighting fittings, floor standing mirrors, seats)	TMC.LLT./ thsd.pcs	535	597	478	483	200	592	750	674	654
Мебель для столовых деревянная	Wooden furniture for the dining-room and living-room (excluding floor standing mirrors, seats)	MOH.LUT./ mlo.pcs.	1,1	1,1	1,2	1,0	8'0	6'0	1,5	1,7	1,9

Без учета окудированных территорий
 Основным сырьем для производства украинской бумаги и картона является макулатура. Целлюлозного производства в стране нет.

Приложение 3

						Го	ды				
Код	ед.изм.	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Итого		5045883	5389576	5437725	6119642	6884925	7287204	6829228	5305458	5624447	443302
4 401	tonn	1126354	1164900	1228330	1521729	1757272	2041116	2040150	1974036	1884442	114443
4 402	tonn	80715	83164	82244	89118	96916	121196	151831	174519	174388	15573
4 403	tonn	2344673	2394017	2383896	2787708	2876701	2497181	1732231	10701	2844	2
4 404	tonn	3857	3373	3462	2539	3342	2497	5787	12038	9906	1050
4 405	tonn	7	346	1156	1323	1555	2661	4294	5002	5458	523
4 406	tonn	8948	15012	21917	8668	8673	7536	5571	4961	6190	745
4 407	tonn	973089	1116127	1010661	1054407	1383782	1743779	1891800	2069377	2334616	204639
4 408	tonn	33482	36540	40261	42395	56907	87094	117167	135702	137835	11726
4 409	tonn	10447	13047	12591	14957	22295	23729	25668	28821	31686	2904
4 410	tonn	252676	279259	328290	246571	314013	358450	380481	344870	300586	21744
4 411	tonn	26016	66110	106303	115929	88393	53664	49120	63671	82918	10799
4 412	tonn	67384	71112	78987	80629	92127	89792	93183	87415	88420	8844
4 413	tonn	32	78	19		170	60	222	22	34	71
4 414	tonn	99	106	57	24	47	29	86	135	149	22
4 415	tonn	56346	69830	64632	72515	95947	151097	206757	241928	385849	31592
4 416	tonn	668	831	1107	926	1423	3593	4857	5758	5254	510
4 417	tonn	4960	5468	4719	4718	5293	5995	7255	7808	7251	682
4 418	tonn	43633	53863	51823	58683	64680	80842	88053	102992	115299	11080
4 419	tonn	630	951	1316	1234	1076	1606	890	914	876	133
4 420	tonn	96	113	259	121	110	92	133	156	174	17
4 421	tonn	11771	15329	15695	15448	14203	15195	23692	34632	50272	6193
Итого		827994	1072784	1059613	1143721	1261955	1106384	1130636	1204743	1492544	139865
4 401	USD	65802	86389	88015	107141	112319	100188	101696	114368	146671	11177
4 402	USD	30506	36479	34751	41145	38549	37442	47761	59400	70780	6628
4 403	USD	181693	234648	212672	237542	254218	172514	106090	887	191	
4 404	USD	651	719	470	359	606	431	816	1407	1436	236
4 405	USD	9	59	267	588	861	1106	1929	2765	3024	302
4 406	USD	2488	4522	6406	2422	2380	1369	1062	970	1243	148
4 407	USD	229397	285505	256245	273021	355713	361211	394310	460165	586141	51525
4 408	USD	58194	66661	73171	82508	94176	99090	135072	175012	198187	19735
4 409	USD	12302	17072	17308	19772	22190	16733	17681	19992	23635	2168
4 410	USD	81474	112092	132649	102929	98615	85027	86881	89522	89290	6342
4 411	USD	8900	28616	40771	49911	37050	16266	13778	18507	25621	3707
4 412	USD	37671	43605	44907	51574	59144	37013	35278	40433	55500	6017
4 413	USD	368	327	24	0	185	43	88	37	23	14
4 414	USD	214	287	124	53	125	33	125	328	440	59
4 415	USD	12336	18329	15599	18644	23682	26366	33643	40179	64150	6787
4 416	USD	1348	1671	2149	2070	2984	4665	5407	7082	7216	839
4 417	USD	4431	5284	4642	4883	5443	4670	5478	6306	7004	736
4 418	USD	83842	107653	105880	124960	132191	124204	122661	139059	174251	18935
4 419	USD	379	767	1139	1080	1027	1416	644	720	748	116
4 420	USD	391	669	812	687	366	465	723	896	1026	103
4 421	USD	15598	21430	21612	22432	20131	16132	19513	26708	35967	4282

In Appendices 3-6, the value of foreign trade is given in thousand USD.

Продолжение приложения 3 Динамика импорта товаров кода 44 (древесина и изделия из древесины) с территории Украины

Код	ед.изм					Го,	ды				
код		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Итого		511930	533313	493943	541987	386138	235105	358022	452951	533567	579126
4401	tonn	607	757	528	564	365	1243	390	365	273	346
4402	tonn	324	377	628	1353	1065	908	905	1053	1670	1868
4403	tonn	18053	21131	16716	12042	6525	5795	5446	10004	25468	4340
4404	tonn	46	147	233	1494	85	287	0110	87	20100	30
4405	tonn	8830	9215	7720	7678	6866	4487	1810	836	1528	486
									030		
4406	tonn	6554	3951	1578	2507	3213	200	289	40040	1492	3879
4407	tonn	4249	7639	5051	3393	2495	3116	5740	16042	22460	16242
4408	tonn	1656	1605	1689	2236	3414	2969	3483	3971	6430	5836
4409	tonn	5049	6285	6045	5510	2141	1298	1245	1575	1218	1302
4410	tonn	179914	196092	204890	236019	155491	88821	156655	181020	163182	182416
4411	tonn	131149	188439	189234	200948	158930	96181	139574	186016	248150	297709
4412	tonn	15575	21888	23345	30810	21941	18800	25544	31819	40768	41978
4413	tonn	451	374	298	185	165	63	62	31	59	36
4414	tonn	322	157	167	809	208	81	79	60	110	156
4415	tonn	9501	5006	3475	2613	2160	1899	3072	5132	7146	8098
4416	tonn	89	171	183	121	140	150	64	101	130	60
4417	tonn	100	100	96	175	136	93	114	92	216	40600
4418	tonn	122125	62453	25340	26078	14249	6992	11294	12347	10565	10622
4419	tonn	2052	1622	1049	1676	957	495	572	635	839	1125
4420	tonn	710	554	585	686	518	130	124	182	223	176
4421	tonn	4574	5350	5093	5090	5074	1097	1560	1583	1640	2336
Итого		324095	371859	349254	397195	281283	139678	187448	241581	294487	297778
4401	USD	336	340	286	319	283	121	87	71	70	123
4402	USD	679	615	767	1088	1081	975	1145	1325	2093	2292
4403	USD	2046	2769	1629	1363	854	416	409	1019	3232	977
4404	USD	28	27	90	600	37	101	0	49	0	15
4405	USD	3339	3913	3309	2793	2267	1362	793	970	976	298
4406	USD	2658	1580	508	992	1212	60	71	0	449	1214
4407	USD	3687	5644	3788	2868	1809	1700	3957	5711	6823	6979
4408	USD	5821	6087	7697	8989	13874	12164	14537	16343	27843	22173
4409	USD	6694	9031	8670	8478	3742	1784	1780	1760	1813	1556
4410	USD	81997	98940	96431	119678	73453	28743	43788	60323	64709	63133
4411	USD	52935	107591	119616	133516	105855	56074	72791	95444	120618	134127
4412	USD	13667	21412	21892	29338	19440	12475	16773	23966	30586	27845
4413	USD	805	825	784	555	432	276	249	156	143	106
4414	USD	1018	540	812	1469	957	353	312	213	390	461
4415	USD	6015	4592	3489	3163	2873	2150	2764	2901	4879	4667
4416	USD	593	721	836	722	216	174	339	346	369	120
4417	USD	252	289	231	370	252	160	147	147	348	138
4418	USD	124061	86499	57083	60262	34137	14513	19674	20706	19773	20291
	USD	4651	3939	2906	3194	2417	1585	1486	1827	2390	3381
4419					10V (SOCIO-10)			100000000000000000000000000000000000000	200 200 200 200 200		
4419 4420	USD	2125	3105	3363	2948	2719	955	1030	1325	1586	1172

Динамика экспорта-импорта товаров кода 47 (древесная масса и целлюлоза) с территории Украины

Код	ед.изм.					Го	ды				
код	ед.изм.	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
					Экспо	рт					
Итого	tons	4262	2936	3597	6250	4312	2380	5082	12263	8945	314
4 701	tons		33								
4 703	tons	19	2		2	37		2		23	145
4 704	tons	49	42								
4 706	tons	10	16			61		60	66	49	169
4 707	tons	4184	2843	3597	6248	4214	2380	5020	12197	8873	
Итого	USD	735	609	568	1241	932	417	1215	2990	2458	3345
4 701	USD	0	2	0	0	0	0	0	0	0	
4 703	USD	16	1	0	9	38	0	3	0	23	78
4 704	USD	42	49	0	0	0	0	0	0	0	
4 706	USD	17	45	0	0	68	0	76	33	93	239
4 707	USD	660	512	568	1232	826	417	1136	2957	2342	3027
					Импо	рт					
Итого	tons	305970	354445	365535	400787	398992	394844	337037	415409	468327	365289
4 701	tons				54				26	66	18
4 702	tons	26	6	5	6	5	5	7	6	31	
4 703	tons	76580	73129	66008	63080	56830	47600	53174	52750	58977	61551
4 704	tons	7089	3598	3591	3810	1972	54	51	76	119	88
4 705	tons	3548	4804	7659	4620	5490	4300	4136	6069	6720	5033
4 706	tons	3914	5035	6611	7860	5246	5917	7784	9945	10122	7970
4 707	tons	214813	267873	281661	321357	329449	336968	271885	346537	392292	290629
Итого	USD	117400	143440	121009	122677	117859	95371	84219	112220	128611	99898
4 701	USD	0	0	0	39	0	0	0	18	40	98
4 702	USD	23	12	9	12	10	9	13	12	25	
4 703	USD	59819	60225	45574	43835	36091	27486	29334	31097	40392	39292
4 704	USD	5996	4225	3480	3808	2196	98	99	150	247	162
4 705	USD	2515	3683	5373	3265	3344	2256	2212	3258	3855	2954
4 706	USD	3782	5712	7386	6236	4833	4755	4925	7634	7415	5560
4 707	USD	45265	69583	59187	65482	71385	60767	47636	70051	76637	51832

Приложение 4

Приложение 5

		1207	7.56	Ы	Год	(3000)	vidite in dis	221		0.0111011	Vo.
2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	ед.изм.	Код
04770	405004	400007	070404	000440	440044	540444	540000	400400	447400		
31778	425394	402397	373421	388410	448241	543411	513233	466432	417186	1444	Итого:
1:	7	4	6	5	6	2	3102	3978	1776	tons	4801
497	40	635	367	685	258	270	281	627	220	tons	4802
1435	13402	11047	12273	10399	9697	8777	8646	10173	8227	tons	4803
624	6227	8084	6141	6186	5585	5734	6990	6331	6843	tons	4804
10007	183453	159330	124980	128132	126653	175239	155216	120353	84207	tons	4805
9	75	104	79	66	53	69	97	103	101	tons	4806
9	88	290	104	564	502	267	123	149	126	tons	4807
723	8169	6718	4243	3238	4912	5248	5261	6080	2849	tons	4808
	1	1	5	0	3	6	3	3	5	tons	4809
2892	29588	35301	29225	32135	29990	34016	31350	29188	31101	tons	4810
1830	14979	12557	45437	50031	53223	59789	64661	61824	62841	tons	4811
1000		0	0	1	1	1	1	3	2	tons	4812
34	54	115	362	183	183	190	134	173	243	tons	4813
2703	45236	50915	46837	53140	91916	94955	93701	88550	80603	tons	4814
	1	1	6	1	1	4	2	5		tons	4816
19	162	125	140	163	144	136	222	219	206	tons	4817
3044	29914	30538	28696	29511	35224	51549	46788	43202	44118	tons	4818
4634	60869	58673	52305	58186	72609	89149	83418	82070	76639	tons	4819
148	3636	3274	2342	2053	4395	6439	5275	5460	7915	tons	4820
309	2992	2703	2887	3087	3385	3457	3162	4457	5107	tons	4821
514	5133	5118	4065	1937	748	532	387	115	99	tons	4822
2336	21368	16864	12921	8707	8753	7582	4413	3369	3958	tons	4823
37212	964543	902147	943455	1069334	1702681	2159696	2015344	1926110	1645546	USD	Итого:
1	6	3	4	4	5	2	1795	2494	1014	USD	4801
318	74	3726	1506	3861	1068	536	432	2697	368	USD	4802
981	9369	6842	7116	4998	4967	5048	6263	7655	6957	USD	4803
1090	9813	12030	11824	11740	11325	12505	15456	14423	13125	USD	4804
4847	96352	70365	48229	55101	67553	99158	84128	75002	47620	USD	4805
34	278	355	324	309	246	267	287	305	269	USD	4806
5	43	130	51	232	262	154	77	111	84	USD	4807
990	10850	8687	3996	1963	3412	3971	4157	5159	2061	USD	4808
. 330	5	2	19	2	9	23	8	10	14	USD	4809
2007	20474	22267	20613	22990	24545	34476	32069	28073	24610	USD	4810
4438	50738	45145	126423		218353	227101	218898	216692	201656	USD	4811
4430	0	45145	2	13	210333	9	41	34	7	USD	4812
252	100 200 200	553	1095	746	1198	1147		894	1548	USD	4813
	305		129246	150821			893 340858	320380		USD	
8099	134460	144997			324407	359944			261110		4814
	0	0	0	0	0	0	0	0	0	USD	4815
2	13	10	17	6	4	11	8	26	0	USD	4816
40	362	270	291	358	361	333	487	500	483	USD	4817
3201	30785	28829	25800	28640	42213	147778	133518	121538	120437	USD	4818
6639	77632	73602	66394	77221	119250	151105	138710	135017	110634	USD	4819
327	3636	3274	2342	2053	4395	6439	5275	5460	7915	USD	4820
1692	17131	14867	14619	15420	18160	19837	16485	18430	15852	USD	4821
330	3319	2927	2092	1027	514	358	266	97	84	USD	4822
1908	16627	12188	9724	7771	9088	9646	7560	8044	6925	USD	4823

Продолжение приложения 5

	Пин	Januva u	ипорта т	оваров к	опа 48. 16	Умага и	vantoul c	0.50	должение рии Vvps		сения 5
17	7 Property Co. (1)	амика и	мпорта п	оваров к	ода 40 (с	Год		террито	рии экра	ины	
Код	ед.изм.	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Итого :		1004175	986313	1026925	1056276	794846	645800	683529	679967	705307	703410
4801	tons	89779	74480	99975	91634	72140	57291	46158	46076	44504	39882
4802	tons	234915	236864	239291	233774	200436	155727	173665	167587	160426	156276
4803	tons	4623	5546	10950	15473	14199	9638	10124	12562	12257	14266
4804	tons	51563	58804	64155	65938	59873	55063	55773	62368	63649	58878
4805	tons	154165	123330	139452	132565	95044	69294	74890	79019	81754	95039
4806	tons	3117	3581	3121	3253	2519	2490	3758	3305	3793	3602
4807 4808	tons tons	7558 7992	5543 7666	5311 10901	5718 8150	3393 3707	3336 3328	3638 3473	2615 2864	2779 3515	2837 2216
4809		2096	2399	1778	1477	1087	934	977	927	1106	779
4009	tons		2388					911			
4810	tons	260100	255971	261535	275875	208272	177806	180251	160741		175669
4811	tons	48031	50353	53313	58173	53668	49180	59677	62430	63326	63663
4812	tons	765	747	611	653	495	618	556	481	578	529
4813	tons	9527	8005	8911	9460	10143	9835	11023	10287	10694	10285
4814	tons	10200	10259	10844	11067	4727	2796	3134	3621	4045	4323
4815	tons	1									
4816	tons	34	54	182	133	159	95	134	86	126	85
4817	tons	707	1241	1547	1387	600	423	470	273	278	372
4818	tons	67681	68919	72077	84934	16588	11693	16456	21343	22786	24771
4819	tons	27089	26135	29133	34080	31010	23808	24248	27370	31484	29113
4820	tons	6814	31552	7520	5437	3189	1449	1389	1605	1656	2218
4821	tons	2625	1832	1353	1680	1342	1171	1124	1219	1495	1451
4822	tons	2740	3513	3894	3650	1515	1340	1392	1242	1350	1344
4823	tons	12053	9519	10971	11765	10740	8485	11219	11946	18183	15812
Итого											
:	USD	2877233	3165027	3150836	3369466	2205705	1503995	1597510	1626514	1846923	867485
4801	USD	46851	45673	57893	53290	40702	26845	21184	21434	28965	20776
4802	USD	245549	277370	264440	258516	210760	127776	142884	143431	152970	142469
4803	USD	10246	12570	21277	29276	27762	13574	10703	14448	15350	16916
4804	USD	43845	64903	62047	66666	59743	44092	45207	53478	62027	57161
4805	USD	112869	99127	90947	91480	66319	40046	40218	43937	49777	48999
4806	USD	4769	6385	5843	6428	4902	3820	4783	4850	5502	5246
4807	USD	4110	5024	6148	5208	2589	2171	2840	2486	2214	2182
4808	USD	7546	8442	10771	9542	5160	3779	4048	3318	4691	3007
4809	USD	3708	4604	3455	2898	2305	1670	1692	1518	2110	1421
4810	USD	288975	319280	315165	338175	262601	186118	180226	155332	186455	178197
4811	USD	163856	176481	176153	191347	165645	120952	138686	150897	164888	154148
4812	USD	3778	4135	3293	3787	3387	2717	2252	2128	2608	2409
4813	USD	47457	45185	42039	46029	49414	35745	40931	38728	41863	40481
4814	USD	24245	27074	29997	31661	12391	7511	8640	10241	11815	11220
4815	USD	2	0	0	0	0	0	0	0	0	
4816	USD	69	265	502	426	520	363	592	458	482	443
4817	USD	1478	2908	3426	3237	1382	830	902	516	567	816
4818	USD	281704	292535	310772	361268	33519	22149	26265	33794	38776	42555
4819	USD	76955	79283	79595	89292	86573	61970	71417	76942	86972	80408
4820	USD	26900	58998	35851	33752	13429	10440	9152	9344	8954	11424
4821	USD	11800	16426	15264	15393	11811	9402	9603	10230	11480	11955
4822	USD	2578	3675	4117	3837	1693	1138	1281	1204	1327	1251
4823	USD	29326	32115	36422	43225	40245	28889	35250	34543	43669	33998

Приложение 6 Динамика экспорта-импорта товаров кода 94 (мебель и строительне конструкии из древесиы) с территории Украины

Код	ед.изм.						Годы				
код	ед.изм.	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
					Экспор	т					
Итого:	tons	103404	119935	121017	116759	110305	85502	80575	111905	132125	15991
940161	tons	3887	4673	4857	4281	4988	4205	5869	8375	9445	1058
940169	tons	3272	3337	3685	3700	4553	3731	2456	2820	2204	203
940330	tons	3143	2382	3261	3323	2405	1980	1402	2452	4139	646
940340	tons	14778	18481	18191	20417	20244	12827	12118	14704	16739	1765
940350	tons	22433	26441	28749	26437	26155	21073	16139	21634	23200	2901
940360	tons	49694	56747	54526	52019	46560	35029	35632	54151	66207	8137
940600	tons	6197	7874	7748	6582	5400	6657	6959	7769	10191	1278
Итого:	USD	148993	194143	213935	209282	185942	126828	114690	164680	208715	251050,9
940161	USD	13585	18372	20187	18518	19301	14194	19545	29179	35233	3844
940169	USD	10819	12639	12645	13785	16142	13914	10568	15081	14146	1703
940330	USD	4856	4123	6224	6229	4188	2618	1948	2968	4546	608
940340	USD	14847	20059	20706	24049	23157	12579	11162	14205	17069	1858
940350	USD	24682	32218	38085	35543	31401	24582	17277	26180	34029	4301
940360	USD	64093	86408	95016	96164	81317	51893	46998	69211	92621	11222
940600	USD	16111	20324	21072	14994	10436	7048	7192	7856	11071	1567
					Импор						
того:	tons	49330	50878	48538	46731	31385	14608	16404	21654	23589	2226
940161	tons	4248	4309	4303	4174	2852	1502	1534	1572	1851	187
940169	tons	1155	1253	992	789	740	246	353	332	436	51
940330	tons	2224	2158	2619	2091	1014	559	567	747	1045	134
940340	tons	2051	2257	2351	2223	1727	1072	1259	1269	1207	117
940350	tons	7270	7430	7028	6258	3850	1735	1309	1345	1529	164
940360	tons	24860	23452	21034	22956	14286	6870	6373	7236	9416	1081
940600	tons	7522	10019	10211	8240	6916	2624	5009	9153	8105	490
того:	USD	144496	201157	216807	171191	107663	45863	57798	60225	85278	7066
940161	USD	19573	26008	30440	24539	14551	6489	6892	7384	8673	913
940169	USD	3826	4099	4241	3135	2412	935	1318	1242	1548	160
940330	USD	7544	11449	11053	10129	3908	1991	1774	2652	3954	369
940340	USD	7979	12446	15381	9951	7343	3856	4156	4169	4128	487
940350	USD	18179	23459	29485	20144	12022	5400	4069	3998	4546	544
940360	USD	66514	86034	93250	75856	45229	20253	20790	21040	24359	2867
940600	USD	20881	37662	32957	27437	22198	6939	18799	19740	38070	1723

Приложение 7

Стоимостная (тыс. USD) оценка внешней торговли Украины продукцией лесного сектора по двухзначным товарным группам

Код				8		0	і оды		8	8	
товаров	показатели	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
300000000000000000000000000000000000000				BC	ЕГО - това	ВСЕГО - товары всех групп	ш				
Bce	экспорт	51430286	68393034	68694495	63320469	53913302	38127040	36361032	43428391	47334680	50060336
Bce	тдопми	60737135	82607537	84656667	76986013	54381409	37516153	39249626	49439156	57187093	60783662
Bce	баланс	-9306849	-14214503	-15962172	-13665544	-468107	610887	-2888594	-6010765	-9852413	-10723327
				группа 44	1	древесина и изделия из неё	1я из неё				
44	ЭКСПОРТ	827994	1077831	1059614	1143722	1261956	1106386	1130634	1204743	1492545	1398656
44	тдопми	324095	374549	349255	397196	281282	139680	187448	241579	294487	297778
44	баланс	503899	703282	710359	746526	980674	902996	943186	963164	1198058	1100878
				группа 47 -	древесная	н масса и целлюлоза	эллюлоза				
47	ЭКСПОРТ	735	610	568	1241	932	417	1214	2991	2458	3345
47	ТФПМИ	117400	143440	121008	122677	117860	95371	84220	112220	128611	100046
47	баланс	-116665	-142830	-120440	-121436	-116928	-94954	-83006	-109229	-126153	-96701
				Гру	ппа 48 - бул	группа 48 - бумага и картон	но				
48	ЭКСПОРТ	822773	963069	1007673	1079848	851340	534668	471728	451074	482271	372120
48	импорт	1438617	1582569	1575419	1684733	1102853	751998	798754	813257	923461	867485
48	баланс	-615844	-619500	-567746	-604885	-251513	-217330	-327026	-362183	-441190	-495365
			группа 9.	группа 94 (частино)	- мебель	и конструк	конструкции из древесины	весины			
94	экспорт	148993	194143	213935	209282	185942	126828	114690	164680	208715	251051
94	тдопми	144496	201157	216807	171191	107663	45863	57798	60225	85278	70661
94	баланс	4497	-7014	-2872	38091	78279	80965	56892	104455	123437	180390
				Bcero	продукции	лесного сектора	ктора				
сектор	экспорт	1800495	2235653	2281790	2434093	2300170	1768299	1718266	1823488	2185989	2025171
сектор	тдопми	2024608	2301715	2262489	2375797	1609658	1032912	1128220	1227281	1431837	1335969
сектор	баланс	-224113	-66062	19301	58296	690512	735387	590046	596207	754152	689202
		đ	эля продук	Доля продукции лесного		сектора во внешней торговле Украины, %	й торговле	Украины,	%		
сектор	экспорт	3,5	8,3	3,3	3,8	4,3	4,6	4,7	4,2	4,6	4,0
сектор	импорт	3,3	2,8	2,7	3,1	3,0	2,8	2,9	2,5	2,5	2,2
			Доляг	продукции	кода 44 вне	Доля продукции кода 44 внешней торговле Украины,%	овле Украи	<b>ж</b> ,іч			
44	экспорт	1,6	1,6	1,5	1,8	2,3	2,9	3,1	2,8	3,2	2,8
44	Импорт	0.5	0,5	0,4	0,5	0,5	0,4	0,5	0,5	0,5	0.5

Припожение 8

;		1	Налоговый						Годы	-				
.n.n.	т. Налоги и обязательные платежи	Плательщик	агент	Поступление	2010	2011 2012		2013	2014	115	2016	2017	2018	2019
-	Налог на добавленную стоимость (20% от стоимости продукции)	покупатель продукции		Госбюджет	17,0	7,0	8,4	0'9	12,3	20,7	36,5	55,8	70,1	
		LIIL	LUL	Госбюджет	19,7	20,3	22,8	25,1	28,2	16,9	18,1	17,4	19,9	22,2
	Рентная плата за специальное использование лесных ресурсов (по ставкам установленным		LINI	Местные бюджеты	6,	7,7	10,3	13,2	17,9	12,1	17,8	13,6	17,7	29,0
2.	для древесины разных пород, размеров, условий заготовки и вывозки)	LIII	E	Всего	21,5	28,0	33,1	38,3	46,1	29,0	35,9	31,1	37,6	51,1
	в том числе:		[											
	общий фонд специальный фонд	EE	EE	Госбюджет Госбюджет										13,0 9,1
,	Налог на прибыль (18%)	EII:	LILL	Госбюджет	6,0	11,4	10,0	10,8	6,7	9'9	9,6	4,4	5,2	4,1
٠ ا	Дивиденды (90% чистой прибыли)	LILL		Госбюджет						3,2	13,0	14,6	14,2	6,6
4	Налог на лесные земли (0,1% нормативно денежной оценки, оценка отсутствует, - 0,1% нормативной стоимости пашни по области.	ניווו	רוווו	Местные бюджеты										5,4
5.	Налог на доходы физических особ (18%)	работники	ГЛП	Местные бюджеты	25,2	31,3	30,8	33,1	25,8	17,8	29,3	35,2	43,1	40,9
9	Военный сбор (1.5% заработной платы)	работники		Госбюджет					1,1	1,9	2,5	3,0	3,7	3,5
8		ראח	LJIL	Госбюджет	1,9	4,4	3,3	2,2	2,1	8,0	0,8	8,0	6'0	9'0
7.	Иные налоги и сборы	ПП	LILL	Местные бюджеты	4,0	1,2	1,3	1,4	1,0	7,0	1,5	1,9	2,0	1,5
				Госбюджет	43,9	41,0	39,6	44,1	50,4	51,2	83,4	0'96	114,0	114,5
00	Итого налогов			Местные бюджеты	30,9	40,2	42,5	47,8	44,7	29,4	45,8	8'09	62,8	76,7
				Сводный бюджет	74,8	81,1	82,1	91,9	95,1	9,08	129,1	146,8	176,8	191,3
	Выплаты в Пенсионный фонд (ПФ)	LJI		ПΦ	61,9									
6	Выплаты в фонды социального страхования (ФСС)	EE.		220	8,4									
	Единый социальный взнос (ЕСВ)	Ш		ECB	0,0	85,5	9,68	95,6	70,9	43,0				
	Итого социальных платежей				70,3	85,5	9,68	92'6	70,9	43,0	35,6	42,2	51,5	50,4
10.	Итого напогов и социальных платежей				145,1	166,6 171,7		187,5	166,0	123,7	164,7	189,0	228,4	241,7

Приложение 9.

Динамика дотаций государственного бюджета на цели, связанные с управлением и ведением лесного хозяйства в Украине (тыс.USD)

17877 5211 (Tbic.USD) 391 2017 292 1571 2015 2014 1558 49075 46 8099 7332 12050 1304 81660 81 40 4826 6649 12099 45584 1360 5739 Создание защитных лесных насаждений (лесных полос) Подготовка лесных специалистов и бакалавров Научные исследования и подготовка кадров Фундаментальные научные исследования Ведение лесного и охотничьего хозяйства Руководство в сфере лесного хозяйства Статьи бюджета Охрана природно-заповедного фонда Общий итог Прикладные научные разработки Подготовка научных кадров Научные исследования

Руководство в сфере лесного хозяйства	6609	5164	5325	5611	3460	1570	1721	3329	4647	4900
Ведение лесного и охотничьего хозяйства	44664	47935	72142	77479	36930	15504	2584	4660	4884	5629
Прикладные научные разработки	966	1013	0	0	0	0	0	0	0	0
Фундаментальные научные исследования	81	79	0	0	0	0	0	0	0	0
Подготовка научных кадров	40	46	0	0	0	0	0	0	0	0
Научные исследования и подготовка кадров	0	0	1258	921	542	176	200	269	546	575
Научные исследования	0	0	0	0	0	0	0	0	0	0
Охрана природно-заповедного фонда	3869	2568	0	0	0	0	0	0	0	0
Подготовка лесных специалистов и бакалавров	5432	5891	0	0	0	0	0	0	0	0
Создание защитных лесных насаждений (песных полос)	12099	12050	0	0	0	0	0	0	0	0
Общий итог	72279	77746	78724	84011	40932	17250	4505	8258	10077	11104
%	95	95	96	26	95	96	87	88	06	47

Общий фонд (гарантированный)

Продолжені Динамика дотаций государственного бюджета на цели, связанные с управлением и ведением лесного хозяйства в Украине (тыс.USD)	на цели, св	язанные с \	правлени	ы и веден	ием лесног	о хозяйств	а в Украин	Продолже <b>тыс.US</b>	Продолжение приложение 9. (тыс.USD)	ение 9.
										(TbIC.USD)
CTOATLUBOUNGTO			2	5-	Годы			2*		
Claibh Codhacia	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	0	Специальный фонд	й фонд							
Руководство в сфере лесного хозяйства	က	2	က	5	4	-	-	302	295	311
Ведение песного и охотничьего хозяйства	920	1140	3218	2662	1836	920	532	639	889	12248
Прикладные научные разработки	364	291	0	0	0	0	0	0	0	0
Фундаментальные научные исследования	0	0	0	0	0	0	0	0	0	0
Подготовка научных кадров	0	0	0	0	0	0	0	0	0	0
Научные исследования и подготовка кадров	0	0	300	346	252	116	116	123	149	121
Научные исследования	0	0	0	0	0	0	0	0	0	0
Охрана природно-заповедного фонда	296	1039	0	0	0	0	0	0	0	0
Подготовка лесных специалистов и бакалавров	1217	1442	0	0	0	0	0	0	0	0
Создание защитных лесных насаждений (песных полос)	0	0	0	0	0	0	0	0	0	0
Общий итог	3461	3914	3520	3013	2092	289	649	1064	1133	12679
%	S	S	4	က	S	4	13	Ξ	19	53