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## THE CURRENT STATE OF ACCESSORY FOREST UTILIZATION (WILD FRUITS AND BERRIES): PROBLEMS AND PROSPECTS

Despite the increased man impact on the understories and adverse global climate changes in recent decades, the bioresource potential of accessory forest utilization in Belarus continues to be very significant. Analysis of the current conditions of accessory forest utilization reveals that economic entities of various ownership forms should be active participants of this activity. It is the Ministry of Forestry that should be coordinating body empowered with inspecting functions as it is the main forest asset holder in the country. The proportion of business enterprises in the volume of wild fruits and berries harvesting is the most substantial followed by organizations of Belkoopsouz system and sole proprietorships. Institutions of the Ministry of Forestry harvest less than 1% of fruit and berry production. The development of accessory forest utilization on the principles of sustainable use and expanded reproduction of non-timber resources and responsibility of all business entities for the condition of resources makes it possible to increase the effectiveness of forestry based on complexity and multifunctionality and improve the number of valuable natural food products and drug and preventive products per population.

**Key words:** accessory forest utilization, wild fruits and berries.

**Introduction.** The forests of Belarus are rich with fruits and berries. There will be no exaggeration to say that their resources are one of the most important parts of national wealth.

Reserve of forest fruit raw materials is renewed and it can significantly be increased when housekeeping is led on scientific basis. And efficiency can be received next year. The value of production of side using repeatedly increased for the last decades (40-50 years). In certain forest conditions, such as in raised bogs, it is quite comparable with the main product of forestry in particular with wood [1]. One more characteristic of current state of wood side use resources is the increased activity of influence on lower stages in which their reserves of anthropogenic load are generally concentrated. This includes wood production with the use of multifunction equipment, recreational press, industrial exploitation of peat deposits, reclamation, unordered collection of berries, fires, radioactive contamination, negative impacts on berries in the future will remain very significant. All this occurs against the global climatic changes, which are expressed mainly in aridization.

**Main part.** The object of industrial preparation are fruits and berries of the following types: apple tree, mountain ash, cranberry, bilberry, cowberry.

As you can see from Table 1, there were prepared 535.2 t of fruits and berries by the Ministry of forestry in 2013. For comparison we will note that there were prepared 1,481 t of wild fruits and berries by the enterprises of the Ministry in 1996. Reduction of preparation by 2.8 times cannot be explained in any way with conditions of year as 2013 was the average year on productivity of wild fruits and berries.

Let's give one more comparison. The stock of mountain ash resources only in the enterprise "Polesye Forestry" made 535.4 t, cranberries – 1,032.9 t, bilberries – 1,780 t [2] in 2008 according to I. V. Ermonina that is comparable on volumes of fruit production preparations in recent years in total among of enterprises of Ministry. The similar situation could appear by comparing with any other forestry.

Now less than 1% of the total amount of wild fruits preparations in Belarus from the total volume of wild fruits preparations we can relate to enterprises to Forestry Ministry.

Table 1
Harvesting wild fruits and berries by the Ministry of Forestry in the context SFI in 2013

The species of plants	Harvesting wild fruits and berries in the context SFI, t						Total
	Brest region	Vitebsk region	Gomel region	Grodno region	Minsk region	Mogilev region	by the Ministry of Agriculture
Apple-tree	_	240.1	7.62	131.8		П	379.52
Ashberry	8.12	1.76	34.28	9.00	45.62	3.07	101.84
Cranberry	_	0.12	34.00	-	0.50	_	34.62
Blueberries	-	2.47	-	-	16.71	-	19.18
Cowberry	_	0.04	-	ı	ı	ı	0.04

Average annual stocks of main types of non-wood resources (fruit and berry resources) of forest fund (biological and possible for preparation) on the date of 01.01.2013 are very high according to materials of the State forest inventory in general in our state [3] (Table 2).

Table 2
Not-timber resources of the forest fund
(fruits and berries)

The main types	Average stocks, t			
of resources	biological	potential for production		
Wild fruits and berries	535,785.2	214,314.1		
including:				
<ul><li>cranberry</li></ul>	15,195.0	6,078.0		
– blueberries	154,379.6	61,751.9		
<ul> <li>ashberry red</li> </ul>	53,264.3	21,305.7		
– wild apple	102,459.2	40,983.7		

We can make univocal conclusion from the above mentioned comparisons that the side using regarding wild fruits and berries preparation by the public forestry-based institutions needs for a new organizational impulse.

The available source of raw materials, as we can see from the provided data, is sufficient for its effective implementation in general for our country. It is quite logical that the formed niche will fill other subjects of managing, but not enterprises subordinated to the main wood holder – the Ministry of forestry.

So, for example, it was prepared about 84 t of bilberry (purchase price – up to 21,000 rub./kg), 10 t of cranberry (purchase price - up to 18,000 rub./kg), 5.4 t of cowberry (purchase price – up to 17,000 rub./kg) by the Novogrudsky Forestry (district consumer union) in 2013. About a half of the prepared bilberry was exported (the price from 1.85 up to 2.40 euro). Selling of berries abroad was stable and high (volume) during last years (about 100 t annually). Countries importers are Poland, Lithuania, Latvia. For comparison -State Forestry Institution "Novogrudsky Forestry" is harvested only 440 kg of two species of a mountain ash: the black-fruited – 210 kg and ordinary – 230 kg in 2013. The similar situation takes place and in other regions of Belarus.

Taking part in preparation of wild berries extremely inconspicuously and, as a result, haven't got economical interest, the state forestry institutions don't pay attention on the condition of berryfields. They don't use the real existent opportunities of keeping and making them better during the process of cutting's realizations, practically don't take part in the events dedicated to the protection of berries' plots of land and the increasing of the stocks of raw materials. This situation can't be

admitted as the suitable one of the modern demands to the field of forest management.

At the same time some other participants of this kind of business activities are investing absolutely nothing in keeping and increasing of the not-timber raw materials of the forest and don't take responsibility for that get a huge annual income which is considered to be the form of a "nature rent".

Meanwhile there are some examples in the branch that can be the convincing evidences of the fact that due to the development of accessory using the forestry institutions are able to accomplish the essential economical results. In 1995, when an economical condition was really tough in the country, at the State Forestry Institution "Lelchitsky Forestry Farm" the profit from the realization of berries and mushrooms had achieved 30% from the common profit and had amounted to \$2 on 1 ha of the wood foundation [4].

An observation of the situation which exists nowadays allows to emphasize some basic reasons of it:

- 1. The financial-legal foundation of using of the not-timber raw materials is not exploited completely by commercial structures and individual employers which includes foreign ones and also by unite structures, such as taxation, rent long-term and short-term, licensing, concession, auctions, sale and purchase agreements, etc.
- 2. Speaking of the cost prices politics flexibility State Forestry Institutions lose out to private structures. In the periods of the berries' preparation the last change cost prices for their own benefit. The main financial reason of uncompetitiveness of the forestry institutions while organizing purchases of the wild fruits and berries is the lack of working capital and the high per cent rates of the obtaining of credits.
- 3. There is no marketing support and the logistics of the accessory using organization is not exploited including also participation of foreign partners.
- 4. The practice of carrying out the functions of the engineers of the accessory using by the pluralistic engineers is distributed at SFIs and that doesn't encourage their effectiveness as the executive managers of this direction of economic activity.
- 5. The investments into the development of the accessory using are insufficient. The current experience gives evidences that from three species of the berries which are prepared in Belarus (blueberry, cowberry, and cranberry) the blueberry posses the biggest demand of the foreign partners. Since it's not stored for a long time, it's necessary to have chambers of shocking freezing and there are no such conditions at the forestry farms. There is almost no system of stationary preparation centers. At the beginning of the 21st century at the enterprises which belonged to the Committee of the Forestry Farmsat that time there were nearly 240–250 preparative and 80–90 [4] mushroom-salting

centers, and now, in the system of the Ministry of the Forestry Farms there are none of them as well.

There are some ways of solving the problem of the SFI' accessory using of the wood material and financial foundation consolidation. The first one is based on using their own sources. The second one is realized by means of the objective budgetary financing especially by facilities of the Ministry of the Forestry Farms innovating foundation. The third one is implemented by the using of borrowed facilities in the form of bank credits.

The most preferable is the first version, however it is possible only by the steady work of SFI (forestry enterprise) in general providing its financial solvency and allowing to carry out investment of innovative projects including in the sphere of side forest using. The second version depends on the volume of State Programs budget financing and existence of assets in innovative fund of the Ministry of forestry. The third version is the most risky. It leads to increasing of financial load on the budget of concrete forestry that is connected with need of credits payment. However we will buy, for example, the equipment on leasing by means of De-

velopment Bank of Republic of Belarus (as by purchasing of multi operational logging equipment) on favorable terms, so the rates on leasing payments in Belarusian rubles will amount 7–8%, and financial burden on forestry will be incomparable less. Innovative technologies of wild berries purchase organization do not realize. For example, widely using by private structures so-called "purveying centers on wheels", moving at the end of day to in advance defined places for purchase of berries directly in forests where prompt calculation with collectors is performed.

**Conclusion.** Not wood resources of forest do not master adequately, in spite of considerable demand in the internal and external markets.

Using of all resources and utilities of the forest by only of the Ministry of forestry forces is impossible.

There was an imperative need of creation of legal, juridical, financial and organizational prerequisites of participation in side using of forest coordinated and controlled by the Ministry of forestry, subjects of managing of various, including also foreign, ownership forms (de facto already participating in it).

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