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ISSUES OF IMPROVING THE ECONOMY OF BUILDING MATERIAL - WOOD PRODUCTION

Abobakirova Zebuniso Asrorovna
Farg‘ona politexnika instituti, PhD dotsent
z.abobakirova@ferpi.uz), (ORCID 0000-0002-9552-897X).

Umarov Shodiljon Abdug ‘ofurovich
Farg‘ona politexnika instituti, PhD, kafedra mudiri
sh.umarov@ferpi.uz, (ORCID 0000-0003-2265-3232)

Mirzayeva Zarnigor Alisher qizi
Farg‘ona politexnika instituti, Assistant
z.mirzayeva@ferpi.uz), (ORCID 0000-0002-9552-897X).

Solijonov Foziljon Sodiqjon o‘g‘li
Farg‘ona politexnika instituti, assistent
f.s.solijonov@ferpi.uz (ORCID 0000-0003-4627-7905).

Abstract:
This article is devoted to improving the construction economy by increasing the strength of wood growing in the conditions of Central Asia and their large – scale use in the construction production industry.

Keywords: building material industry, wood production, modification, local Poplar.

One of the urgent problems of today is to create organizational, economic and legal conditions for the formation of market relations in capital construction, to deepen economic reforms in the construction sector, to choose the most optimal solutions for improving the management system of the construction complex based on market principles and mechanisms, and to apply them in practice. It is not possible to find a solution to all the listed factors at the same time. Therefore, it is possible to eliminate all problems step by step [1-9].

In Central Asia, in particular, in our republic, wood raw materials used in construction are in short supply. It is known that softwood structural wood (high strength) is grown mainly in the forests of Russia, but the reason for its relatively low strength is the small number of forests in our republic and the fact that only poplars (Mirzaterak, Californian poplar) grow from local trees, and they are rarely used in construction. If we take into account the rapid growth of poplar, there will be an opportunity to increase the strength of this type of wood and to use it widely in infrastructure facilities.

Taking into account that the period of growth necessary for the use of softwood usually lasts 80-100 years, the possibility of using poplars growing in our regions in 15-20 years in construction is of great importance to increase its durability.

Because poplar is a fast-growing tree, a special commission on poplar was established by the United Nations. Based on the decision of this commission, it is envisaged to establish poplar plantations in the countries of Central Asia. In this regard, the decision of the first President of the Republic of Uzbekistan I.A. Karimov on "Establishing poplar plantations in Uzbekistan and increasing their efficiency" is also important.

Based on the decision of the government of the Republic of Uzbekistan on localization, the following can be noted, only if we take into account that the cost of bringing 10 thousand m3 of wood from the Russian Federation for model houses to be built in the villages of our Fergana region is 2.0 million US dollars, with the modification of local wood , it is not difficult to calculate how much currency will be saved by improving their physical and mechanical properties and using them in infrastructure and housing construction. [1-9].

In the dry-hot climate of Central Asia, the poplar has a height of 15-18 meters in 10 years, and its diameter is 18-20 cm, in 30 years it is 20-25 meters and a diameter of 50-60 cm, in 40 years it is 25-28 meters, the diameter is 60-70 cm.

Poplars usually grow very fast in the first 10-15 years and reach a height of 18-20 meters and a diameter of 20-30 cm. Over the years, the growth of poplars slows down. Its main vegetation period is 50-60 years, and its height reaches 40-45 meters. and its diameter is 0.5-0.75 meters, after which the tree stops growing and begins to dry. The scope of use of poplars is determined by 30-40 years.

Taking into account the development of the chemical industry and the production of constructions by gluing boards, using poplar at the age of 10-15 years is very effective. Increasing the strength of poplars makes it possible to use them widely in construction practice. If we look at the macrostructure of poplar, its tubular cells are very developed, so it is very easy to process it with modifiers. For example, if the lengthwise channels of the poplar are 33-37%, this indicator is 10.6-21.4%, in the poplar it is 34%, and in the willow it is 38%. If the transverse absorption channels make up 14% in poplar, this indicator makes up 10.8-11.7% in the poplar, and 11% in the mountain poplar.

As you can see from above, it is convenient and easy to soak poplar with various modifiers. Poplar can be impregnated with oils, resins, sulfur solution [12-26]..

Considering that the mechanical properties of poplar are 10% lower than those of mountain poplar, it is necessary to impregnate it with polymer compounds or sulfur for its wide use in constructions and products.

In terms of technical characteristics, poplar and other soft-leaved woods (beech, beech, linden) have several disadvantages that limit their use in construction. These disadvantages include their tendency to rot due to the lack of resins in their composition, cracking when dry, and low mechanical properties. An effective way to eliminate these defects is to process them with synthetic polymers, which is a progressive technology of using wood.

Even though building codes and regulations consider the protection of wood, many woodworking companies develop wood products and structures without protecting (tempering) the wood, causing them to fail without much effort. This requires the immediate implementation of wood protection technology, that is, it creates the need for their modification.

There are two methods of wood modification, they are divided into thermochemical and radiation-chemical[2-14]..

Polymers (phenolic aldehyde, aminoaldehyde, furanic, polyacrylic, polyether, organosilicon, etc.), oligomers, organic monomers (styrene, methyl methacrylate, acrylonitrile, urea), sometimes mineral substances (sulfur, bishofite, magnesium chloride, ammonium silicon fluoride) are used for wood modification.) is also used.

After wood modification, its strength, hardness, decay resistance, chemical resistance, biological and fire resistance increase.

Therefore, by modifying the local poplar wood, we will create an opportunity to achieve a sharp reduction in the amount of import of construction materials from abroad and, at the same time, to increase the efficiency of using local construction materials.

In the world economy, the production of building materials is developing as a priority. In this, building materials production management strategies play an important role, trying to cover economic practices and various future trends in them. For example, cement is the most used product on earth after water, its annual consumption on our planet is 1 ton per person[22-40].

Cement is produced in 156 countries of the world. But 70 percent of the world's cement production is accounted for by 10 major countries. Its development level is 1.5-2 times higher than the world GDP growth rate, which in turn indicates the increasing importance of effective use of natural raw materials in cement production enterprises.

As a result of the reforms carried out in Uzbekistan, new enterprises and new jobs are being created, foreign investments are widely attracted, morally outdated enterprises are being modernized and reconstructed. At the same time, the efficiency of some industrial enterprises remains at a low level, as a result of the increase in the cost of manufactured products, they remain uncompetitive. Therefore, one of the priority tasks is to improve the scientific-theoretical basis of economic efficiency management of industrial enterprises.

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