

BASIS OF MODERNIZATION OF THE CONSTRUCTION INDUSTRY IN OUR COUNTRY***Jabborov Dilshod Bakhromovich****Teacher of the Jizzakh Polytechnic Institute****Akhmedov Rauf Abdurasul ugli****Student of the Jizzakh Polytechnic Institute*

Annotation: This article explores the key foundations for establishing a modern construction system in Uzbekistan. It analyzes the current situation, necessary reforms, and the importance of integrating international best practices. The article highlights how innovations, digital technologies, ecological standards, and modern project management can ensure sustainable development in the construction sector.

Key words: construction system, innovation, digital technology, standardization, sustainable development, project management, construction reforms.

Annotatsiya: Mazkur maqolada O'zbekistonda zamonaviy qurilish tizimini yaratishning asosiy omillari, mavjud holati, islohotlar va ilg'or xorijiy tajribalarni joriy etish zarurati yoritilgan. Qurilish sohasida innovatsiyalar, raqamli texnologiyalar, ekologik talablar, standartlashtirish va zamonaviy loyiha boshqaruvi tizimlarini joriy etish orqali barqaror rivojlanish ta'minlanishi asoslab berilgan.

Kalit so'zlar: qurilish tizimi, innovatsiya, raqamli texnologiya, standartlashtirish, barqaror rivojlanish, loyiha boshqaruvi, qurilish islohotlari.

In the Republic of Uzbekistan, urbanization processes, infrastructural development and the growing need for housing in recent years have led to the need to form a modern construction system. Large-scale reforms are being carried out in our country to liberalize the construction sector, increase its efficiency and adapt it to international standards.

The main goal is to ensure the accurate and transparent maintenance of design and estimate documentation, along with the construction of high-quality, safe, economical and environmentally friendly structures.

The essence of the modern construction system

A modern construction system is a construction system that is comprehensively developed in technological, regulatory, economic and organizational terms, based on advanced technologies and management methods. Such a system:

Digitalizes all stages of the construction process;

Causes minimal damage to the environment;

Economically uses resources;

Increases labor productivity;

Requires the use of innovative materials and equipment.

Current status of the construction sector in Uzbekistan

Currently, the following positive changes are being observed:

New laws and regulatory documents regulating the construction sector are being adopted;

Public procurement and tenders are being announced openly;

Large infrastructure projects are being implemented - construction of roads, bridges, social facilities;

The development of the building materials industry is being ensured;

The initial stages of introducing green building technologies have begun.

However, the system has the following shortcomings:

Limited use of advanced technologies in construction;

Insufficient implementation of digital technologies in design;

Low staff qualifications;

Problems in controlling the quality of construction work.

The main directions of creating a modern construction system:

1. Digitalization and BIM technologies

The introduction of BIM (Building Information Modeling) technology ensures:

Design and construction stages are harmonized;

Accuracy and transparency are ensured at each stage of construction;

Resources and costs are calculated correctly;

The construction process is accelerated.

2. Development of the building materials industry

It is necessary to support local manufacturers of materials, encourage the production of environmentally friendly and energy-saving products. This will reduce the cost of construction and reduce dependence on imports.

3. Training and retraining

It is necessary to train specialists who understand and can use modern construction technologies. In this regard:

Providing practice-oriented education in construction universities;

Introducing a certification system based on foreign experience;

It is important to organize continuous professional development courses for builders.

4. Green construction and environmental requirements

In order to reduce the impact on the environment:

Use renewable energy sources;

Introduce energy-saving technologies in heating and cooling systems;

It is necessary to establish a construction waste recycling system.

5. Standardization and control in the construction sector

The presence of a control system based on national and international standards:

Increases the quality of construction;

Ensures transparency between the manufacturer and the customer;

Guarantees that the construction meets safety requirements.

Conclusion. The formation of a modern construction system in Uzbekistan is one of the important strategic directions of the economy. Through this system, not only the quality and speed of construction is developed, but also criteria such as environmental safety, economical use of resources, financial transparency and human resources capacity. By properly using existing potential, introducing modern technologies, and adapting advanced foreign experience to local conditions, it is possible to create a sustainable, efficient and competitive construction system in the country.

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