



Construction Network Based On Cluster Organization Ways Of Effective Management

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ABSTRACT

Due to the importance of the construction industry in the development of the world economy, extensive scientific research is being carried out to ensure the sustainable development of construction enterprises. This article focuses on new approaches to improving the construction industry, considering it as an important factor in the development of the construction industry based on the cluster model, and also provides suggestions and recommendations for organizing the cluster model.

Keywords:

construction industry, cluster model, innovation, modernization, strategy, competitiveness, entrepreneurship

Today, the works and services carried out in the construction industry in Uzbekistan, along with other sectors of the national economy, not only create the main funds of the economy, but also make an important contribution to the implementation of structural changes in the country's economy and the implementation of urgent tasks in various social spheres.

In 2018, the Decree of the President of the Republic of Uzbekistan "On measures to fundamentally improve the state management system in the field of construction" was adopted on the further development of the construction industry in the republic [1]. Based on this Decree, the Ministry of Construction was established on the basis of the State Architecture and Construction Committee.

We are witnessing that in the adopted State programs, special emphasis is placed on the construction industry as a locomotive of the economy, especially new buildings and facilities, new production facilities and private

entrepreneurship, railways and highways, and construction of residential buildings.

In 2019, the Decision of the President of the Republic of Uzbekistan "On measures for the wide introduction of information and communication technologies in the construction industry" was adopted [2]. According to the decision, a center for the development of information and communication technologies was established in the field of construction.

Therefore, a lot of work is being done in our Republic on the formation of mechanisms for the consistent development of construction bodies and institutions, on ensuring the efficiency of the state management system and on the introduction of digital technologies in the field, on measures to ensure transparency in construction and fight against corruption.

In 2020, the decree of the President of the Republic of Uzbekistan "On approval of the strategy of modernization, rapid and innovative development of the construction network of the

Republic of Uzbekistan for 2021-2025" was adopted [3]. It mainly aims to further improve the construction network, to form mechanisms for the consistent development of architecture and construction bodies and institutions, to ensure the efficiency of the state management system, and to introduce advanced digital technologies into the field.

In 2021, the decree of the President of the Republic of Uzbekistan "On approval of the strategy of modernization, rapid and innovative development of the construction network of the Republic of Uzbekistan for 2021 - 2025" was adopted [4]. Basically, the decree provides that the construction network creates the material and technical base of all sectors of the economy and satisfies the needs of the population for a comfortable home, social and engineering infrastructure services, as well as cultural entertainment, and the state policy in the field of construction ensures the successful implementation of programs for the socio-economic development of the country, regions and sectors. aimed at increasing the capacity of the sector through innovations, investments, effective use of labor and material resources.

In order to further develop the construction industry and the production complex of building materials in the republic, to ensure the construction of affordable housing for the population in the regions, to reduce the imbalance of demand and supply in the housing construction market, in 2022 the President of the Republic of Uzbekistan "Supporting housing construction and building materials industry - "On additional measures of support" was adopted [5].

The above decisions and decrees of the President of the Republic of Uzbekistan are important because they are aimed at the noble

goals of making the houses and places necessary for the needs of the population affordable, comfortable and convenient, improving people's lifestyle, and ensuring the well-being of the people.

The foundation for further improvement of construction in our republic has been created, that is, the need to choose one of the tested ways based on knowledge and practice, which is giving economic results in the world markets in developed countries, and to continue the processes based on this way remains one of the main tasks of today.

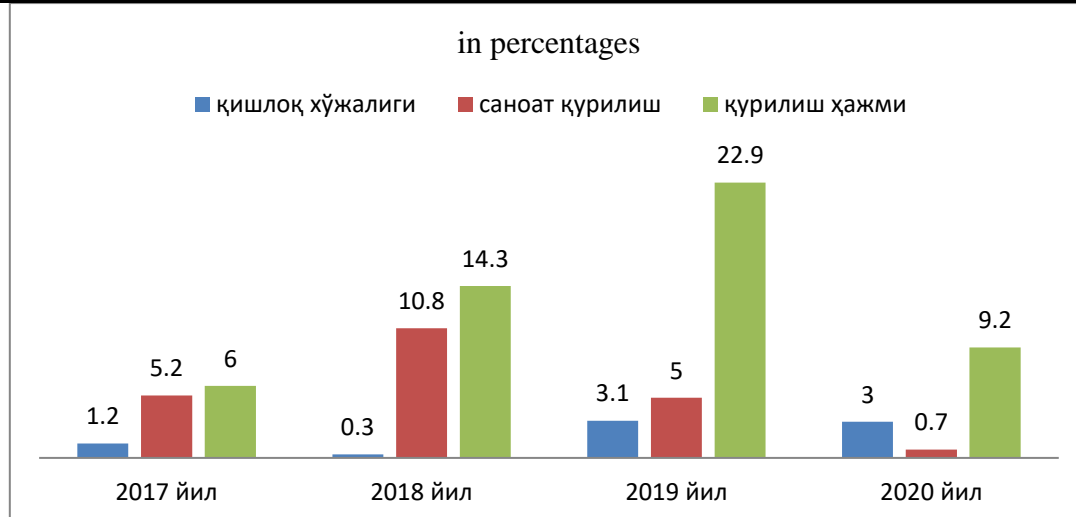
This way is also a further improvement of the cluster in the construction network.

So what is a cluster? Cluster - in which the integration of science, education and production will be deepened, another favorable condition will be created for the rapid introduction of new innovative technologies into practice.

Because, in order to improve the cluster model in our Republic, it is important to achieve high efficiency in the construction sector. This has already been confirmed in reality.

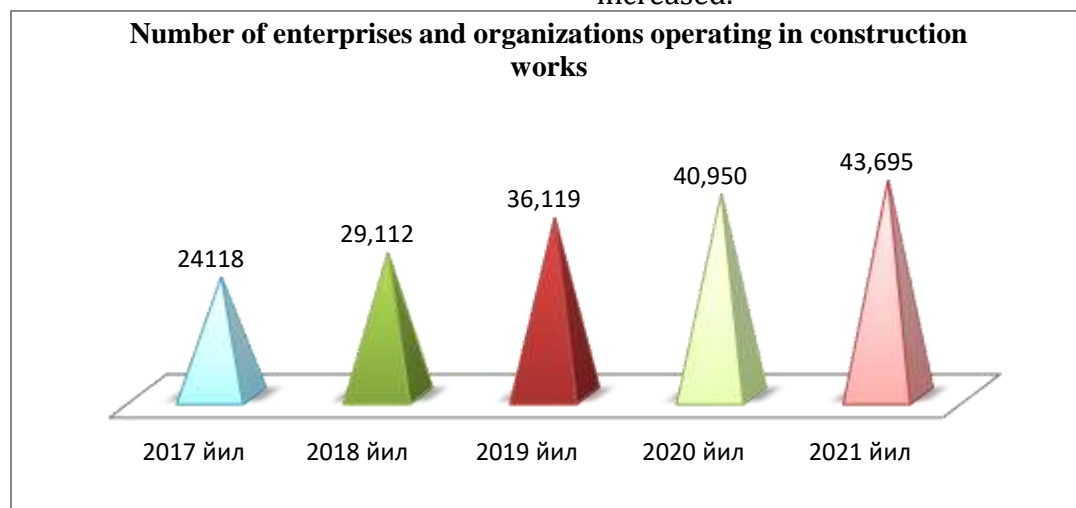
Taking into account that today Uzbekistan has become a huge area of creativity, it is in the construction industry that the prospects of the cluster are clearly manifested. A clear example of this is that the construction sector is growing faster than other sectors of the economy.

If agriculture is 1.2% in 2017, 0.3% in 2018, 3.1% in 2019, 3.0% in 2020, and production of industrial products is 5.2% in 2017, 10.8% in 2018, It increased by 5.0% in 2019 and 0.7% in 2020, while the construction volume increased by 6.0% in 2017, 14.3% in 2018, 22.9% in 2019 and 9.2% in 2020



Also, the share of this industry in the national economy is increasing year by year. The share of the construction sector in the GDP was 5.7%, and in 2020 this indicator reached 7.0%.

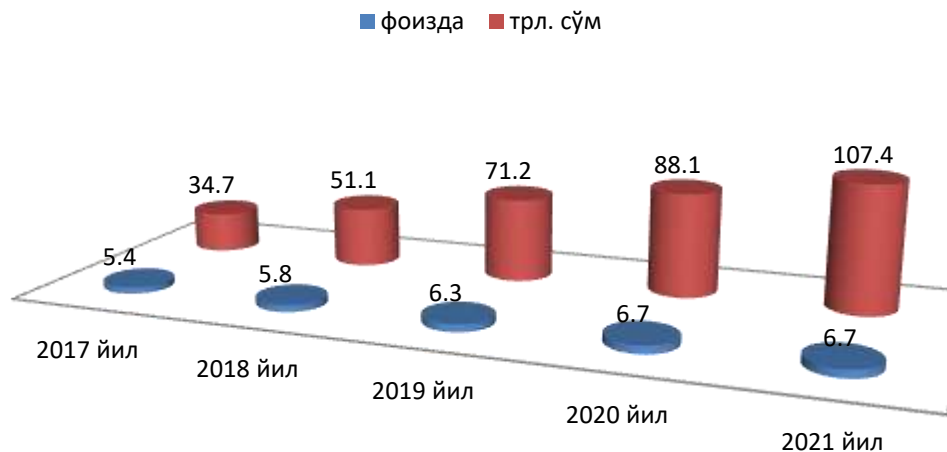
The number of enterprises and organizations engaged in construction works in 2017 - 24,118, 2018 - 29,112, 2019 - 36,119, 2020 - 40,950, 2021 - 43,695, which is 6.3% increased.



The volume of construction works completed in 2017 is 35.0 trillion. amounted to 88.1 trillion soums in 2020. amounted to soums. Also, when analyzing by types of economic activity, the main part of completed

construction works corresponds to the volume of construction works of buildings and structures (74.5% share compared to the total indicator)

Processes of increasing the volume of construction in Uzbekistan



The volume of construction in Uzbekistan is constantly increasing, if this indicator is 34.7 trillion in 2017. amounted to 107.4 trillion soums in 2021. reached soums, and the share in GDP increased by 1.3 percentage points compared to 2017 and reached 6.7% by the end of 2021.

Also, in 2020, the number of people employed in construction increased by 15,600 compared to 2017, reaching 1.3 million. is forming a person. It should be said that about 10 percent of the people employed in the economy today belong to this sector.

Another noteworthy point is that the share of the non-state sector in construction works is increasing, in 2017 this figure was 95.2%, and in 2020 it reached 95.8%.

A lot of work is being done in our country to further improve the human infrastructure. Including:

1. 11 programs on the social and economic development of the Republic of Karakalpakstan, regions and the city of Tashkent, as well as 36 programs on the development of individual districts and cities were adopted;

2. More than 10,000 km of internal roads have been repaired in 2,721 neighborhoods of the republic, more than 4,000 km of internal water supply network has been laid, and a total of 3 trillion dollars has been spent on these works. allocation of soums;

3. Within the framework of the "Prosperous village" program - construction and repair works in 79 schools, 171 preschool

educational organizations, 161 medical institutions;

4. Within the framework of the "Prosperous neighborhood" program - 57 schools, 37 pre-school educational organizations, 15 medical institutions, [6] the implementation of the cluster model in the network is the demand of the time, that is, where the huge construction if the work is going on, this indicates the economic stability of that place.

The ongoing work itself shows how important the construction sector is in the development of the country and people's living standards.

"Yevro Global Invest" limited liability company in the Upper Chirchik district, a cluster-type enterprise specializing in the production of large precast reinforced concrete panels, has the capacity to produce 500 thousand cubic meters of concrete products, crush 1 million tons of stone, and prepare as much asphalt. The total cost of this project is 40 million euros. Modern lines from Italy, Germany and Austria are installed on the 7-hectare production area. Interior and exterior doors, window frames, and furniture are also made here. The company's products meet world standards and have high earthquake resistance. The cost of houses using these building materials will be 30 percent cheaper than others. Products can also be made in color.

Therefore, the emergence of construction clusters in the country is justified in every way,

and it is ready to eliminate the problems encountered in the system of training qualified personnel for this field.

On October 16, 2020, when the head of state visited the new building of the Tashkent Institute of Architecture and Construction, he gave instructions on the need to establish an industry cluster here and turn the area into an array of builders. This is an urgent initiative to meet the demands of today's fierce and competitive times. The implementation of this proposal is not only in the scale of creativity, especially in improving the quality, but also in the ability to radically improve the possibilities of using innovative and technological achievements. The integration of foreign experiences into the construction front has been implemented since the last (2021) academic year. Specialists from Turkey were appointed as rectors of both institutes in order to teach the experiences of developed countries to the Tashkent Institute of Architecture and Construction and the Samarkand State Institute of Architecture and Construction, to train competitive personnel locally, to study advanced foreign technologies and to increase the efficiency of their assimilation. The current goal is to establish exemplary clusters with higher education institutions on the basis of construction organizations, that is, higher education institutions are very close to the

production system, and work side by side in terms of organization and content, to provide scientific and practical integration processes, for this there are sufficient opportunities and conditions in our Republic. is available.

The problem of searching for innovative construction products and putting them into practice by the construction organizations of our republic, theoretically analyzing the types suitable for the climatic conditions of our country and applying them to the construction process is one of the urgent issues of today.

A huge number of different types of construction materials offered in the current modern building materials market, their correct application and compatibility (integration, penetration) with other materials cause many problems and inconveniences.

The building materials needed for the construction site should not only be modern from the technical point of view, but also compatible with each other in terms of price, composition, quality, and meet the customer's demand. The solution is to organize clusters in this area.

Processes of establishing clusters in this field are also being implemented in our republic. Specialized districts where construction material clusters are organized [5]

Nº	Districts	District specialization
1.	Buloqbooshi district, Andijan region	Production of marble products, aerated concrete blocks and decorative bricks
2.	Qarovulbazar district, Bukhara region	Production of silicate products, building plates and cement
3.	Jizzakh region Forish district	Production of construction materials based on the processing of basalt raw materials
4.	Chust District, Namangan Region	Production of decorative brick
5.	Pakhtachi district of Samarkand region	Production of gypsum products and mineral wool, processing of natural stone
6.	Sariosia District, Surkhandarya Region	Production of plaster products, cement, reinforced concrete products, processing of natural stone
7.	Tashkent region Ohangaron district	Gypsum products, cement, reinforced concrete products, production of mineral wool, processing of natural stone
8.	Fergana region, Uzbekistan district	Production of gypsum and ceramic products, cement, reinforced concrete products, natural paints

In 2022, the funds allocated for the provision of building materials and housing construction clusters with external engineering and communication networks are presented in Table 1.

The amount of funds allocated for the provision of construction materials and housing construction clusters with external engineering and communication networks [5]

Table 1.

№	Name of the object	Project cost (million soums)	from that	
			2022 in	2023 in
	Total for the republic:	200 511,8	101 070,8	99 441,0

The second part of the cluster in this network is the construction organization, which today has good opportunities. Suppliers of construction organizations, i.e. enterprises that prepare construction materials and equipment, should also take part in this regard. After that, the cluster model will be complete, that is, science (innovative research) and manufacturers will complement each other, the construction process will become sources that satisfy needs, these processes will be closely connected in one system and create a cluster model.

Successful scientific and technical innovations (technologically new or improved building constructions, types of materials and devices) of the products produced based on innovative activities in the construction industry bring clear benefits to the construction organization, by increasing the level of competitiveness of the product, the company can strengthen its position in the markets and enter new markets. The author made suggestions for the creation of a cluster in the field of construction materials:

- the process of organizing the production of quality products in accordance with the market demand with the rational use of production capacities should be considered as the main direction of the management of construction enterprises and as an urgent problem that needs to be studied;

- it is necessary to theoretically research the nature and features of improving the effective management of construction industry enterprises based on innovative measures;

- to improve the effective management of construction industry enterprises, marketing research should be conducted in the analysis of

factors affecting product competitiveness, based on the information provided by respondents, the factors affecting the product should be evaluated and the most influential factors should be determined;

- the level of competitiveness of construction products produced by construction industry enterprises is evaluated based on expert opinions, and development of measures to increase the level of innovation success and the evaluation model of management of innovative activities in the region;

- determination of ways to increase the efficiency of management by conducting correlational-regression analyzes on the improvement of management of the competitiveness of the products produced in the construction industry enterprises in the region on the basis of innovative measures.

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