Modern Problems Of Architectural And Planning Organization Of The Rural Environment In Uzbekistan

Khudoyarova Mavluda, Hidirov Muhsin

Abstract: The article examines modern problems of the architectural and planning organization of the rural places on the basis of radical changes in the urbanization process in the country, regional features of territories, natural and climatic conditions, organization of production and the formation of social infrastructure for recreation, lifestyle and work of the population.

Index Terms: rural place, urbanization, agrarian reform, work style, lifestyle, neighborhoods, social infrastructure facilities, local centers.

1 INTRODUCTION
By the XXI century, we are seeing the emergence of large metropolitan areas around the world. So far, architects have focused on the development of urban planning based on new technological advances in science and technology. Until now, in rural areas, nature was treated at the individual request of consumers. It's of unique historical value, the natural and climatic conditions and the possibility of preserving the rural landscape neglected; rural areas are increasingly in conflict with the urban environment. The time has come to pay more attention to the development of social and economic infrastructure in rural areas. In the fast-paced world of urbanization, architects and urban planners are increasingly focusing on rural areas. Opportunities for innovative research are emerging in rural areas. Work on the radical improvement of urbanization processes in the villages of the Republic of Uzbekistan is carried out at the state level. There is a need for the principles of village development simultaneously with the development of master plans for the makhalla (village) population, to include detailed planning projects of settlements and architectural proposals for the development of urban planning schemes for neighboring makhallas.

2 APPOINTMENT
The settlement of each rural farmer and their population formed for them, regardless of their size, represent an economic, social, ecological and architectural system. When organizing a rural settlement project, it becomes necessary to solve the problems arising from an in-depth study of each of the above systems.

3 PURPOSE
In order to know and form the multilateral content of the appearance of settlements, it is necessary to study the historical characteristics of the village and recognize it as an integral part of a holistic study, in which all the functional elements, not only in production, but also in the social aspect, continuously link them. The maintenance of rural settlements is based on specific farms and associations, as a result of the spread of heterogeneous urbanization and due to changes in the structure of work, a culture and way of life.

4 HISTORY
For the remedial screening and development process, agrarian reforms are the main driving force behind the agricultural sector in the Republic. Its main directions are land reform, the development of the private sector in agriculture, the formation of non-state agro-industrial complexes and the creation of a market infrastructure in them, as well as the radical social transformation of the countryside. The above directions are crucial for the development of the rural environment, which has a long history now and in the future, as well as for its radical transformation. The socio-economic base of agriculture is changing, which leads to the introduction of many new trends in the process of formation, reconstruction and development.

5 SCIENTIFIC RESEARCH METHOD
Analysis of the problems of the architectural and design organization of the rural environment based on the study of the ongoing process of urbanization in the regions, the factors of the organization of agro-industrial and industrial complexes and their influence on the formation of the way of life, work and recreation of the population. In Uzbekistan, the improvement of the current state of the rural places is being implemented in two main directions. The first is to reconstruct existing environmental elements in rural places and improve its quality (Figure 1). The second is by introducing new elements in organic unity with the existing environment (Figure 2). General plan and design of the community center

Figure 1. The village of Nush, Djambay district, Samarkand region.
Taking into account the current state of the village, the community center of the village was reconstructed along the main roads. The community center of the village is formed along the intersections on both sides of the main street and the streets adjacent to it. There are small squares in front of the shopping center and the rural medical station at the intersection of streets. The architecture of the main street, as well as the building of the center of the quarter, the existing building of shopping and consumer services, the projected shopping center, the existing school on the other side of the road and the projected Stella in a comfortable environment for the recreation of the population made it possible to complete the composition of the public community center. The project was reconstructed and expanded taking into account the current state of a large village and the inclusion of a number of social facilities. The community center is designed on both sides of the main street of the village. The social infrastructure facilities include an administrative building, a teahouse “Nuroniy”, a consumer and trade service store, a complex of houses of culture of the village. The village doctor’s office is an integral part of the community center, along with the local center formed by a pharmacy, a mini-football field, an alley and a playground. Along the main road, another local center has been created with a shopping center and a catering complex, which are also designed to serve neighboring villages. The transition from the principle of zoning covering the whole range of services to the principle of dividing functional zones and placing objects in different local centers characteristic of the Republics of Uzbekistan is one of the key areas of designing rural places. Project proposals implemented under the state program “Prosperous Village” are an example of the fact that this direction is widely used in the design of rural settlements in the republic (Figure 3).

The reconstruction of the village is organized taking into account the current situation and is developed around the trays that provide the village with water and the main road. This road was connected to the central road and united with the road around the trays, through which water flows into the village, creating the compositional integrity of the village. The community center of the village consists of several squares along the main street. This is the area for holding the main events in front of the shopping center, the house of culture and the building of the village’s medical center, the area around the pool formed at the intersection of the road and the building designed for solemn weddings and festivities. Small buildings of social infrastructure facilities are located along the main road. The existing residential streets of the residential area are regularly connected to the main street of the village and the projected residential area, which provides a holistic architectural and compositional solution connecting the village as a whole.

The new socio-economic conditions require the expansion of the basic elements of settlements without maximizing the rural environment. These include the territory, service facilities, recreational areas and the state of merging some of them into another until complete unity. Bringing complexes to the scale of rural areas, rather than expanding them, is the main trend of rural architecture. Obviously, this direction is widely used in ongoing projects for the reconstruction and further development of existing villages in the country. The peculiar features of the historical values of Uzbekistan, natural and climatic conditions and the possibility of preserving the rural landscape and villages, which corresponds to the rapid changes in the future, in order to meet the daily needs of the growing population; there is an urgent need to work on the problems of forming new types of buildings. This is evidenced by the fact that in the villages where historical monuments have been preserved, reconstruction is being carried out around them by means of the construction of architectural objects, brought to perfection in the spatial composition (Figure 4). The Gavs-ul-Azam sanctuary in the Urgut region is located on a hill visible from all sides of the village of Gus, and plays an important role in the architectural and compositional formation of the village. A recreation area has been set up.

![Figure 3. Project proposal for the reconstruction of the village of Manas, Dustlik district, Jizzakh region.](image-url)
and improved around the shrine. Mosques and shops, designed as part of the temple complex, added the splendor of rural architecture with their spatial compositional solution, in harmony with the environment [3].

Figure 4. Payaryk district of Samarkand region “Imam Al-Bukhari complex of residential and social infrastructure in the project proposal.” Arkhi KUB Limited. F. Khudoikulova

This system at that time required not only the functional integration of all elements of space, but also a certain level of architectural and artistic solutions” [4]. Housing enlargement was not one of the topical problems. The dwellings consisted mainly of one-story houses, and two-four-story houses were built only in the central part of the village. An example of this is the village of Begimkulov [4] (Figure 7-8) in the Kashkadarya region. The community center of the village is located along the axis of the central boulevard, where the administrative and shopping center are designed at the beginning of the boulevard, the cultural and educational center and the park at the end of boulevard. Along the boulevard, two and four-storey residential buildings have been designed, which fill the space between the cultural and shopping center and contribute to a holistic perception of the spatial composition of the public center.

In the last century, the expansion in the country mainly affected the master plans of settlements, industrial and public complexes, and they fell under the influence of the enlargement of objects. At the same time, the concept of the living environment has changed. This environment is now interpreted as a system of interconnected spaces: habitat - plots in front of houses - dwellings - community center of the village - inter-settlement communications - inter-settlement service center - organization of a common architectural landscape of the village. In the Kashkadarya region. Sredazgiprotselinstroy, architect V. Nemirovsky

Figure 5. The current state of the Gavs ul Azam shrine, located on the territory of the Gus village, Urgut district, Samarkand region.

Figure 6. Project proposal for the reconstruction of the Gavs ul Azam shrine, located on the territory of the Gus village council of residents of the Urgut district of the Samarkand region. Authors: K. Rakhimov, A. Aimatov

In the village of state farm No 4 in the Kashkadarya steppe, the architect V. Nemirovsky took into account the climatic conditions of the desert zone and placed the center in the depths of the village. The community center is organized within the territory bounded by the main street of the village ring road. On the territory of the public center, there is a trade and cultural center, an administrative building, a school, a park with sports grounds. Two-four storey residential buildings are located around the main street, connecting the village with a regional road. Particular attention is paid to the formation of a public center, landscaping, expressive design of the front entrances.

Figure 7. Plan of the public center of the village named after Ch. Begimkulov in the Kashkadarya region. Sredazgiprotselinstroy, architect V. Nemirovsky

1 - administrative building; 2 - communications department; 3 - teahouse; 4 - bus stop; 5 - club; 6 - school complex; 7 - summer cinema; 8 - shopping centers (shop, kitchen, household, hotel).
**Figure 8.** General plan of the village of the 4th state farm in the Kashkadarya region. Sredazgiprotselinstroy, architect Nemirovsky V.

1 - four-storey houses; 2 - two-storey houses; 3 - administrative building; 4 - shopping center; 5 - club; 6 - school; 7 - summer cinema; 8 - nursery - kindergarten; 9 - consumer services; 10 - production area

In both versions, the environment in the desert zone has been carefully studied by the architect and all questions of functional zoning and their boundaries have been carefully resolved. The issues of cultural and social services, the location of public centers, the organization of housing for the population, transport and pedestrian corridors, improvement and landscaping, architecture of open and closed areas well organized. The expressiveness of the settlements has been achieved, the problem of taking into account the points of view of their remote rural location has been completely solved. Today’s rapid urbanization, the transition to a cluster production system and the emergence of large agro-industrial complexes make it possible to create multi-storey housing for the population working in these complexes. This, in turn, creates a need to use the latest modern technologies in the design of social infrastructure and residential buildings, as well as convenience and environmental friendliness in the organization of engineering and communication infrastructures.

**6 RESULTS**

At present, it is advisable to follow the following directions in the design of housing, objects and complexes of social infrastructure, taking into account the territorial environment of settlements:

- taking into account the environment when planning master plans of the village, designing taking into account natural and climatic conditions, effective use of local topography, widespread use of modern technologies in landscaping and gardening;
- the inclusion of multi-storey residential buildings in the structure of housing in rural areas, the formation of the "makalla" system;
- transition to individual design of social infrastructure facilities taking into account local conditions;
- increased customer requirements for the convenience and environmental friendliness of the building, the provision of engineering communications in the design of social infrastructure facilities;
- a comprehensive solution to the environmental problems of rural facilities - waste-free farms (private households, farms), the use of natural energy sources for life and production needs;
- an increase in the number of types of buildings and structures, depending on their capacity, size, purpose and social status;
- should pay great attention to the wide use of national folk architectural traditions;
- to study the possibilities of preserving the historically established rural environment, the effective use of architectural monuments, shrines in the organization of the general ensemble of the village; Department of Architecture, Samarkand State Architectural and Civil Engineering Institute, Samarkand, Uzbekistan - the need to use the potential of a wide range of industrial structures and building materials, as well as local building materials.

**7 CONCLUSION**

Together with socio-economic factors in the process of cardinal changes in the rural environment, environmental problems, environmental protection, the fruitful use of the natural landscape, if possible without changing them, the effective use of scientific and technological advances in the practice of design and construction of engineering communications is of great importance. Every year new villages appear in our republic, existing ones are reconstructed. Improving cultural and consumer services for rural areas, reducing the difference between urban and rural areas, are the priority tasks of a radical change in rural populated areas. The loss of this discrepancy is based on modern principles, where the special attention of rural community centers, local centers, educational institutions, trade and service enterprises in their development are directly related. The inclusion of urban multi-storey residential buildings in the countryside, the organization of rural roads in relation to highways, fields, farms in remote areas, small settlements create a completely different environment. Because of this, in the formation of the rural environment, the main attention is paid to the widespread use of new technologies in landscaping and landscaping of the territories of public and local centers.

**REFERENCES**

[1]. Decree of the President of the Republic of Uzbekistan. 03.29.2018 No.PF - 5386 "On a safe village"

[2]. Decree of the President of the Republic of Uzbekistan. 10. 01. 2019 № PF-5623 "On measures to radically improve the urbanization process."
