

**PRINCIPLES OF DESIGN AND DEVELOPMENT OF  
URBAN AND SATELLITE URBAN AREAS**

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**Annotation:** Urban and satellite cities are areas that are located in the same metropolitan zone and, in most cases, are economically, socially and culturally interdependent. Currently, the issue of the proper design and development of the city and its satellite cities is due to many problems, including population density, transportation systems, green areas and architectural development. This article provides a scientific analysis of the peculiarities of the design of urban and satellite cities.

**Keywords:** city, satellite city, urban planning, trend, function, area, demography, architecture.

**Introduction.** Urban planning is the process of designing, developing and managing cities. It aims to properly plan the infrastructure of the city, create a comfortable living environment for the population and ensure economic stability. In this, it is aimed at ensuring the economically, socially and environmentally sustainable development of cities, creating favorable living conditions for the population living in them. The laws and regulations governing urban planning are designed with the aim of ensuring the correct planning of the urbanization process of the country, the effective use of urban areas and the creation of comfortable living conditions for the population. The Republic of Uzbekistan also has several laws and regulatory documents that control urban planning activities.

The Urban Planning Code of the Republic of Uzbekistan defines general principles in the field of urban planning and contains rules that must be observed in the planning of urban areas. It establishes regulatory requirements for the allocation of plots, the placement of Housing and infrastructure facilities [1].

Urban and satellite cities are a set of cities that are located close to each other, connected economically, socially and culturally. The main city is often an important Center for a country or region and will have great economic and cultural potential. The satellite city, on the other hand, is usually located around the main city and depends on it in aspects such as economic development, population density, transport links.

Satellite cities help to reduce the population density in large cities, eliminate the shortage of Housing and social infrastructure, diversify economic development. In

addition, satellite cities allow you to maintain an ecological balance and use natural resources wisely.

**Methods.** The main differences between urban and satellite cities are described as follows:

1. The main city serves as the center of Economy, Trade, Culture, and governance, while satellite cities serve as an additional habitat, manufacturing, and service area;

2. There are strong transport links between the city and satellite cities. These routes have developed public transport and road infrastructure, providing convenient mobility for residents;

3. Satellite cities are often designed with the aim of creating a livable environment. They have more green areas, hiking areas, and can become a recreation area for urban residents.

Satellite cities play a significant role in modern urbanization. They not only reduce the burden on the main cities, but also contribute significantly to the economic, social and environmental sustainable development of the country or region [4]. The following are notable aspects of satellite cities:

1. Reducing population density. Satellite cities help reduce the growing population density in the main cities. With this, the accumulation of excess people in the main city is taken away and the pressure on resources such as housing, road infrastructure, public services is reduced. In satellite cities with lower population density, living conditions will usually be created in a more comfortable and healthy environment.

2. Solving housing and infrastructure problems. The growth in land and housing values in the main city creates problems. Satellite cities, on the other hand, offer relatively comfortable housing and extensive infrastructure, increasing the possibility of living around the city. Through this, residents are offered comfortable housing and good social infrastructure.

3. Diversification of economic development. Satellite cities can be developed as centers of large economic activity. They provide new opportunities in the manufacturing, trade and service sectors, reducing dependence on the main city. This will help create new jobs, attract investment and strengthen the local economy.

4. Reducing pressure on Transport infrastructure. The presence of satellite cities reduces the load on transport networks, since residents will be able to live and work in satellite cities without much commuting to the main city. This will help reduce road congestion in the transportation system and increase safety on city roads.

5. Maintaining ecological balance. Major cities experience environmental issues related to urbanization, including pollution, depletion of green areas, and over-consumption of resources. Satellite cities contribute to the preservation of the

environment by creating a green and ecological environment for a part of the population and reduce the environmental burden of the main city.

6. Increase cultural and social diversity. As satellite cities develop, their specific cultural and social environments are formed. It provides opportunities for residents of cities such as rich cultural life, educational and health facilities, resorts and entertainment centers.

**Discussion and results.** The principles of urban and satellite city design are of great importance in the modern urbanistic design process, and the following principles must be taken into account for their effective and sustainable development:

1. Integrated transportation system. It is necessary to create a powerful and effective transport system between the city and satellite cities. This includes:

- Public transport: to make it possible for the population to move comfortably by introducing buses, metro, tram or express transport systems from the main part of the city towards satellite cities;

- \* Bicycle and pedestrian paths, providing opportunities for Green and ecological transport types and building infrastructure for them;

2. Conservation and development of green areas. Green areas are important for urban and satellite cities to be environmentally sustainable. When designing them, the following principles are important:

- Parks and recreation areas, creating recreational areas for residents, while preserving the natural environment;

- \* Providing natural flow and migration routes by creating green corridors, roads connecting different green areas or green corridors.

3. Development of economic and social infrastructure. In order to improve the well-being of the population and to develop the city sustainably, it is necessary to properly plan the social and economic infrastructure.

- \* Provide convenience for people by building shopping and service centers, shopping and service centers near living areas;

- Educational and health institutions, schools, hospitals and cultural centers should be placed throughout the city and satellite cities in accordance with the needs of the population.

4. Principles of architecture and design. Urban and satellite cities should also be harmonized in terms of architecture:

- Local and modern design, architecture should reflect national and local characteristics, as well as represent modernity;

- Aesthetic and functional harmony, it is important that the buildings and structures are both aesthetically and functionally accessible. This has a positive effect on the urban environment.

5. Environmental sustainability and energy efficiency. In the design of urban and satellite cities, maintaining environmental sustainability is one of the main principles:

\* Implementation of environmental technologies such as green technologies, energy efficient equipment, solar and wind energy use;

• Protection of the urban environment by building water and Waste Management System, Water Resource Conservation and waste recycling systems.

6. Balancing urbanization. It is important to maintain economic and social balance between the main city and satellite cities, to manage the population density:

• Planning Regional Development, creating jobs and services in satellite cities in order to reduce the density in urban centers;

\* Balance by planning residential and commercial areas, residential and commercial areas around cities. Through the correct design of urban and satellite cities, it is possible to create a stable development and a population-friendly living environment with their integration.

**Conclusion.** Based on these principles, the design of urban and satellite cities helps to ensure their integrated development and high-quality living environment for the population. By properly designing and developing urban and satellite urban areas, they can be transformed into more accessible, sustainable and economically developed areas. Because satellite cities are of such valuable importance, their strategic planning and development along with the main city are considered important in increasing urbanization and population well-being. To achieve this goal, an integrated and integrated approach is necessary.

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