

PROSPECTS FOR IMPROVING LANDSCAPE DESIGN IN THE CITIES OF UZBEKISTAN

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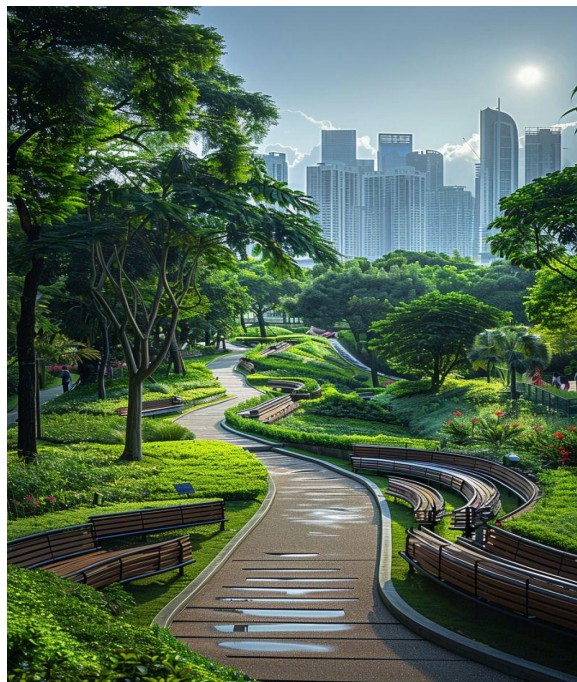
Abstract: This scientific article analyzes the development of landscape design in the cities of Uzbekistan, the organization of modern green areas, the improvement of the ecological environment, and the provision of aesthetic and functional balance in the process of urbanization. In addition, the experiences of landscape architecture in Tashkent, Samarkand, Bukhara, and other cities are studied, and perspective solutions are proposed.

Keywords: landscape design, urbanization, ecology, green area, urban environment, architecture, composition, ecological sustainability.

Today, the rapid expansion of cities worldwide is causing various ecological problems. In particular, air pollution, the reduction of green areas, and climate change have increased the need for landscape design in modern urban planning. Since the urbanization process is also accelerating in the cities of Uzbekistan, expanding green spaces and developing landscape design based on modern requirements has become one of the urgent tasks. Landscape design not only creates an aesthetic environment but also ensures human health, ecological sustainability, and social activity. Green zones, parks, water reservoirs, and recreation areas play an important role in maintaining the ecological balance of cities. Landscape design is the art of creating aesthetic and functional spaces through the harmonious combination of natural and artificial elements. This field is closely connected with architecture, ecology, botany, and design sciences. The main elements of landscape design include:

1. green plants;
2. water elements;
3. pathways and squares;
4. small architectural forms;
5. lighting systems;
6. decorative compositions.

Compositional harmony is of great importance in urban landscapes. Principles such as color, rhythm, proportion, symmetry, and balance determine the aesthetic quality of landscape design. An ecological approach occupies a central place in modern landscape design.



Water-saving technologies, the use of plants adapted to local climates, and increasing energy efficiency are important factors in creating ecological landscapes. In recent years, along with the modernization of urban infrastructure in Uzbekistan, a number of reforms have also been implemented to expand green areas. In Tashkent, new parks, alleys, and pedestrian zones are being established. In historical cities such as Samarkand, Bukhara, and Khiva, special attention is paid to landscape solutions in the national style. In these areas, creating a green environment harmoniously integrated with historical architectural monuments is considered an important task. However, the following problems are observed in some cities:

1. Insufficient green areas;
2. Outdated irrigation systems;
3. Disturbance of ecological balance;
4. Lack of modern landscape design specialists;
5. Weak aesthetic environment in public spaces.

In many residential areas, the reduction of green spaces leads to excessive heating of the microclimate during summer. Urban greening can improve air quality. Trees and shrubs trap dust, produce oxygen, and reduce noise pollution. The following measures are particularly important: using plants adapted to the local climate; introducing drip irrigation systems; organizing vertical gardens; developing green roof technologies.

The historical and cultural heritage of Uzbekistan should also be reflected in landscape design. National ornaments, oriental garden styles, pools, and fountain compositions demonstrate the uniqueness of Uzbek landscape design. For example, the historical gardens of Samarkand and Bukhara are considered unique examples of Eastern landscape art. Today, digital technologies are widely used in landscape design. 3D modeling, automatic irrigation systems, and the “smart garden” concept increase design efficiency. The use of solar energy in lighting systems is also environmentally and economically beneficial. Landscape design positively influences human psychology. Recreation in green areas improves mental well-being, reduces stress, and increases physical activity. Public parks and alleys also play an important role in increasing social activity among the population. Especially children’s playgrounds, bicycle lanes, and recreational zones have become integral parts of modern urban infrastructure. Landscape design also contributes to tourism development. An aesthetically organized urban environment increases tourist flow and strengthens the economic potential of the region. In recent years, many new parks and alleys have been established in Tashkent. The “New Uzbekistan” Park, “Ashgabat” Park, and central pedestrian zones were created based on modern landscape design principles. Solutions such as:

- 1) wide pedestrian walkways;
- 2) decorative lighting;
- 3) water reservoirs;
- 4) modern benches;



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5) environmentally friendly materials

6) have been applied.

However, in the future it is necessary to establish more ecological parks, expand car-free zones, and develop green corridors. Composition is an important artistic tool in landscape design. When plants, pathways, water elements, and decorative forms are harmoniously arranged, an aesthetic environment emerges. Color harmony is also of great importance. Green symbolizes peace and nature, while yellow and red add vitality to the environment. Neutral light colors create balance in the overall composition.



The principles of rhythm and proportion ensure the integrity of space in landscape design. Symmetrical compositions create a sense of solemnity, while asymmetrical compositions provide a feeling of naturalness and freedom.

Conclusion: The development of landscape design in the cities of Uzbekistan is of great ecological, aesthetic, and social importance. Through the organization of modern green spaces, it is possible to improve the ecological condition of cities, increase the quality of life of the population, and develop tourism potential. In the future, one of the main tasks will remain the integration of national traditions with modern technologies in landscape design, the implementation of environmentally sustainable solutions, and the creation of a comfortable urban environment for people.

References

1. Qodirova N. *Fundamentals of Landscape Architecture*. Tashkent, 2021.
2. Karimov A. *Urban Planning and Ecology*. Samarkand, 2020.
3. Norqulov B. *Modern Landscape Design*. Tashkent, 2022.
4. Le Corbusier. *Architecture and Urban Planning*. Paris.
5. Materials of the Ministry of Construction and Housing and Communal Services of the Republic of Uzbekistan.
6. Collection of Scientific Articles on Urban Ecology and Green Infrastructure.