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State control in monitoring the greening of city roads and streets

M.Z. Ergashova¹^a, Sh.R. Khalimova¹^b, A.A. Normukhammadov¹^c

¹Tashkent State Transport University, Tashkent, Uzbekistan

Abstract: As cities continue to expand, green spaces are vital for maintaining environmental balance and improving the quality of life for residents. However, urbanization, combined with climate change, poses significant challenges to the preservation of these spaces. Local government bodies play a crucial role in ensuring the sustainability of urban green areas. Their responsibilities include planning and allocating land for parks, gardens, and green corridors, which help to mitigate the urban heat island effect, enhance air quality, and provide recreational areas. Local authorities also need to implement policies that protect existing green spaces from overdevelopment and maintain biodiversity. Moreover, local governments must foster community engagement, encouraging citizens to participate in the creation and maintenance of green areas. Public-private partnerships can further support the development of urban parks, with businesses contributing to the creation of green spaces while benefiting from improved aesthetics and environmental quality. In the face of climate change, urban green spaces offer essential ecological services. By addressing the challenges of urbanization and climate change, local governments can ensure that cities remain livable, resilient, and sustainable for future generations.

Keywords: road transport infrastructure, natural soil-climate conditions, trees, bushes, effective monitoring, monitoring of greening of avenues, parks, central streets, city roads, and streets

1. Introduction

The processes of modernization of the country are visible at every step and are bearing results. The appearance of cities and villages is changing; new settlements and smooth, modern roads are being built. Large-scale socio-economic reforms implemented in the republic in recent years and aimed at increasing the economic potential of the regions and fundamentally changing the appearance of cities and villages, in turn, require more rapid development of the road transport infrastructure.

While the greened area participates in the formation of the environment, it is primarily subject to natural soil-climate conditions and human activity [1].

State control over the greening of city roads and streets is very important to achieve sustainable urban development and create a healthier and more livable environment for residents [2]. The greening of urban areas, including urban roads and streets, is the strategic planting of trees, shrubs, and other plants to improve urban air quality, reduce heat island effects, mitigate the effects of climate change, and improve overall aesthetics. includes planting in a way. However, without effective monitoring and enforcement mechanisms, these activities cannot be implemented or maintained properly [2].

2. Research Methodology

The problems and shortcomings of landscaping and beautification in Uzbekistan were divided into several types:

First: "limited sources of financing." Improvement works are carried out at the expense of funds allocated from the local budget, or, in other words, at the expense of taxpayers' funds. In this case, land owners and land users do not have any obligation to beautify adjacent areas.

Second, "the exact area of the areas to be improved has not been determined." The condition of the passports in the areas to be improved is unsatisfactory. As a result of the analysis, it was shown that the size of the real areas to be improved is several times larger than the areas recorded in the passport.

Certain types of areas, in particular the centers of settlements (alleys, parks, and central streets), are partially beautified by improvement departments, state bodies, residents, and business entities, while the rest of the areas are neglected.

Third: "The workload is too much" The volume of work of improvement departments is 3-4 times higher than their existing capabilities, which has a negative impact on the quality of their work. According to the norm, the cleaning area of one employee in one day should be 3,500 m², but in practice, the average load is 9,997 m², which is almost three times higher than the established norm [3].


Fourthly, "lack of monitoring and outdated technology". There are a total of 4,522 machines on the balance sheet of the improvement departments in the republic, of which 888, or 20%, are in defective condition.


There is no mechanism for monitoring areas, which would significantly save time, material, and labor resources, as well as increase the quality of improvement work.

Fifthly, "the elements of public-private partnership, outsourcing, and public control do not exist." The lack of elements of a public-private partnership limits the possibility of attracting additional effective resources. The introduction of this partnership on the basis of specific requirements makes it possible to attract the material, technical, and labor resources of the private sector.

Not only the relevant organizations, but also the participation of the population in the greening of city roads and streets is important in the organization of landscaping works.

^a <https://orcid.org/0000-0001-6636-6206>

^b <https://orcid.org/0000-0002-4753-390X>

^c <https://orcid.org/0009-0008-3593-9612>



State control refers to the authority and responsibility of the government to control and regulate various aspects of urban planning and development, including the greening of city roads and streets. This is to set policies, guidelines, rules, and standards for the implementation of green infrastructure, to monitor compliance with these rules, to provide financial incentives or penalties for compliance or non-compliance, and to ensure that green initiatives are implemented as intended. may include inspections [4].

3. Result and Discussion

Monitoring the greening of urban roads and streets is a process of monitoring the condition and development of green spaces in the urban environment. This is an important task for improving the ecological situation, creating a

comfortable urban environment, and preserving biodiversity. As part of the monitoring of the greening of the city streets, the study of green areas, analysis of their condition, identification of problems and improvement of plant care, and development of measures for the expansion of green areas are carried out. Another important aspect of monitoring is monitoring compliance with the rules for planting trees and shrubs in the city in order to preserve the health of plants and maintain the aesthetic appearance of the city [5].

Urban street greening monitoring involves tracking the progress and effectiveness of urban revegetation efforts by planting tree seedlings, installing green infrastructure, and implementing other sustainable practices. Methods of monitoring the greening of city streets have been developed [6].



Figure 1. Monitoring scheme for greening city roads and streets

By regularly monitoring urban street greening through these and other methods, local governments can ensure that their sustainability goals are met and that cities become healthier and more vibrant places to live.

One of the main directions of state control in monitoring the greening of city roads and streets is to set specific goals and tasks for the implementation of green infrastructure. This could include setting targets for the percentage of tree shade cover, ensuring that a certain number of trees are planted each year, or providing guidelines for including green space in new developments.

Another important aspect of government control is the allocation of resources for green infrastructure projects. Public authorities can provide funding through grants or subsidies to support tree planting initiatives, green space development, or maintenance activities.

In addition to providing financial support, public authorities can also play a role in coordinating efforts among various stakeholders involved in greening city streets. This can involve working with local authorities, community groups, non-profits, private businesses, and residents to develop comprehensive greening plans and ensure everyone is working towards common goals. Public oversight can help facilitate communication between stakeholders and foster collaboration to maximize the impact of green infrastructure projects [7].

Another important task of state control is to control compliance with regulations related to the greening of city roads and streets. This may include regular inspections to ensure that trees are planted according to specifications [8], maintaining proper tree maintenance practices such as regular watering and pruning, removing invasive species, or implementing regulations related to the protection of trees during construction activities.

4. Conclusion

In short, state control should play a decisive role in controlling the greening of city streets by setting specific goals and objectives, providing financial support, coordinating efforts among stakeholders, controlling compliance with regulatory documents, applying sanctions for non-compliance, conducting inspections, collecting data on green infrastructure indicators, and assessing the effectiveness of the measures taken to achieve the goals of sustainable urban development. Overall, government oversight is critical to ensuring that cities effectively implement green infrastructure initiatives on their roads and streets. By setting mandates, supporting funding, maintaining compliance, and coordinating stakeholder engagement, state governments play a critical role in creating healthier, more sustainable, and more livable urban environments through strategic greening efforts.

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Information about the author

Ergashova Mokhichekh-ra Tashkent State Transport University,
Teacher of the Department of Urban
Roads and Streets

Email: mohichexra1995@gmail.com

<https://orcid.org/0000-0001-6636-6206>

Khalimova Shakhnoza Tashkent State Transport University
Docent of the Department of Urban
Roads and Streets

Email: xalimova_sh@tstu.uz

<https://orcid.org/0000-0002-4753-390X>

Normukham-madov Asilbek Tashkent State Transport University,
Teacher of the Department of Urban
Roads and Streets

Email:

asilbeknormuxammadov1993@gmail.com

<https://orcid.org/0009-0008-3593-9612>



O. Ishnazarov, Kh. Khaydarov <i>Enhancing energy efficiency in industrial pump units: the role of asynchronous motors with frequency converters</i>	7
Sh. Ismoilov <i>Functions of the Operation of Continuous Automatic Locomotive Signaling in Rail Transport (ALSN)</i>	15
N. Aripov, Sh. Ismoilov <i>Features of the effect of increased reverse traction currents on rail circuits and continuous automatic locomotive signaling</i>	18
S. Absattarov, N. Tursunov <i>The influence of the chemical composition, including harmful and undesirable impurities, on the properties of spring steels</i>	21
K. Azizov, A. Beketov <i>Analysis of existing methods for measurement of air pollution in road areas</i>	24
D. Odilov <i>The practical importance of the Maple software</i>	28
I. Umirov <i>Program evaluation of the enterprise exploitation service process</i>	31
R. Saydakhmedov, O. Rustamov <i>Increasing the role of titanium alloys in the aviation industry: problems and solutions</i>	34
I. Normatov <i>Bibliometric analysis of improving the performance system of human</i>	37
T. Kurbaniyazov, A. Bazarbaev <i>Modeling the processes of conversion of asymmetrical three-phase currents into output voltage</i>	40
K. Azizov, A. Beketov <i>Traffic flow characteristics and their impact on air pollution in urban streets: a case study of Tashkent</i>	43
M. Ergashova, Sh. Khalimova, A. Normukhammadov <i>State control in monitoring the greening of city roads and streets</i>	46
O. Khushvaktov, Sh. Khalimova <i>Traffic flow velocity analysis on urban roads: a study of Uzbekistan's key transportation route</i>	49
Z. Alimova, S. Pulatov <i>Performance analysis of motor oil quality in heavily loaded engines of quarry vehicles</i>	53
M. Umarova <i>Impact of the greened area of the enterprise on the safety of workers</i>	58
D. Nazhenov, M. Masharipov, B. Rustamjonov, O. Pokrovskaya <i>The impact of attracting an additional shunting locomotive to railway technical stations on the utilization indicators of rolling stock</i>	61
Sh. Kayumov, A. Bashirova <i>Improvement of the technology for determining the time spent on cleaning gondola cars</i>	64