



IQTISODIYOT & TARAQQIYOT

Ijtimoiy, iqtisodiy, texnologik, ilmiy, ommabop jurnal

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- 08.00.11 Marketing
- 08.00.12 Mintaqaviy iqtisodiyot
- 08.00.13 Menejment
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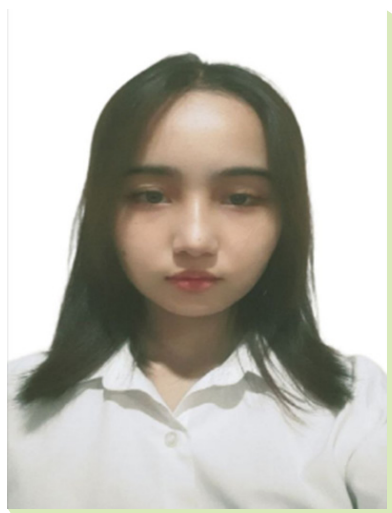


MUNDARIJA

Strategies for achieving sustainable growth through green economy transition.....	14
Umida Kakhramonova Gayratovna, Tillayev Khurshidjon Sulaymon oglu	
Current state and development prospects of tourism: comparative analysis and Uzbekistan's experience.....	20
Risolatbonu Shakhzodova, Laziza Khalilova, Nabijonov Biloliddin, Aziza Usmanova	
Инновационные подходы к повышению эффективности корпоративного управления.....	26
Тлеумуратова Мадинабону Дилмурат кизи, Уринов Бабур Насиллоевич	
Startup проекты и их реализация	30
Ёдгорова Мухайе Шухратовна, Иминова Наргиза Акрамовна	
Methodology of Teaching English: Traditional and Modern Approaches	34
Ravshanova Ziyoda Qahramon Qizi, Xoliqova Dilafruz Shuhratovna	
Государственный кредит и государственный долг.....	37
Срождиддинова З.Х., Тухтасинова Д.Н.	
Сравнительный анализ реформ государственных финансов в Китае и Грузии: уроки для Узбекистана	42
Срождиддинова Зарина Хайриддиновна, Шарифзода Мубина Дилмуроджон кизи	
Korxonalarda asosiy vositalar hisobini yuritishni takomillashtirish	49
Shakarov Shahzod Sobir o'g'li, Po'latov Xudoyberdi Uktamovich, Esanov Oybek Madatovich	
Sustainable consumption and production: economic challenges and solutions.....	55
Abdullayev Abdug'ofur, Abdubaxromov Abduazim, Eshniyozov Ozodbek, Azizbek Abdullayev	
Traffic congestion in Uzbekistan: causes and strategic solutions	60
Abdulloh Qodirov, Imron Egamberdiyev, Isomiddin Ravshanov, Munisa Bekmirzayeva	
The relationship between corruption and economic growth.....	64
Jurayev Jo'rabek, Abdullayeva Aziza, Mamatova Sarvinoz, Maha Ibrahim	
Crisis management in the tourism industry	74
Ikromova Munisa, Bahodirova Mohigul, Xalimova Dilbar, Abdullajonova Muslimabonu	
Impact of the touristic indicators on the poverty rate.....	80
Abdumanova Maftuna, Azizova Ruhshona, Shavkatova Mubiynabonu, Durдона Bahodirova	
Bringing sustainability: the role of the green economy in enhancing resource efficiency	91
Salokhiddinova Farangiz, Mardonov MuhammadYusuf, Shovkiyeva Munisa, Ahmadova Xurshida	
The relationship between innovation and environmental emissions.....	98
Mamadiyorova Ruxshona, Nurullayev Asliddin, Abduraimov Sardor Anvar o'g'li, Aysayeva E'zoza	
Green finance unlocked: innovations, challenges in Uzbekistan's perspectives.....	107
Dildora Khodjaeva Mukhamedkhodjaevna, Jamolova Madina Talgatovna, Lola Qidiralieva Ulug'bekovna	
Turning the tide: how Uzbekistan can tackle its water crisis	115
Rixsiboyev Mirhaydar, Orazov Kamron, Baratov Shakhriyor, Bahromjon Urmanov	
Drivers and losses of economic development of Tashkent: a desk study.....	125
Zaribbaeva Komila Ulugbek qizi, Durдона Davletova	



DRIVERS AND LOSSES OF ECONOMIC DEVELOPMENT OF TASHKENT: A DESK STUDY



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Abstract: This study explores the environmental implications of economic development in Tashkent, focusing on the widespread removal of urban trees as a result of infrastructure expansion and real estate pressure. Utilizing qualitative content analysis based on secondary data from 2020–2024, the paper identifies key drivers behind urban deforestation, including modernization efforts and weak regulatory enforcement. It emphasizes the ecological and social consequences of such development and calls for the institutionalization of participatory planning and legally binding environmental protection measures to ensure sustainable urban growth.

Key words: urban development, deforestation, environmental policy, public space, sustainability, Tashkent, participatory planning.

Annotatsiya: Ushbu tadqiqot Toshkent shahridagi iqtisodiy rivojlanish jarayonlarining ekologik oqibatlarini, ayniqsa, daraxtlarning ommaviy kesilishi holatini o'rganadi. 2020–2024-yillardagi ikkilamchi ma'lumotlarga asoslangan sifatli kontent tahlili orqali daraxt kesilishining asosiy sabablari – infratuzilma kengayishi, ko'chmas mulk bosimi va ekologik nazoratning zaifligi aniqlanadi. Maqolada urbanizatsiyaning ijtimoiy va ekologik salbiy ta'siri ko'rsatilib, barqaror rivojlanish uchun jamoatchilik ishtirokini ta'minlaydigan va huquqiy asoslangan rejalashtirish tizimini joriy etish zarurligi ta'kidlanadi.

Kalit so'zlar: urbanizatsiya, daraxt kesilishi, ekologik siyosat, jamoat maydonlari, barqarorlik, Toshkent, ishtirokchi rejalashtirish.

Аннотация: В статье рассматриваются экологические последствия экономического развития Ташкента, особенно массовая вырубка деревьев в результате расширения инфраструктуры и давления на рынок недвижимости. На основе качественного анализа вторичных данных за 2020–2024 годы выявлены ключевые причины урбанистической деформации, включая модернизационные усилия и слабый экологический контроль. Авторы подчеркивают необходимость институционализации участия общественности и принятия юридически обязательных мер по охране окружающей среды для обеспечения устойчивого развития города.

Ключевые слова: градостроительство, вырубка деревьев, экологическая политика, общественные пространства, устойчивое развитие, Ташкент, участие общественности.



INTRODUCTION

Over the past few years, Tashkent has undergone rapid urban development through a series of initiatives that include infrastructure enhancements, road widening, and the construction of modern residential and commercial properties. These efforts have been aimed at modernizing the capital and promoting economic growth. However, such urban development has come at a significant environmental cost, particularly due to the widespread and often unregulated removal of urban trees by construction companies.

The city's transformation has been abrupt and, for many residents, deeply unsettling. Civil society and environmental groups in Tashkent and surrounding regions have expressed serious concerns over the loss of urban green spaces. Public outrage peaked in early 2024, when the Ministry of Ecology of Uzbekistan issued restrictions against the Tashkent City Environmental Protection Department after it identified illegal tree removals carried out during a period when a national moratorium was still in force [1].

These violations appear to stem from a series of high-profile incidents in which construction companies removed trees—often without proper permits or environmental impact assessments—despite official commitments to environmental protection. These events have raised serious questions about transparency, institutional accountability, and the coherence of urban planning practices.

In response to growing criticism, the government launched initiatives such as “Plant 100 Saplings” to mitigate the environmental damage and regain public trust [2]. While such programs may contribute to urban greening and reflect a commitment to sustainable development, critics argue that they fail to address the root causes of deforestation—namely, aggressive development priorities and institutional weaknesses in environmental governance.

This study investigates the scale, motivations, and consequences of tree removal in Tashkent as a byproduct of economic development. By analyzing how the issue has been represented in official statements, media reports, and environmental discourse, the study aims to uncover the fragile ecological foundations underlying current development trends and to highlight the ecological and cultural costs of prioritizing modernization over the preservation of green spaces.

REVIEW OF RELEVANT LITERATURE

Urban development in post-Soviet cities has often incorporated assertive modernization policies that compromise environmental sustainability. In Tashkent, the capital of Uzbekistan, this trend is exemplified by tree removal linked to infrastructure expansion and modernization initiatives—a pattern that has triggered concern among local citizens, NGOs, and international observers. Current research in urban ecology, environmental governance, and infrastructure planning offers valuable insights into the motivations, implications, and narratives surrounding the loss of urban green spaces.

The decline of urban greenery is typically driven by state-led infrastructure expansion, real estate investment, and beautification campaigns. In Tashkent, media reports have noted that major projects—such as metro extensions, residential complexes, and road expansions—are often approved with minimal consideration of their environmental consequences [3;4]. According to *The Times of Central Asia* [2], beautification is frequently cited as a rationale for such developments; however, this can involve removing mature trees under the guise of redesigning green corridors, only to replace them with decorative landscaping elements that lack genuine ecological value.

These trends reflect broader academic findings on urban development in Central Asia. Issanova et al. [5–6] argue that cities like Almaty exhibit similar patterns of deliberate ecological degradation, where developmental priorities outweigh environmental considerations. Urban land is commodified, and state-driven initiatives increasingly favor construction over conservation—especially in central areas like Tashkent, where land value is highest and green protection is most vital.

Urban trees play a critical role in climate regulation, biodiversity protection, public health, and environmental purification. Nowak et al. [7] document a range of benefits from urban tree canopies, including reduced heat island effects, improved air quality, and lowered healthcare costs. In Tashkent, the decline in tree coverage has led to rising levels of urban dust, heightened heat stress, and a noticeable deterioration in public well-being [8–9]. UNDP [10] warns that such effects can be especially damaging in arid urban regions, where climate change intensifies environmental vulnerabilities.

Socially, green spaces provide essential areas for recreation, relaxation, and social interaction. Khamidov and Tulyaganov [11–12] link the removal of trees to growing dissatisfaction and psychological stress, particularly among vulnerable populations such as children and the elderly. Global urban literature increasingly recognizes trees as critical components not only of environmental systems but also of urban social infrastructure.



news reports, academic articles, and NGO publications—this section highlights the primary economic drivers for tree removal, the environmental and social consequences, and how the issue is presented in different discursive domains (government, media, academia). Collectively, the findings illustrate how urban changes in Tashkent are eroding environmental resilience and public green space, prompting vital questions about sustainability and civic participation in urban planning.

Economic Drivers of Tree Removal

Several intertwined economic factors underpin the removal of urban trees, reflecting an apparent emphasis on economic growth over environmental preservation.

Infrastructure Expansion:

The Tashkent municipal government has embarked on major infrastructure projects—including road widening, bridge construction, and metro expansion—to support population growth, ease traffic congestion, and modernize urban mobility. These projects often necessitate removing or significantly reducing green spaces along roadsides and in outlying areas, frequently without public consultation or environmental impact assessments [24].

Real Estate Development & Land Value Increases:

Rapid increases in land value and short-term returns in the real estate sector have led developers to clear trees and green areas in high-demand urban zones—replacing them with luxury housing, malls, and office buildings. In many cases, developers prioritize immediate profits and view green spaces as underutilized land [25–26]. This trend accelerated following land privatization reforms, enabling more aggressive exploitation of urban land.

Beautification Campaigns:

State-led beautification efforts—such as street redesigns, public square renovations, and ornamental landscaping—often involve the removal of mature trees. While positioned as measures to modernize and visually enhance Tashkent [2], these initiatives frequently diminish urban biodiversity and natural shading.

Environmental and Social Impacts

Tree removal in Tashkent has both immediate and long-term implications for the urban environment and public well-being.

Short-Term Effects:

Urban Heat Island Intensification: Removing trees increases surface and air temperatures—especially in summer—due to reduced shade and evapotranspiration, heightening discomfort and health risks [20].

Air Quality Decline: Trees play a crucial role in filtering pollutants and suppressing dust. Their absence leads to increased soil exposure, higher airborne dust levels, and degraded air quality.

Social and Psychological Effects:

Tashkent's residents frequently report dissatisfaction, diminished mental well-being, and erosion of cultural identity due to the loss of trees and recreational green spaces. Public parks and communal gardens are vital for all, particularly the elderly and families; their removal contributes to social alienation and reduced community cohesion [27].

Long-Term Ecological Consequences:

Loss of urban forests weakens the city's ecological resilience, increasing vulnerability to climate extremes—such as soil erosion, flash floods, and heatwaves. Biodiversity decline reduces ecosystem functionality, while cumulative canopy removal alters microclimates—changes that are often neglected in official planning but have real consequences for urban life.

Discursive Representations

The issue of tree removal is framed variably across different platforms:

Government Narratives:

Authorities often acknowledge tree cutting as an unfortunate but necessary aspect of modernization. Infrastructure improvement and urban revitalization are frequently emphasized, with environmental consequences minimized or omitted [14]. Symbolic initiatives like “Plant 100 Saplings” (referenced earlier) are promoted, but experts criticize them as largely superficial without substantive ecological action [2].

Independent Media:

Outlets like Daryo.uz report illegal or excessive tree removal, exposing enforcement lapses, policy inconsistencies, and unlicensed construction activities [16]. These reports function as watchdogs, revealing public discontent and demanding institutional accountability.

Academic & NGO Critique:

Scholarly and NGO literature offer a deeper systemic critique of environmental governance—highlighting weak regulatory enforcement, minimal urban greening policies, and limited public participation in planning. Studies point to poorly maintained tree inventories and lack of mechanisms to register tree removal [10;19].



Proposed solutions include stronger legal enforcement, comprehensive urban greening strategies, and genuine community involvement.

Synthesis

Tashkent's rapid urban modernization mirrors broader trends in post-Soviet Central Asia, driven by efforts to upgrade municipal infrastructure, develop real estate, and beautify public spaces. However, these gains have come at the cost of urban green assets. The tension between economic growth and environmental preservation remains unresolved.

The failure to integrate thorough Environmental Impact Assessments (EIAs) into planning has enabled unsustainable development. Weak enforcement of existing environmental laws has allowed short-term economic interests—whether by corporations or government entities—to override ecological considerations [29–31]. This lack of transparency and public involvement erodes trust in governance.

Notably, civic responses—including protests, online petitions, and grassroots campaigns—indicate a growing demand for environmental accountability among Tashkent's residents. Calls have intensified for the protection of mature trees, not only for their ecological function but also their social, historical, and cultural significance [3]. These grassroots actions play an essential role in promoting more sustainable urban planning.

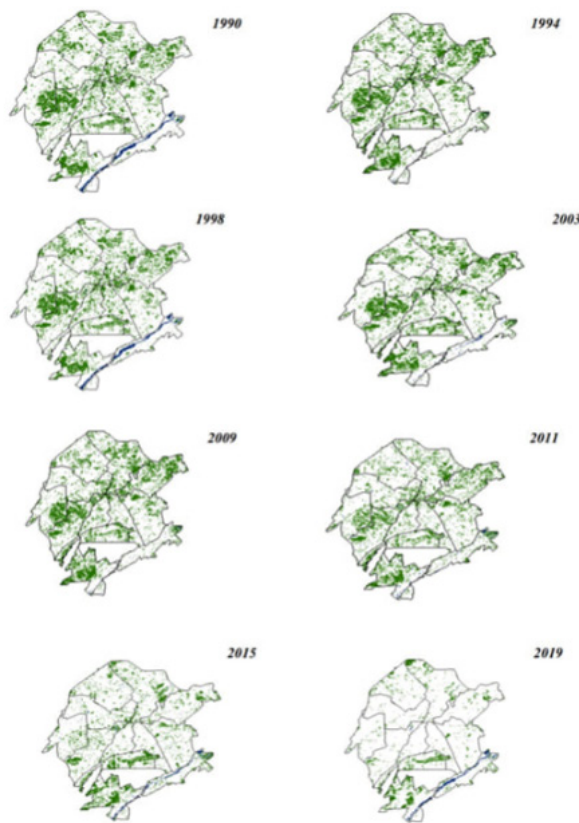
Recommendations

To address these challenges and align with sustainable urbanization objectives, the following measures are recommended:

- Institutionalize mandatory urban greening plans, including:
 - Establishing green corridors and ecological buffers along transportation routes
 - Creating urban parks and community gardens in residential areas
 - Conducting regular urban tree inventories and monitoring programs

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Identification and classification of LULC from 1990 to 2019.

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_Applying_remote_sensing_techniques_to_monitor_green_areas_in_Tashkent_Uzbekistan

Figure 1. Identification and classification of LULC [33]

A no-net-loss tree policy that guarantees that any removed trees are replaced to a satisfactory and to the greatest extent possible with native species and in appropriate urban environments.



Integrating them into master plans positions Tashkent to be more harmonious with broader, global patterns of sustainability and resilience. For example, cities like Singapore and Barcelona have exemplified ways in which nature-based solutions can integrate into high-density urban environments to bolster livability and lessen environmental risks [32].

Furthermore, institutionalizing the principles of participatory planning that allow local community stakeholders, the environmental community, and urban planners to engage in meaningful discussion and decision-making not only provides more democratic forms of urban governance but also enhances policy outcomes. Diverse viewpoints from the community and local knowledge can act as a springboard for creativity, experimentation, and adaptive management that is critical to urban planning and governance in today's era of increasingly unpredictable ecological realities.

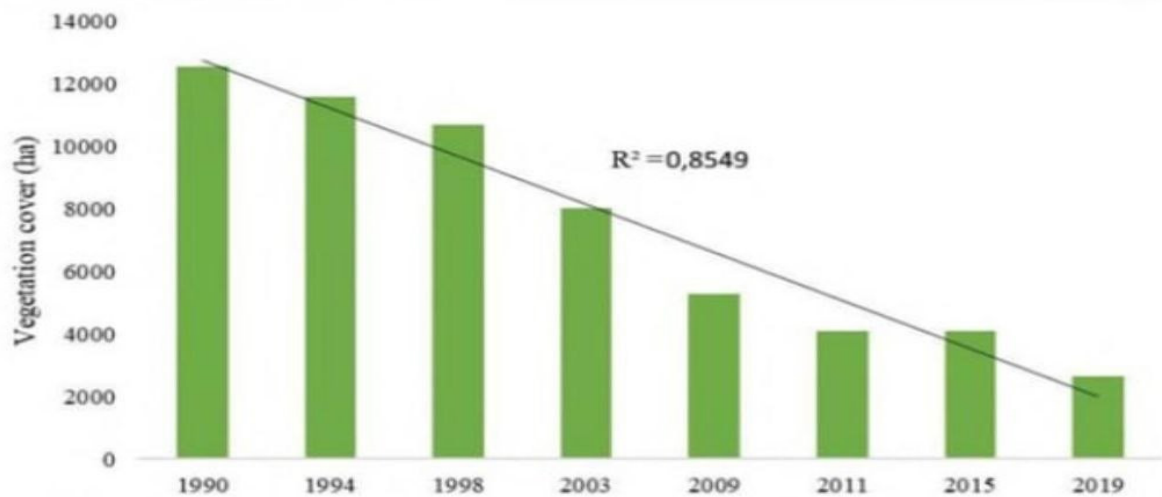
The spatial and statistical representations in Figures 1 and 2 further validate the argument that Tashkent has been experiencing an unmodernization that is unsustainable. These maps are not just visuals—they're proof. They support the long-standing warnings of news articles, scholars, and civil society: urban greening in Tashkent is in a crisis.

Even with government narratives prioritizing modernization and beautification, the land use and land cover (LULC) maps (Figure 2) illustrate that Tashkent has continued to experience a decline in ecological integrity and urban biodiversity over approximately 30 years. At best, these transformations showcase a lack of environmental planning in infrastructure and real estate development; and, at worst, counteract narratives of "sustainability."

Also, the trendline of the information in Figure 1 suggests the problem is cumulative and structural, not incidental. Without stronger institutional structures like environmental impact assessments, urban greening strategies, and ordinances for tree protection, the future will worsen.

In addition, these visualizations highlight a wider gap in governance, as public green space is being replaced by economic opportunity, without serious public consultation, and without many structures for accountability. And frustration by the public (as expressed in local protests and in independent media) is partly based on what is visualized in the present maps—the eradication of public green heritage that is invisibly to some, visibly to many.

Analysis of Tashkent's green cover



<https://www.researchgate.net/publication/351740406>

Applying remote sensing techniques to monitor green areas in Tashkent Uzbekistan

Figure 2. Analysis of Tashkent's green cover [33]

While we applaud Tashkent's desire to create a vibrant urban space for its people, we remain concerned that the current trajectory it is pursuing may undermine future sustainability. Without a commitment to integrated and ecologically conscious planning, the risks associated with climate vulnerability, public health, and social cohesion are likely to intensify over time, complicating the urban development agenda. Lessons from recent controversies surrounding tree removal—driven by development uncertainty—indicate a pressing need for reform and present an opportunity for Tashkent to redefine what progress means in the evolving context of sustainable urbanisation in Uzbekistan.



CONCLUSION AND RECOMMENDATIONS

This research is constrained to utilize publicly available secondary data and does not involve primary data collection (e.g., interviews, surveys, and site visits). Thus, the analysis does not capture all localized particulars or informal practices around tree cutting. It is likely that other governmental or proprietary documents, which are either unavailable or edited, may further limit a comprehensive evaluation of the effectiveness of official policy.

Importantly, the use of a diversity of independent and institutional sources provides a reasonably balanced and critical understanding of the research focus.

This exploration has evaluated the environmental consequences of economic development in Tashkent. Understanding the widespread loss of trees as a result of urban expansion has been an essential component of this inquiry. The assessment of secondary data indicates that the primary economic catalysts of tree loss are infrastructure development, real estate/land use pressure, and beautification efforts—all of which serve legitimate purposes of economic growth and modernization, albeit often at the expense of ecological integrity and community well-being.

In the short term, urban heat intensity, air pollution particulates, and diminished access to public recreational spaces negatively affect residents' quality of life. In the long term, environmental changes such as biodiversity loss and climate vulnerability are likely to significantly undermine Tashkent's resilience and habitability. Furthermore, the inertia surrounding the state of environmental governance in Tashkent is compounded by limited enforcement resources, lack of transparent processes, and minimal opportunities for public participation—factors that tend to favor the interests of vested economic stakeholders.

The development agenda adopted by Tashkent justifies the call for a broader and more balanced approach to urban planning, based on a well-structured and environmentally mindful urbanization strategy. Economic development without environmental safeguards is no longer tenable. Sustainable practices must include legal protections for green spaces, comprehensive urban tree inventories, mandatory environmental assessments, and genuine community engagement. Without these protections, urban developments in Tashkent risk alienating communities and destroying the very quality of life that development aims to enhance.

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