

Political Instability and the Treadmill of Production: Sustainable Urban Processes in Kabul City

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Highlights in this Article:

- Examine the intersection of political instability, weak governance, and environmental degradation in Kabul City.
- Applies the treadmill of production theory in a conflict-affected urban context.
- Proposes sustainable governance pathways for post-conflict urban development.
- Highlights critical policy entry points for urban environmental resilience.
- Offers comparative insights into cities facing similar post-conflict ecological crises.

Abstract

Political instability and weak institutional governance have exacerbated environmental degradation in Kabul City, where the relentless treadmill of production continues to strain natural resources. This study examines how weak institutional governance, conflict, corruption and economic pressures contribute to unsustainable environmental practices, intensifying pollution, deforestation, and resource depletion. As political instability weakens institutional capacities, regulatory enforcement diminishes, allowing industrial and urban expansion to proceed unchecked. The treadmill of production, driven by economic imperatives, further accelerates environmental harm, prioritizing short-term economic gains over long-term sustainability by unregulated urban growth, resource depletion and pollution. This cycle of degradation not only threatens ecological balance but also undermines public health and quality of life. However, by using a qualitative approach that integrates document analysis and expert interviews, this study explores potential sustainability pathways, emphasizing the need for robust governance, policy reforms, and community engagement to mitigate environmental damage in conflict-affected urban areas. The study contributes novel insights into how politically fragile states can reorient urban development towards sustainability, offering practical recommendations for policymakers, NGOs, and local communities.

Keywords: political instability; weak governance; treadmill of production; environmental sustainability; Kabul Afghanistan.

Introduction

Kabul, the capital city of Afghanistan since 1776, serves as the country political, cultural, and economic center (1). According to the Afghanistan National Statistics and Information Authority-NSIA, with a population of over 4.95 million, the Kabul history spans more than 3,500

years and has been a battleground for great empires. Its significance lies in its representation of the Afghanistan diversity in many aspects. However, since the late 1970s, the city has faced continuous violence, coups, foreign occupations, and widespread destruction, disrupting urban and human settlement structures. The fall of the Taliban regime in 2001 saw the return of over 5.2 million refugees

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(2), contributing to rapid urbanization. The Kabul geographical location at the intersection of trade routes (Figure 1) (3) and international humanitarian aid aimed at supporting returning refugees and internally displaced people (4) further spurred its growth, ranking it as the 75th-largest city in the world (5).



Figure 1: Kabul City Locator Map (Credit: [Britanica.com](https://www.britanica.com))

Political landscape of Afghanistan has seen significant shifts, especially following the second Anglo-Afghan war in 1880 and the country independence after the third war in 1919 (6). These changes brought reforms across politics, society, and the economy, including the introduction of urban planning which laid the groundwork for Kabul urbanization (7). The competitive planning phase, marked by the Cold War rivalry, was followed by the sporadic planning era post-2001, characterized by numerous, often uncoordinated, rehabilitation efforts by decentralized supranational powers and centralized national authorities (7). Kabul experienced significant population growth due to the influx of internally displaced persons after the US invasion in 2001 (8), leading to unplanned urban expansion and challenges in urban management. The rate of urban land expansion increased from 1.07 square kilometers per year during the Soviet era to 3.35 square kilometers per year from 2001 to 2018 (4). Despite a of relative stability, political landscape of Afghanistan remains volatile, with recent developments further impacting the city and its inhabitants (9).

I aim to analyze the primary effects of political instability on treadmill of production dynamics theory and their implications for environmental sustainability in Kabul City. Political instability undermines governance, making it difficult to implement and enforce environmental policies (10). The treadmill of production, characterized by continuous cycles of production and consumption driving economic growth, often leads to environmental degradation if not managed properly (11,12). Kabul, already stressed by overpopulation, limited water resources, and air pollution, faces dire consequences from environmental degradation (10). Understanding how political instability intersects with economic activities can help identify

sustainable practices that balance growth with environmental protection. This knowledge is vital for policymakers to create a stable governance environment conducive to sustainable development (13).

Methods

This study takes a qualitative approach to examine how political instability, weak governance, and the treadmill of production impact on environmental sustainability and the absence of environmentally sustainable practices in Kabul City (Figure 2).

To build a well-rounded understanding, we analyzed various sources, including historical records, government and media reports, academic literature, and publications from governmental and non-governmental organizations.

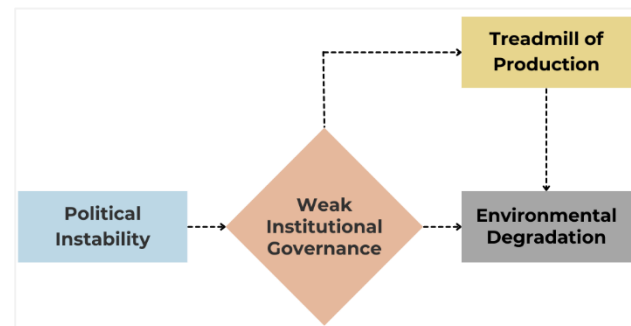


Figure 2: Visualized Conceptual Framework (The Author)

A case study methodology was used to explore specific instances where political unrest has intersected with economic and environmental challenges in Kabul City. This case study offers deeper insights into the systemic issues shaping the environmental landscape and urban transformation of Kabul City under conditions of prolonged political instability and governance breakdown due to two recent decades. To achieve these main objectives, the study employs the treadmill of production theory to contextualize how economic growth imperatives have outpaced environmental considerations upon the time. The novelty of this research lies in its application of this theory to the Afghanistan urban setting—a region underrepresented in environmental governance literature—and its combination of historical analysis with insights from environmental experts.

To complement the document analysis, I conducted expert interviews with urban planners, policymakers, and environmental scientists. Given the current political situation, these interviews took place online, primarily with professionals based in the U.S. and other countries who had previously worked in Afghanistan before the Taliban takeover the country. Interviewees covered individuals

with direct experience in urban and environmental management in Kabul, as well as experts who had worked in similar conflict-affected regions. Their insights provided valuable qualitative data, enriching the research findings and offering practical recommendations for sustainable pathways in evolving Kabul City urban landscape. By providing insights from various sources, the research contributes to scholarly understanding by identifying policy and planning gaps that perpetuate ecological degradation in politically unstable and conflict-affected cities.

Results

The results presented in this section are drawn from document analysis and are enriched by expert interviews with professionals familiar with the urban governance and environmental dynamics of Kabul City. As outlined in the Materials and Methods section, the data sources include historical records, academic studies, policy documents, media reports, and publications from both governmental and non-governmental organizations. These diverse materials were analyzed thematically to align with the study core objectives and conceptual framework (Figure 3), which focuses on the intersection of political instability, institutional weakness, and the treadmill of production, and how these factors contribute to environmental degradation and obstruct sustainable urban practices.

This section is organized into three interrelated themes, each corresponding to a key research objective. The first subsection, “Political Instability in Kabul City,” synthesizes historical and policy evidence to explain the roots and persistence of instability and its impact on urban governance. The second, “Treadmill of Production Dynamics,” illustrates how political and institutional conditions allow unsustainable economic pressures to drive unregulated development. The final subsection, “Impact on Environmental Sustainability,” draws on both document analysis and expert perspectives to highlight the ecological consequences of these socio-political and economic processes. Together, these subsections provide an integrated view of how the Kabul City environmental degradation is shaped by systemic governance and production failures.

Political Instability in Kabul City

The Kabul history has been shaped by decades of political instability, marked by conflict, power struggles, and regime changes that have deeply affected its people and environment. The Soviet invasion in December 1979, aimed at supporting a pro-Soviet government, triggered a decade-long war that led to the deaths of nearly one million Afghan civilians and forced millions to flee to neighboring countries (14).

After the Soviet-backed government collapsed in 1992, Afghanistan plunged into a brutal civil war (1992–1996), as Mujahideen leaders fought for control. This period saw intense power struggles, further displacement, and widespread destruction in Kabul (14). The rise of the Taliban in 1996 brought a strict and repressive regime, which lasted until 2001 when they were ousted by U.S. and allied forces following the September 11 attacks to the World Trade Organization in New York, U.S.A (15).

The U.S.-led intervention sought to establish a new government, but the following two decades were marked by persistent insurgency and political uncertainty (15). In 2021, the withdrawal of American and NATO forces led to the Taliban swift return to power, once again plunging the country into crisis. Under Taliban rule, governance remains highly restrictive, with significant limitations on minorities rights and freedoms (14).

The current political situation in Kabul is characterized by the Taliban control, with Haibatullah Akhundzada religious leader of Taliban wielding significant influence over decision-making (16). Their rule has become increasingly authoritarian, focusing on Pashtun exclusivity and leading to repression of opposition and minorities. The Taliban actions, such as banning girls and women from education, work, and public life, have had severe consequences for individual rights and humanitarian aid (16). Additionally, the Taliban struggles to contain terrorism, particularly from the Islamic State in Khorasan-ISK, and the situation remains delicate with external powers cautious about supporting anti-Taliban groups (16).

Political landscape of Afghanistan is also heavily influenced by its regional neighbors, especially Pakistan, Iran, India, and China. These countries play significant roles in the Afghanistan political issues, often using commercial imports and migrants as instruments of political pressure (17). The recent security situation has led to a large migration of citizens, particularly those associated with the previous government and social networks, to neighboring countries. These countries often use Afghan migrants as tools of political leverage, impacting the Afghanistan domestic stability and the well-being of the region (18).

The challenges facing Kabul and Afghanistan as a whole are immense. Restoring internal political efficacy, combating insurgency and terrorism, reducing poverty, and advancing the peace process are critical (19). Additionally, the COVID-19 pandemic (20), climate crisis (21), and water crisis (22) further complicate the situation. While the Taliban claim that their primary achievement is stability and centralized power after decades of war (23), other aspects, including internal power struggles and ongoing crises, continue to challenge the progress of nation.

Recent regional studies highlight that the environmental degradation driven by political instability is not unique to Kabul. Across South Asia, for example, countries like Pakistan and Bangladesh have struggled with the environmental consequences of persistent governance failures significantly elevate carbon emissions and ecological degradation in these settings (24). In the Middle East and North Africa (MENA) region, a broader study covering eighteen countries between 1985 and 2016 found that ongoing political upheaval has eroded environmental quality over time, when fragile institutions and recurring conflict have been key barriers to implementing effective environmental protections (25).

Treadmill of Production Dynamics

The Treadmill of Production theory posits that modern societies, driven by capitalist or socialist imperatives, pursue relentless economic growth, which leads to systematic environmental degradation, resource depletion, and social inequality (26). This dynamic is strongly visible in Kabul, where political instability has weakened environmental governance, embedding the city into a cycle of unsustainable development. Following decades of war, reconstruction was urgently prioritized, but with limited public funding and international aid mostly directed toward security, the Afghan government adopted a growth-first recovery strategy. As a result, environmental sustainability received limited attention, further entrenching Kabul in the treadmill of production (4).

At the core of the treadmill of production theory is the growth imperative: governments and institutions prioritize GDP and physical expansion to create jobs and assert legitimacy (27). In Kabul City, this materialized through widespread private sector investment in housing and infrastructure, encouraged by the municipality. However, most of these developments were unregulated and driven by short-term economic recovery goals rather than long-term environmental considerations. As a consequence, outdated construction technologies and resource-intensive practices were deployed, leading to deforestation, unregulated mining, and groundwater depletion (5-7).

As production intensified, technological fixes were applied in place of deeper reforms. For example, pollution control and housing policies were implemented without altering the city core dependence on fossil fuels, informal construction, and poor urban design. These "solutions" merely displaced problems—such as shifting pollution burdens to low-income districts or increasing wood and coal burning due to unaffordable clean energy (26,29). Similar patterns have been observed in Sri Lanka, where politically driven but poorly planned sustainability transitions, like the shift to organic agriculture, led to system-wide food and environmental crises (28).

Institutional weaknesses sustain the treadmill. The Kabul fragmented governance structures lack the authority and expertise to enforce environmental regulation. Additionally, media and educational institutions reinforce the idea that economic recovery is paramount, sidelining environmental narratives (31–33). This is similar to the Somali context, where conflict-induced governance collapse has resulted in uncontrolled deforestation and erosion—reinforcing how institutional decay feeds unsustainable production and consumption (34).

Finally, the Kabul chaotic urban expansion has further intensified environmental degradation. Industrial emissions, air and water pollution, loss of biodiversity, and agricultural overuse have created a multidimensional ecological crisis (35–42). All of these outcomes illustrate the treadmill of production theoretical logic in action: when economic growth is pursued in the absence of strong, sustainable institutions, environmental costs escalate rapidly.

The environmental degradation observed in Kabul, driven by political instability and weak governance, mirrors patterns identified in other conflict-affected regions. For instance, in Sri Lanka, the government abrupt national transition to organic farming in 2021, implemented without adequate institutional readiness or technological infrastructure, significantly reduced agricultural yields and triggered a food crisis. This reform effort, driven by nationalistic growth narratives amid political upheaval, highlights how poorly planned technological fixes—without addressing systemic governance issues—can deepen environmental and social vulnerabilities (30).

Impact on Environmental Sustainability

The effects of political instability on the treadmill of production dynamics are profound, especially in regions like Kabul. When political turmoil disrupts economic activities, it pushes the production treadmill into overdrive. Uncertainty and unrest deter investments and hamper business operations, leading to economic stagnation or decline. Consequently, the pursuit of continued economic growth becomes increasingly frenetic as governments struggle to compensate for losses and maintain stability (43). This relentless drive often exacerbates environmental degradation, as natural resources are exploited at an unsustainable pace to fuel economic recovery efforts (44). Moreover, political instability can create social tensions and inequalities, complicating efforts to address environmental challenges (45). As discussed in the treadmill of production subsection, this aligns with this theory, where systemic pressures to sustain growth override environmental considerations, particularly when institutions are weakened or absent.

Economically, political instability in Kabul impacts investment patterns, job opportunities, and resource allocation. An uncertain political-economic environment deters both domestic and international investors, reducing investment and causing currency depreciation, which can lead to higher inflation (46,47). Political instability also negatively affects economic growth; empirical data shows that higher degrees of political instability are associated with lower growth rates of GDP per capita and reduced productivity growth rates (43). In Kabul, as in many recent years happened many times, additional cabinet changes significantly reduce the growth rate of annual real GDP per capita, affecting the accumulation of physical and human capital. Economic freedom and ethnic homogeneity are beneficial for growth, while democracy may have a small negative effect (43). These economic fluctuations create a cycle of growth anxiety—a treadmill dynamic—where accelerated exploitation of resources is used as a temporary solution, yet without regulatory planning, it undermines long-term sustainability.

Socially, political instability in Kabul weakens social cohesion, community resilience, and access to essential services, while also having significant psychosocial impacts. It often leads to division, polarization, and mistrust among different groups, weakening social bonds and increasing conflict (48). Instability disrupts essential services, weakens institutions, and undermines social networks, reducing community resilience (49). In terms of healthcare and education, instability often leads to under-resourced hospitals, fleeing healthcare workers, and closed schools, denying children access to education and hindering long-term community development. Infrastructure damage further hinders access to basic services like water, electricity, and transportation, while economic services are adversely affected, leading to unemployment and limited access to financial services (50). The psychosocial impact includes stress, anxiety, and trauma from violence, displacement, or economic hardship, often driving migration and complicating integration into new communities (51).

Environmentally, political instability in Kabul leads to land use changes, exploitation of resources, and pollution, exacerbating environmental degradation. Disruptions in governance and planning result in rapid urbanization and agricultural expansion, affecting biodiversity, soil quality, and water availability (52). Deforestation for urban or agricultural development contributes to habitat loss and soil degradation (53), while weak regulation increases resource exploitation, water management issues, and conflicts over water resources (54). Mining and oil production during instability damage ecosystems and increase pollution, hampering conservation efforts and leading to biodiversity loss (55). Weak governance also results in inadequate waste management, air and water pollution, and

hindered climate action, worsening global warming (56,57). Violent conflicts further damage ecosystems, disrupt agriculture, and cause displacement, with displaced populations often exploiting natural resources unsustainably, exacerbating deforestation, soil erosion, and water scarcity (55). This is consistent with findings from other fragile regions, such as the Democratic Republic of Congo and Yemen, where prolonged conflict and institutional breakdown have accelerated deforestation and water stress under weak environmental oversight (58-61). In each case, including Kabul, the treadmill effect intensifies when growth pressures operate without regulatory restraint or technological solutions to mitigate harm.

Discussion

Political instability and weak governance in Kabul City have created a cycle that accelerates environmental degradation. This finding aligns with patterns observed in other post-conflict urban settings such as Pakistan, Bangladesh, Somalia, Sri Lanka, Congo, and Yemen, where reconstruction imperatives and political uncertainty compound environmental crises. Without effective regulatory frameworks, unchecked urbanization and industrial expansion continue to strain natural resources, leading to pollution, habitat destruction, and unsustainable production practices. The treadmill of production—driven by economic imperatives—prioritizes short-term growth over environmental wellbeing, further deepening crisis.

Addressing these challenges requires a multi-pronged approach that includes strengthening governance, engaging local communities, and investing in green infrastructure. Improved regulatory oversight and enforcement mechanisms are critical in breaking the cycle of unsustainable production. Additionally, international collaboration and investment in sustainable urban development projects could provide the necessary resources and expertise to mitigate the environmental impact of political instability.

Furthermore, long-term political stability is essential for ensuring consistent and effective environmental policies. Future research should focus on policy interventions that disrupt the treadmill of production while promoting sustainable urban development. Adaptive governance models—tailored to the Afghanistan geopolitical and socio-economic realities—could play a pivotal role in shaping a more resilient environmental future.

Conclusions

This study underscores the relationship between political instability, weak governance, and the treadmill of production, all of which drive environmental degradation in Kabul City, Afghanistan. Political unrest fosters unregulated

production and resource exploitation, leading to worsening environmental conditions and deepening social inequalities. The treadmill of production theory illustrates how relentless economic growth, in the absence of strong governance, prioritizes profit over environmental health, causing long-term harm to both people and ecosystems.

The Kabul historical and ongoing political struggles further complicate this issue, as instability disrupts governance and policy enforcement. The consequences include pollution, climate change, habitat loss, and water scarcity, making urban sustainability a pressing concern. However, despite these challenges, opportunities for positive transformation exist. Strengthening governance structures, promoting community-driven environmental initiatives, and integrating sustainable practices into urban planning can help Kabul move toward a more resilient and sustainable future.

Collaboration between policymakers, civil society, and local communities is crucial for implementing long-term solutions. By breaking the cycle of political instability and weak governance, Kabul has the potential to transition from environmental degradation to sustainability pathways, fostering a future where economic development aligns with environmental preservation.

However, this study is not without limitations. Due to the current political situation in Afghanistan, access to up-to-date primary data from within Kabul was restricted. Most qualitative insights were drawn from experts based abroad, which, although valuable, may not fully reflect evolving ground realities. Moreover, while Kabul provides a crucial case study, its unique socio-political context limits the broader generalizability of findings. Future research should incorporate localized perspectives, direct interviews with residents and municipal officials, and comparative case analyses from other conflict-affected urban areas.

List of abbreviations

GDP: Gross Domestic Product
NGO: Non-Governmental Organization
UN: United Nations
NSIA: Afghanistan National Statistics and Information Authority
US: United State of America
NATO: North Atlantic Treaty Organization
ISK: Islamic State in Khorasan

Author Contributions

The sole author conducted all research, analysis, and manuscript preparation.

Availability of Data and Materials

Data sources are publicly available through media and government reports and research publications.

Consent for Publication

This study does not include any personal data, images, or videos requiring consent for publication.

Conflicts of Interest

The author declares no conflict of interest.

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