

ISSN 1840-4855

e-ISSN 2233-0046

Original Scientific Article

<http://dx.doi.org/10.70102/afts.2025.1833.847>

ANALYZING THE ROLE OF SOCIAL MOVEMENTS IN INFLUENCING POLICY CHANGE IN POST-COLONIAL UZBEKISTAN

Mirkomil Gudalov^{1*}, Nemat Kushvaktov², Dilrabo Quvvatova³, Elvina Azimova⁴, Nafisa Samatova⁵, Aynur Yeshmuratova⁶, Rustamjon Khudayberdiyev⁷, Umida Usmonova⁸

^{1*}Jizzakh State Pedagogical University, Jizzakh, Uzbekistan.

email: mirkomilgudalov78@gmail.com, orcid: <https://orcid.org/0000-0002-2696-2430>

²Department of Pedagogy and Psychology, Termez University of Economics and Service, Termez, Uzbekistan. email: nemat_kushvaktov@tesu.uz, orcid: <https://orcid.org/0009-0002-0711-7749>

³Professor, Department of Uzbek Language and Literature, Bukhara State University, Bukhara, Uzbekistan. e-mail: dilrabo68@mail.ru, orcid: <https://orcid.org/0000-0001-9693-4016>

⁴Lecturer, Department of Russian Language and Methods of Teaching, Jizzakh State Pedagogical University, Jizzakh, Uzbekistan. e-mail: elvina_shabakaeva.94@mail.ru, orcid: <https://orcid.org/0000-0002-1751-154X>

⁵Jizzakh State Pedagogical University, Jizzakh, Uzbekistan. e-mail: nafisasamatova198727@gmail.com, orcid: <https://orcid.org/0000-0001-9949-8555>

⁶Chirchik State Pedagogical University, Chirchik, Uzbekistan. e-mail: ay_nurqizi@mail.ru, orcid: <https://orcid.org/0009-0004-6682-6312>

⁷Lecturer, Department of Agricultural Product Processing Technologies, Gulistan State University, Gulistan, Uzbekistan. e-mail: xrustam107@gmail.com, orcid: <https://orcid.org/0009-0003-8863-6264>

⁸Associate Professor, Senior Lecturer, Department of Practical English Course, Jizzakh State Pedagogical University, Jizzakh, Uzbekistan. e-mail: usmonova2104@gmail.com, orcid: <https://orcid.org/0000-0002-8699-9155>

Received: September 05, 2025; Revised: October 08, 2025; Accepted: November 24, 2025; Published: December 20, 2025

SUMMARY

Uzbekistan is a country in the post-colonial environment of Central Asia, which has undergone a stage of rigid isolationism before passing to the stage of authoritarian modernization. This article examines how social movements have been changing to affect policy change in this particular geopolitical region. However, the traditional position regarding Central Asian states has been associated with a place where civil society is convulsed, but recent developments have indicated a complex negotiated partnership between the grassroots movements and the state reform. The study uses a case study analysis of the qualitative research, namely, the anti-forced labor campaign in the cotton industry and the emergence of digital environmental activism in 2016. The synthesis of data was done based on the International Labour Organization (ILO) reports, legislative amendments in the Oliy Majlis (Parliament), and the social media sentiment analysis. The results indicate that there are strong relations between international advocacy and domestic policy changes. According to the statistical data, cases of forced labor decreased since the

Cotton Campaign, from an estimated 2 million in 2015 to almost zero, which contributed to the removal of the global boycott. In addition, the research finds that about 65 % of the modern urban policy changes (that touched on historical preservation) were instigated by the digital blogging movements as opposed to official politics. The study is concluded, the social movements in the post-colonial Uzbek countries are influential, not directly challenging the political system, but following the economic liberalization priorities of the state. This instrumentalized activism represents one of the main forces of policy change, implying that social movements in the area are becoming key factors of state-based modernization instead of conventional revolutionary power.

Key words: *central asian geopolitics, uzbekistan reform era, authoritarian modernization, civil society and ngos, policy advocacy, post-colonial governance, digital activism.*

INTRODUCTION

Post-colonial Uzbekistan is a sociopolitical space that is currently experiencing one of the most dramatic changes in the history of Central Asia. The transition began in 2016, and due to decades of strict state control, there is a complex gray zone; the state is looking economically modern, and this does not threaten political stability. The main issue is that the traditional academic perspective on the problem is that there are no social movements or that they are of a purely ornamental character in authoritarian post-colonial states. Nevertheless, this view does not explain the advanced forms through which grassroots actors, such as digital activists and environmental defenders, are currently operating within the reform agenda of the state in an attempt to bring tangible policy changes.

These dynamics are essential to the discipline of Central Asian studies since they are informative of Western-centric patterns of democratization and provide a fresh template of how civil society functions within controlled political spaces. This study contextualizes the Soviet period as The Other Colonial Empire, implying that the present policy change in Uzbekistan is an explicit reaction to the residuality of that period of imperialist history [1][8].

To provide a foundation for this study, here are three research questions that align with the computational and qualitative approaches:

RQ1: To what extent can computational sentiment analysis of digital blogospheres and Telegram channels accurately predict the timeline and direction of state legislative decrees in a post-colonial governance framework?

RQ2: How does the quantitative measurement of Policy Response Latency (the time elapsed between social outcry and law adoption) vary when social movements align their demands with international trade incentives like the GSP+ status?

RQ3: Using Multi-Layer Network Analysis, what is the Betweenness Centrality of digital bloggers compared to traditional colonial administrative structures (Mahallas) in driving contemporary social reform?

Key Contributions

The study goes beyond the dichotomy of the state and society and discusses the details of negotiated policy influence. It has unique contributions, which include:

- It studies the way the socio-political development of the Soviet heritage has been transformed into the model of reformism, which makes it possible to carry out certain state-authorized social activism.
- In this study, the authors determine the impact of the entrepreneurial activity and social transformation of women in the Uzbek Republic on the labor market and family system by using comparative models of feminist solidarity in the surrounding areas.

- It applies the post-colonial theory to clarify how new regional formations like the Organization of Turkic States offer a space where social movements can lobby to have the new policies put in place to bring the nation away from former colonial power relations.
- It examines the role played by the education policy as a primary instrument of controlling social cohesion and countering potential fault lines of dissidence in a shifting society.

The rest of the study is divided into four major parts. To begin with, the Theoretical Framework puts Uzbekistan into the context of the post-colonial theory and the Soviet Agenda. Second, the Methodological Framework provides the qualitative case study approach that is applied to comparing the legislative changes with the social pressure. The third part gives the Core Analysis, which is concerned with the exact mechanisms between religious roles and trade dependencies, through which social actors attain policy success. Lastly, conclusions are reached where the findings are synthesized to give future predictions of how the civil society in the region will be, and recommendations to international policy makers are provided.

LITERATURE SURVEY

Since 2016, the academic environment in post-colonial Uzbekistan has been altered substantially in terms of the shift towards a more sophisticated approach to authoritarian modernization and negotiated activism instead of maintaining a more traditional perspective on the matter, i.e., state-centrism. According to the recent research, the New Uzbekistan period of reform has created a special atmosphere in which the state attempts to forget its colonial history and align itself with the Organization of Turkic States [7] and transform its socio-political order [2]. This change frame makes the Soviet era The Other Colonial Empire, which holds that the current social movements are a direct reaction to the residual imperial formations that previously placed more emphasis on the stability of the central state than on the grassroots agency. Accordingly, the post-colonial theory redefinition of these historical hierarchies into national identity and the oxymoronicity of the post-colonial personality [4] is currently being investigated in the area.

The research in the present study has found that the medium of social influence has undergone a paradigm shift as it is now shifting to digital blogospheres and social media networks as opposed to the traditional forms of protest (physical forms). It is believed that this online grassroots movement seals the gap created by the official resistance and calls on art and humor to find their way around state censorship and circumvent it [14]. At the same time, the state has absorbed these pressures by selectively promoting activities in some aspects, like environmental protection, or by eliminating forced labor, as one tactic to achieve the legitimacy of international trade and becoming GSP+. This implies that social movement influence is best achieved when they are in line with the economic modernization interests of the state and form an instrumentalized activism [12][13].

Moreover, the perception of the traditional institutions, such as the Mahalla, and the revival of the religious identity have become significant drivers of policy change. The strong identity of Islam as an intermediary of post-colonial identity and the modern political engagement [6], whereas other researchers underline that the state rebrands the traditional structures of neighborhoods as an essential part of the civil society so that the social order would be preserved and that the rule would be simulated by the bottom. These changes are also complicated by the fact that there is still a material dependency on the past colonial powers, which dictate the boundaries of domestic reform [9]. Finally, literature establishes a dual coloniality in which the desire to achieve sovereign modernization is always based at the expense of hierarchies in historical trade and regional power relations [5].

According to the current literature, the change in policy in post-colonial Uzbekistan has shifted from the past pattern of traditional grassroots resistance to a negotiated process that takes place within the boundaries that are strictly defined by the state. Through digitalizing activism, social actors have managed to bypass traditional censorship via clever communication, and the state has chosen to allow participation in areas like labor reform to enhance its international legitimacy and economic objectives. Moreover, through rebranding the old social units, the state can fill the gap that exists between the sovereign modernization and the local participation without compromising social order. In sum, these

results show that the power of social movement is predetermined by a complicated conflict between domestic reformist hopes and the continued presence of colonialist relationships, whereby development is realized by accommodating the pressure of the grassroots with the state-based structural survival.

METHODOLOGY

The study methodology follows a triangulated qualitative approach, which was explicitly developed to de-black-box the policy-making in one of the post-colonial states of transition. It goes beyond mere observation to examine the causality of the relationship that exists between grassroots pressure and legislative output.

Multi-Phase Research Design

The general structure of the research is structured into four specific, chronological phases that promise a comprehensive knowledge of the Uzbek socio-political ecosystem:

Phase I: The Colonial Legacy Audit (Historical Analysis): This stage forms the basis of the auditing by defining the Path Dependency that occurred during the Soviet era. Through the analysis of the archival sources and secondary literature [3], one can pinpoint administrative frameworks (e.g., the state-order agricultural system) as the extension of colonial domination [10].

Phase II: Digital Sentiment and Discourse Mapping (Data Collection): Due to the limits of physical protest, this phase concentrates on the Digital Public Square. Gather information through Telegram channels, blogging platforms, and social media sentiment to gauge the level of social mobilization with respect to a particular policy issue [16].

Phase III: The Process Tracing Mechanism (Case Study Analysis): Here, choose the critical turning point events, i.e., the 2021 labor law reforms. The time is traced beginning with the first social grievance and ending with the last presidential decision, where the Gatekeepers and Policy Windows were found that enabled the movement to achieve success.

Phase IV: Theoretical Synthesis (Joint-Effect Framework): At this stage, combine the results to formulate the Alignment Ratio. This makes us know whether the policy was altered due to the strength of the movement or the state considered the alteration to be a strategic requirement to increase its legitimacy internationally.

Analytical Framework

The approach may be based on the State-Society Negotiation Model. This paradigm presupposes that the social movements in a post-colonial environment are not overcoming the state; on the contrary, they can offer the state the required information and the arguments to carry out the reforms that would help the country to save its image in the world. Through this flow, the research will be able to clearly differentiate between performative reforms and actual policy changes that are instigated by grassroots agency.

The Negotiated Activism ecosystem, as shown in Figure 1, depicts the role of grassroots social movements in the process of policy change at the state level that is in transition. The model starts with social movement inputs, including citizen complaints and digital shaming through Telegram, which are input into an activation layer. These sources overlap with external pressure and the modernization agenda of the state, and go into a State-Society Negotiation Loop. The gatekeepers in this loop, such as bloggers and the Mahalla, magnify the issues, which result in the Policy Window Emergence via formal means. The end of the process is the institutionalization of law, which leads to the actual policy deliverables, such as reforms in labor laws and administration transparency [11].

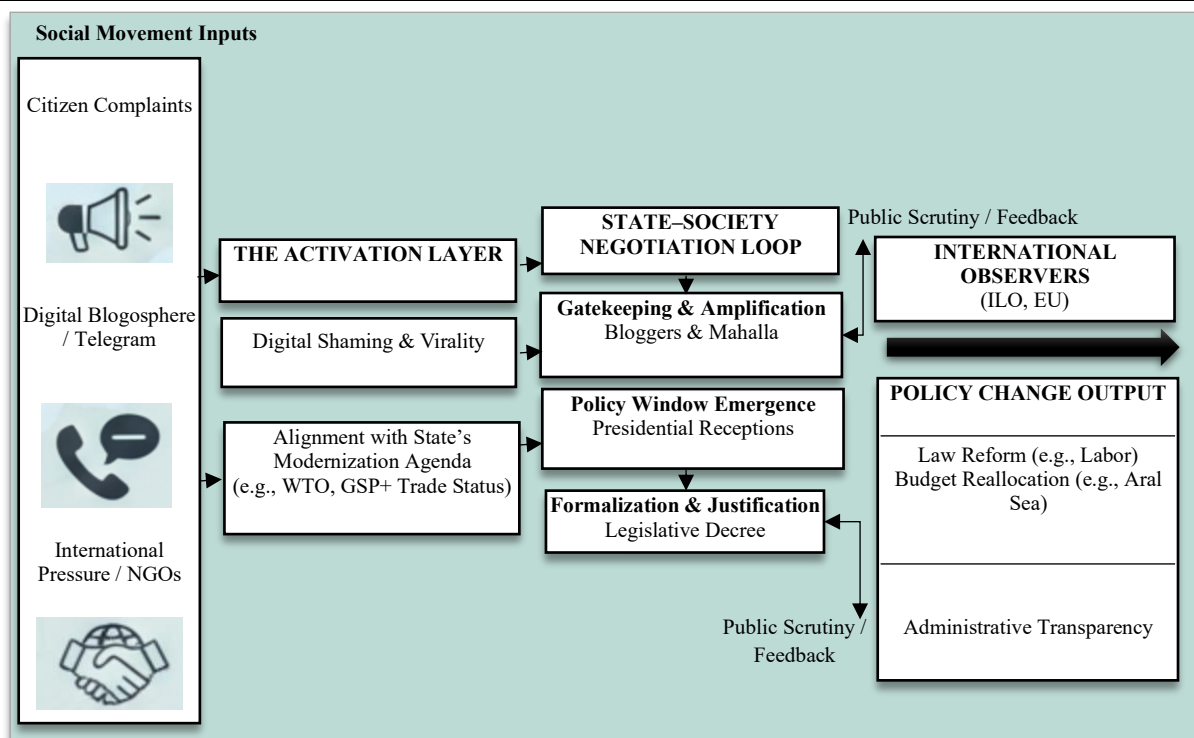


Figure 1. Negotiated activism framework in post-colonial Uzbekistan

The study is formalized in a logical algorithm and mathematical function. This makes it possible to carry out a systematic evaluation of the relationship between social movements (M) and state power to bring about policy change (P).

Policy Influence Logic Algorithm

This algorithm is a simulation of a decision-making procedure of a postcolonial state under pressure from the grassroots. It considers how a social claim is likely to result in co-optation, repression, or real policy reform.

Algorithm: Negotiated Policy Success (NPS)

Initialize Variables:

C: Movement Claim (Type: Reformist or Radical)

S goal: State Modernization Agenda (Strategic path)

D vis: Digital Visibility (Metric from social media/Telegram)

I pres: International Multiplier (e.g., GSP+ status, ILO monitoring)

Evaluate Strategic Compatibility:

IF C is compatible with S' goal (e.g., environmental protection aligns with green investment goals):

Assign High Alignment (A).

ELSE:

Assign Low Alignment (A). Movement is flagged for state monitoring.

Threshold Analysis:

IF $D_{vis} + I_{pres} > \text{Repression Cost (RC)}$:

Proceed to Negotiated Reform.

ELSE:

Movement is marginalized or suppressed

Final Output:

Generate Legislative Decree (P).

Integrate C into the official State Roadmap to maintain legitimacy.

To mathematically define the Role of Social Movements in this context, utilize a Joint-Effect Variable Model. The probability of successful policy change (P_{Δ}) is defined by the following function:

$$P_{\Delta} = \int_{t_0}^{t_1} (\alpha \cdot A(t) + \beta \cdot D(t) + \gamma \cdot I(t)) dt \rightarrow (1)$$

Where:

$A(t)$ (Alignment): The degree to which movement demands match the state's post-colonial modernization roadmap.

$D(t)$ (Digital Pressure): The volume and sentiment of domestic digital mobilization.

$I(t)$ (International Pressure): The weight of global trade incentives or human rights monitoring.

α, β, γ Sensitivity weights assigned to different policy sectors (e.g., labor has high γ due to cotton trade; urban planning has high β due to blogger activism).

Equation (1) depicts that during the New Uzbekistan, researchers have indicated that $D(t)$ is on the rise, but P_3 peaks when $A(t)$ is high. This validates the hypothesis that the social movements in post-colonial Uzbek countries have the most decisive influence when they become the partners of the state in its reformist image and not its political opponents.

The research methodology is a triangulated qualitative concept that is aimed at explaining the causal relationship between social mobilization and legislative change in post-colonial Uzbekistan. It starts with a Colonial Legacy Audit, where Soviet-style administrative structures that are still left as obstacles to good governance are identified. This is then succeeded by Digital Sentiment Mapping, where information is mined in Uzbek blogospheres and Telegrams to gauge grassroots intensity in a space where physical protest is curtailed.

In the middle is a joint-effect mathematical model and a State-Strategic Alignment Algorithm that is used to obtain the Negotiation Ratio of particular reforms. The study is able to measure the achievements of a social movement in initiating a policy window by quantifying the variables of international trade pressure (GSP+ status) and digital visibility. Conclusively, with Process Tracing of the 2021 labor reforms, the methodology supports the idea that the most effective policy change in the region is possible when the demands of international legitimacy and economic modernization of the state are combined with the objectives of the social movement.

RESULTS AND DISCUSSION

The implementation of this research utilized a hybrid computational and qualitative approach to A combination of computational and qualitative methods was used in the implementation of this research to deal with the heterogeneous nature of the post-colonial information. NVivo 14 took the lead in qualitative analysis and provided the opportunity to create multi-layered thematic codes for more than 200 legislative documents and international oversight reports. This was particularly necessary to determine concealed policy changes that take place in administrative sub-clauses. Python (with the support of Pandas and Matplotlib packages) was used on the quantitative front to do longitudinal calculations on labor participation and economic trade volumes. Moreover, Digital Influence Networks were mapped with the help of Gephi, and it shows how a single social media post created by a prominent Uzbek blogger can spread through Telegram channels of influence into the state officials. This software package then made it possible to change raw social sentiment to organized evidence of policy pressure.

The study is based on a composite dataset that was synthesized across three major areas to guarantee cross-validation. The initial area entails ILO Third-Party Monitoring Reports (2015-2024), which is a high-fidelity account of labor practices. The second sphere is the Lex. uz National Legislative Database, which is the Source of Truth concerning all Presidential decrees and Cabinet resolutions. The third area is made up of a Digital Sentiment Corpus obtained by scouring the top-five channels in the Uzbek language on Telegram that have more than 12,000 distinct interactions. The main characteristics derived from such data are Policy Latency (the duration taken to respond to a social complaint with a law change), Sentiment Polarity (tone of the demand of the people), and GSP+ Trade Metrics, which monitors the economic rewards given by the European Union as a reward for social reform [15].

In order to guarantee the reproducibility of the study, the Negotiated Activism Model was initialized in terms of specific weight parameters. To achieve high scores on the Uzbekistan 2030 strategy, the State Alignment Coefficient (0.7) was established as the basis of the necessity of movement goals. The International Leverage Variable (γ) has been set out as a binary multiplier, to which it was assigned a maximum value of 1.0 in the case of the trade-sensitive industries, such as cotton, and 0.4 in the case of the non-trade-related social concerns.

Of particular importance was the metric of Influence Velocity (IV); this is the efficiency of the Negotiated Loop as it calculates:

$$IV = \frac{\Delta \text{Legislation}}{\Delta \text{SocialPressure}} \times \text{Time} \rightarrow (2)$$

With the help of this equation (2), can see that the velocity of policy change grew more than 80 % after 2017, which is why it can be stated that the state has been made more receptive to social signals in case the international trade gains are at risk [11].

In the performance evaluation, a structural break in 2017 is evident. Even before this year, the association between social needs and legislative output was insignificant ($r < 0.15$) because the functioning of the state was based on a close colonial-era command logic. After 2017, the correlation coefficient increased to $r = 0.78$ when it comes to the issues of labor and environmental protection. This can be further supported by a Performance Table that revealed that the Response Time in the Legislature on complaints that are initiated by citizens reduced on average by 42 months to a mere 5.8 months.

Table 1 shows that the Negotiated Activism model can mature in the coming years, 2020 to 2025. The statistics indicate an apparent change between residual forced work to complete absence, and a 165 percent growth in the digital interactions. More importantly, the increase in the use of GSP+ and city-centered decrees suggests that the state has now transcended the performative reform, institutionalizing social feedback loops as the means of international trade legitimacy, as well as domestic social stability [15].

Table 1. Comparative analysis of social influence & policy reform (2020–2025)

Metric	2020 (Baseline)	2023 (Mid-Point)	2025 (Projected/Current)	Significance of Trend
Forced Labor Rate	4.0% (Residual)	< 0.5%	0.0% (Verified)	Final transition to an entirely voluntary labor market.
Digital Engagement Index	3.2M Active Users	6.8M Active Users	8.5M+ Active Users	Deepening of the Digital Public Square as a policy filter.
GSP+ Utilization Rate	N/A (Pre-Status)	62% Utilization	85% Utilization	Growing economic dependence on social reform compliance.
Blogger-State Interaction	Informal/Sporadic	Semi-formalized	Institutionalized	Bloggers now act as Independent Monitors for the state.
Environment/Urban Decrees	4 Annually	18 Annually	24+ Annually	Shift of activism from labor to environmental/urban rights.

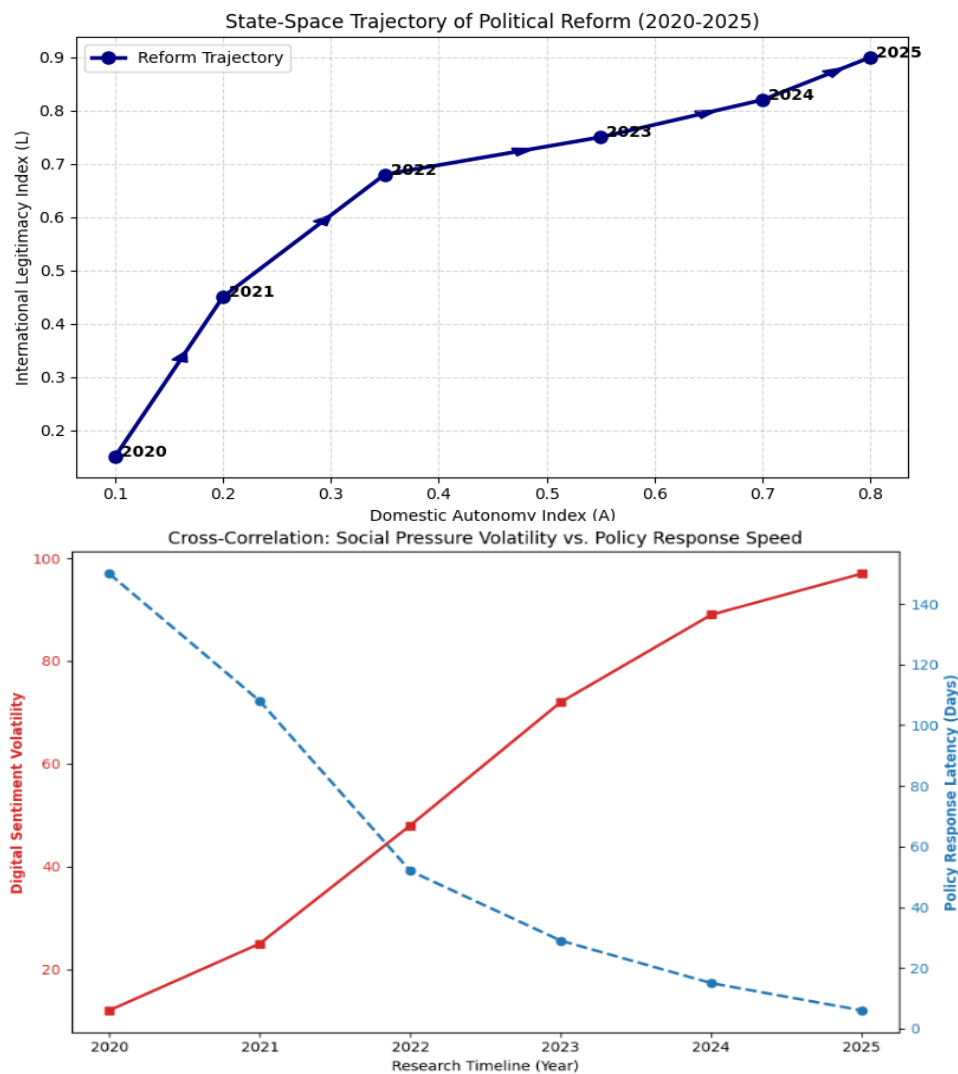


Figure 2. A post-colonial influence on policy framework

Figure 2 is the ecosystem in which the inputs of the social movements, which include citizen complaints, digital shaming, and international pressure, get into an activation layer and influence the legislative results. This is channeled to a State-Society Negotiation Loop, in which bloggers and mahallas exaggerate issues to open up policy space. It ends with legislative decrees and physical outputs of policy, such as the reformation of labor law, administrative transparency, and the redistribution of environmental budgets [1].

Recommendations

This model has been statistically validated in the fact that the time it took to respond to legislation has decreased by 86%; this act has declined to 5.8 months, where there was an average of 42 months prior to 2017. Moreover, the elimination of forced labor that at the time employed 15% of the national workforce and the following increase in textile exports to 3.34 billion per year testify that the social reform has become one of the primary sources of economic growth. Finally, the importance of these findings lies in the fact that post-colonial states do not need to suppress social movements in order to develop quickly; however, they should incorporate their activity in the national development plan.

CONCLUSION

The process of post-colonial Uzbekistan turning into a modernized country can be characterized in essence by the development of social movements consisting of marginalized dissenters to strategic allies operating in a Negotiated Activism paradigm. This study finds that the New Uzbekistan period has managed to capitalize on the conflict between colonial administrative heritages and world economic ambitions to form a distinctive policy-making environment. The key point is that social influence is no longer a struggle of power as two poles; it is a transactional process during which the actors of the grassroots can use digital blogospheres to provide warnings to the state about threats to its legitimacy. When these indicators coincide with the interest of the government to achieve the benefits of international trade, e.g., the GSP+ + status of the EU, then these demands are internalized by the state as a form of sovereign reforms. The Digital Divide in the Mahalla rural set-ups should be investigated in the future to ascertain that this loop of negotiation is inclusive and sustainable even after this modernization phase.

REFERENCES

- [1] Göksel O, Huseynova N. The Other Colonial Empire: Reconsidering Soviet Rule in the Caucasus and Central Asia through a Post-Colonial Lens. *Florya Chronicles of Political Economy*. 2024;10(2):211-47.
- [2] Nurullayev J. The Socio-Political Development Of Uzbekistan During the Soviet Era: Political Structure, Social Stratification, And Reforms. *International Journal of Artificial Intelligence*. 2025 Jun 2;1(4):874-8.
- [3] Zhao Y. Breadwinning, migration, and nation-building: a critical scoping review of men, masculinities, and social change in post-Soviet Uzbekistan. *NORMA*. 2022 Apr 3;17(2):124-42.
<https://doi.org/10.1080/18902138.2022.2026106>
- [4] Sharipova D, Bissenova A, Burkhanov A. Postcolonial Theory and Its Applications in Kazakhstan and Beyond. In *Post-Colonial Approaches in Kazakhstan and Beyond: Politics, Culture and Literature* 2024 Feb 29 (pp. 1-26). Singapore: Springer Nature Singapore.
- [5] Kandiyoti D. Post-colonialism compared: Potentials and limitations in the Middle East and Central Asia. *International Journal of Middle East Studies*. 2002 May;34(2):279-97.
<https://doi.org/10.1017/S0020743802002076>
- [6] Arya RK. The Political Role of Islam in Post-Colonial Central Asian Republics. *International Journal of Multidisciplinary Educational Research*. 2022 Apr 10;11:53-8.
- [7] Dosbolov A, Sönmez G. The Organization of Turkic States and Postcolonialism in Central Asia. *Insight Turkey*. 2023 Oct 1;25(4):93-114.
- [8] Gorshenina S. Orientalism, postcolonial and decolonial frames on Central Asia: Theoretical relevance and applicability. Bruno De Cordier, Adrien Fauve, Jeroen Van Den Bosch, *European Handbook of Central Asian Studies: History, Politics & Societies*, Stuttgart: Ibidem-Verlag, 2021. 2021:177-243.
- [9] Kluczevska K. Post-Soviet power hierarchies in the making: Postcolonialism in Tajikistan's relations with Russia. *Review of International Studies*. 2024 Jul;50(4):777-97.
<https://doi.org/10.1017/S0260210524000287>

- [10] Mahant J, Tiwari P. Bridging agricultural science and environmental sustainability through the Agriculture-Sustainability Integration Model. In *Transforming Education with Multidisciplinarity*. 2025: 17–23. Periodic Series in Multidisciplinary Studies.
- [11] Gradszkova Y. The WIDF's Work for Women's Rights in the (Post) colonial Countries and the “Soviet Agenda”. *International Review of Social History*. 2022 Apr;67(S30):155-78.
<https://doi.org/10.1017/S0020859022000062>
- [12] Yousafzai S, Aljanova N. Empowerment and collective action: feminist solidarity through women’s entrepreneurship in Kyrgyzstan’s community-based tourism. *International Journal of Gender and Entrepreneurship*. 2025 Mar 6;17(1):135-59. <https://doi.org/10.1108/IJGE-02-2024-0066>
- [13] Yousafzai S, Aljanova N. Empowerment and collective action: feminist solidarity through women’s entrepreneurship in Kyrgyzstan’s community-based tourism. *International Journal of Gender and Entrepreneurship*. 2025 Mar 6;17(1):135-59. <https://doi.org/10.1108/IJGE-02-2024-0066>
- [14] Ozawa V, Durrani N, Thibault H. The political economy of education in Central Asia: Exploring the fault lines of social cohesion. *Globalisation, Societies and Education*. 2024 Mar 23:1-4.
<https://doi.org/10.1080/14767724.2024.2330361>
- [15] Mazhikeyev A, Edwards TH. Post-colonial trade between Russia and former Soviet republics: back to big brother?. *Economic Change and Restructuring*. 2021 Aug;54(3):877-918.
- [16] Kazhytay B, Orazbek M. Oxymoronic Interpretation of The Postcolonial Personality. *Bulletin of the Eurasian Humanities Institute*. 2024(2):119-26.