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# Journal of Liberal Arts & Interdisciplinary Sciences



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The *Journal of Liberal Arts and Interdisciplinary Sciences (JLAIS)* is an international, peer-reviewed, open-access journal dedicated to advancing scholarship that bridges the liberal arts and scientific disciplines. As global societies grapple with the complexities of cultural globalisation, digital transformation, environmental sustainability, and socio-political shifts, the JLAIS aspires to become a beacon for scholarly excellence and intellectual curiosity. It aims to advance academic discourse and influence policymaking, education, and public understanding, thereby contributing to a more informed and interconnected world. The journal welcomes original research articles, reviews, essays, and case studies from various disciplines within the liberal arts and humanities and their intersections with science, technology, social sciences, and other fields.

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# Migration as a Continuation of Genocide: A Note on Exile, Statelessness, and Social Death

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Vaishnavi Singh<sup>1</sup>

## Abstract

This article reconceptualizes genocide through the lens of forced displacement and legal erasure, discussing how exile and statelessness are not simply consequences of mass atrocity, but can be seen as ongoing forms of genocidal intent. By analyzing the Rwandan and Sudanese genocides through secondary analysis, the article demonstrates how administrative containment, racial identity erasure, and legal exclusion constitute structured, organized forms of violence that take place even after the immediate mass killing has ceased. By employing sociologist Orlando Patterson’s construct of social death, the article demonstrates how the displacement of the population impacts the progressive loss of their political and legal personhood. They are not only expelled physically but also wholly erased bureaucratically and symbolically by way of prolonged disconnection from citizenship, rights, and acknowledgment. A comparative table that maps the indicators of “genocidal continuation” across both studies found somewhat similar patterns for encampment, identity erasure, and state exclusion. These findings highlight the importance of temporally and spatially reconceptualizing genocide beyond event-based frameworks to include these prolonged harms and injustices created through law, policy, and inaction on behalf of the international community.

## Keywords

Genocide, statelessness, forced migration, social death, Rwanda, Darfur

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## **Introduction**

Traditional legal analyses of genocide have a tendency to place its terminus at the end of mass violence or the official announcement of peace. Yet for most survivors, what follows is not justice or healing, but the persistence of violence in less egregious, structural forms. History contends that forced migration, more specifically, exile, statelessness, and prolonged displacement, is not merely collateral damage to genocide but an intrinsic part of its continuing logic. Placing genocide as a process rather than an event makes it easier to have an honest conversation with the long-term harms faced by displaced persons. In this argument, displacement is not the consequence of genocide, but one of its forms.

Focusing on mechanisms that include statelessness, spatial exclusion, and legal abandonment, this study brings to the forefront how genocidal intent is transformed into administrative and geographic modes of erasure (Hovil, 2016; Mamdani, 2009). These mechanisms are also beyond the reach of international law, which seeks to rigidly dichotomize acts of mass violence from the bureaucratic and geopolitical processes of migration. However, as survivors themselves affirm, such legal borders seldom meet lived reality. The genocide's long tail runs to refugee camps, borderlands, and national rolls—sites where identity is erased or instrumentalized, and return is coded as a risk rather than a right (UNHCR, 2023).

This study essentially engages the post-genocide geography of Rwanda and Sudan in order to describe how displacement turns into a site of erasure instead of refuge. In each instance, the wake of mass atrocities was not marked by reparation or reintegration, but by the entrenchment of political regimes that persisted in marginalizing, monitoring, and silencing survivor populations. Whether through the Great Lakes' exile of Hutu communities or Darfuri refugees' decades-long confinement in Chad, genocide's borderlands have been maintained as spaces of chronic violence. Borrowing from literature that challenges state-led and episodic definitions of genocide (Manby, 2011; Patterson, 1982), this note calls for a reconceptualization of forced migration as a part of the genocidal continuum, a type of harm that persists in law, space, and identity.

## **Social Death and Genocidal Continuity**

Orlando Patterson's (1982) concept of social death, developed in relation to the status of slaves, offers a strikingly useful approach to understanding how genocide can persist through displacement and banishment. The absence of political recognition constitutes social death, along with the severing of kinship and communal ties, one's meaningful participation, and engagement in the social and political life of a society. It is real rather than allegorical or metaphorical. The social death created by genocide becomes material and juridical: It is marked by statelessness, long-term encampment, revocation of citizenship, denied repatriation, and bureaucratic non-recognition of displaced identities.

This concept of genocide expands the idea of process rather than a single-event focused and reveals the extent to which structural violence continues to operate well beyond the point where acts of mass killing have ceased. All too frequently, the very institutions intended to protect survivors become vehicles for variants of erasure. Legal erasure encompasses not only the non-recognition or failure to register individuals as displaced persons but also the active withdrawal of citizenship as an exclusionary political measure. Physical containment, such as confining refugees to closed or isolated camps, reinforces the condition of “bare life” (Agamben, 1998), where displaced people are marginalized and controlled with no rights. The refusal of return, commonly justified on “national security” or “reconciliation” grounds, then becomes a policy of exclusion that hides political purpose under humanitarian and legal language.

In both Rwanda (since 1994) and Darfur (since 2003), such circumstances have persisted even with the presence of peace agreements, frameworks of transitional justice, and international engagement. The violence is particularly acute for the uprooted people who are displaced, especially in contexts where return is framed not as a right, but as a peril. The displaced sociopolitical and legal status becomes a site of conflict, where host states, home states, and global powers exercise control over people who are paradoxically both so seen and cared for and systematically forsaken and neglected.

### *Rwanda: Exile as Political Management*

After the 1994 genocide, the Rwandan Patriotic Front (RPF) took control of the country and branded itself as the architect of national unity and post-genocide reconstruction. However, this reconstruction was state-guided and came together with a form of ethnic and political engineering through the erasure and exile of specific groups—most notably the Hutu populations that were involved in the genocide. Most who left in the earliest days—hundreds of thousands in number—were kept in long-term exile in Uganda, the Democratic Republic of Congo (DRC), and Tanzania. Although the Rwandan official state discourse encouraged return, repatriated Hutu populations in practice found themselves under surveillance, stripped of land, and excluded from politics.

Citizenship here was conditional: not on legal citizenship, but political allegiance. Rwanda’s post-genocide government has persistently defied regional or global pressure to normalize the status of returnees and exiles, instead characterizing them as security threats or genocide deniers. This has given rise to what scholars such as Hovil (2016) refer to as “managed return”: a state-managed process whereby re-entry is permitted only under conditions that consolidate state dominance and stifle opposition. For the exiles, especially in the DRC, statelessness is not happenstance but ordered, facilitated by fragile host-state safeguards and Rwanda’s denial of their political selves. Denial of documentation, services, and legal personhood to them represents a kind of social death that undermines not only their here and now but also their there and then as a citizen of any polity.

### ***Sudan: Encampment and the Permanence of Displacement***

The genocide from 2003 onwards under Omar al-Bashir's leadership inflicted violence on the Fur, Masalit, and Zaghawa ethnic groups, causing the displacement of over 2 million individuals. While there was some global condemnation, the United Nations and International Criminal Court (ICC) branding it as a genocide, concern quickly dissipated, leaving Darfuri refugees in extended neglect. Even after 2 decades, more than 300,000 Darfuris remain in refugee camps in eastern Chad (Human Rights Watch, 2019). What were once intended to be temporary refugee shelters have now turned into permanent confinement: Exceptional zones where rights are null, basic services are scant, and movement is severely restricted.

Unlike Rwanda, which systematically facilitates return and citizenship, Sudan suffers from chronic violence and fractured governance, which leads to a complete lack of responsibility. Refugees are stranded in a limbo where they have no protection from a state that denies them citizenship and is unwilling to be permanently resettled in a host country. Even after al-Bashir's removal from power in 2021 and the prospect of civilian rule, most Darfuris have been unable to return. In fact, the 2023 outbreak of war has exacerbated fears of new ethnic cleansing, further entrenching the stagnant reality of displacement.

In this scenario, social death manifests through spatial exclusion and bureaucratic invisibility. Most refugees from Darfur remain stateless and carry no form of identification and go unregistered in birth registries and national censuses. Legally, they are rendered invisible and ineligible to participate in vital aspects of societal engagement, such as voting, securing employment legally, or inheriting property. This erasure is compounded by the system of humanitarian aid, which often prioritizes immediate relief to crises rather than upholding rights. Aid in the form of short sustenance is effectively masking the deeper issue of responsibility that states must provide in terms of reestablishing justice. Aid as a mode of caring can paradoxically veil abandonment, a notion put forth by Didier Fassin (2012) and Michel Agier (2011).

### **Performative Concern and International Complicity**

Both examples illustrate how international responses to genocide tend to solidify, rather than alleviate, the underlying conditions of social death. Institutions of post-genocide justice like the International Criminal Tribunal for Rwanda or the ICC's Sudanese indictments, as meaningful as they purport to be, have virtually no impact on the daily lives of displaced survivors. In these situations, legal justice operates in a realm completely separate from material justice. There is a continuous existence of suspension of rights, residency, and citizenship. Alongside this, displaced populations are also increasingly pushed to the social, political, and economic periphery due to the securitized migration regimes, donor fatigue, and shifts in geopolitical concern.

Moreover, the gap created by international law, such as the 1948 Genocide Convention and 1951 Refugee Convention, which separates genocide and migration, elides the reality of the lived multiplicity of violence. This gap provides

space for states to absolve themselves of responsibility under the pretense of legal finality (“the genocide is over”) while still engaging in behavior that embodies genocidal logic. The marginalization of displaced populations is not an epilogue to genocide; rather, it is an extension of the political project of genocide by alternative tactics.

## **Migration as the Medium of Genocidal Continuity**

Thus, forced migration serves both as a symptom and an instrument of genocide. It represents the violence of group genocide and simultaneously provides a means to perpetuate it in legal and territorial frameworks. The displaced are not only homeless; they are stripped of any meaningful political identity necessary to claim such a dwelling. Their existence is managed through humanitarian governance, and their potential is legally frozen.

Returning to Patterson’s framework, this condition of social death is not random. It results from deliberate government actions, augmented by global apathy and humanitarian depoliticization. While Rwanda and Sudan exemplify different modalities of this rationality—one involving tightly controlled return and the other prolonged abandonment—both demonstrate the ineffectiveness of contemporary legal and policy frameworks to grapple with the enduring genocidal violence.

To properly address the issue, policymakers and researchers require episodic frameworks to analyze genocide. They must analyze how bureaucracies, borders, and laws are turned into instruments of erasure (Table 2). In this way, forced migration can be reframed as a political issue rather than a humanitarian catastrophe: one where the underlying logic of destruction governs even in the absence of gunfire.

## **Case Comparison: Rwanda and Sudan**

Table 1 outlines select indicators of genocidal continuation through forced migration in two key post-genocide contexts, namely Rwanda and Darfur (South Sudan). Each variable links to a dimension of social death, illustrating how migration extends the logic of group destruction across time and space.

## **Implications for Migration and Human Rights Policy**

Overriding paradigms of humanitarian and migration rule tend to approach genocide as something with a definite terminus. International law, political intervention, and development policy are designed to work on a temporal trajectory that starts from atrocity and finishes in ceasefires, tribunals, or repatriation accords. This “aftermath” perspective, however, drastically restricts the potential of international frameworks for acknowledging and being responsive to genocidal harm’s long durée. It externalizes the survivors’ displacement and marginalization as

**Table 1.** Indicators of Genocidal Continuation in Post-Genocide Migration Contexts.

Dimension	Rwanda (post 1994)	Darfur (post 2003)
Statelessness	Persistent exile of “Rwandan refugees” in Uganda, DRC	Millions remain internally displaced and stateless in Chad, South Sudan
Administrative erasure	Denial of return rights for 1994-era refugees	Bureaucratic delays in ID issuance; exclusion from voting registers
Spatial containment	Closed refugee camps until the early 2000s	UN-managed camps in Chad still exist after 20 years
Legal invisibility	Lack of recognition in census, ID frameworks	Refugees are excluded from legal aid, health, and education systems
Cultural suppression	Language and memory politics silence the Hutu diaspora	Afro-Arab identity politics erase Fur, Masalit narratives
Return as violence	Repatriated groups often under surveillance, marginalized	Returns denied under “safe zone” claims despite evidence of risk

**Sources:** Hovil (2016), Manby (2011), UNHCR (2023), Mamdani (2009), Human Rights Watch (2019).

**Table 2.** Mechanisms of Erasure in Displacement Governance.

Actor	Mechanism of Erasure	Example
Home state	Revocation or denial of citizenship; political labelling of returnees	Rwanda’s rejection of Hutu returnees as “genocide suspects,” blocking full reintegration
Host state	Prolonged encampment with no path to citizenship or permanent residence	Darfuri refugees in Chad have been confined to camps for over two decades
International system	Fragmented humanitarianism; failure to enforce durable solutions	UNHCR camps deliver aid but avoid political action on citizenship or return rights
Legal frameworks	Narrow legal definitions that exclude structural or migratory genocide	The Genocide Convention (1948) overlooks displacement as a tool of group destruction
Humanitarian regime	Aid without rights; relief replaces restoration	Refugees receive shelter and food but not education, identity, or political participation
Return Policies	Symbolic repatriation	Displaced are pressured to return under unsafe conditions

**Sources:** Hovil (2016), Manby (2011), UNHCR (2023), Mamdani (2009), Human Rights Watch (2019).

post-genocidal “side effects” and not as continuities of the initial violence. Through this, humanitarian and migration regimes risk not only neglect but active complicity in the structural violence they purport to undo.

One of the most important corollaries of this reorientation, then, is that attention must be paid to how policy practices—no matter how bureaucratically dispassionate or humanitarian in purpose—have the capacity to operate as instruments of exclusion, abandonment, and erasure. Prolonged refugee crises, boundless statelessness, and return policies that value spectacles over justice are non-neutral results. They are the seen products of a system engineered more for containing than redressing. As Duffield (2007) cautions, the architecture of contemporary humanitarian governance is coming to be more defined by risk aversion, control, and geopolitical interest than by transformative justice. When repatriation is a symbolic action, or when citizenship is granted conditionally based on assimilation or political silence, these interventions, rather than restoring genocide, perpetuate it through administrative processes (Agier, 2011; Fassin, 2012).

### *Reassessing the Camp and the Border as Political Technologies*

The perpetual exclusion of displaced populations cannot be explained without rethinking the role of borders and camps in the post-genocide configuration. Borders are not just geographical boundaries separating sovereign nations; they are regimes of regulation that structure access to rights, identity, and recognition. In situations such as that of Rwanda and Sudan, borders have turned into arenas of suspended life—places where displaced populations are caught between lawful belonging and complete exclusion. The border here becomes what might be termed a “dispositive” (apparatus) by Michel Foucault: not a receptive space but an active machinery of control, surveillance, and differential valuation of human lives.

This is compounded by what Giorgio Agamben (1998) famously theorized as the “camp”. The camp refers to a state of exception wherein legal norms are put in abeyance, and individuals are reduced to bare life—biological existence without political agency. Refugee camps worldwide, from the one in Dadaab, Kenya, to the Darfuri camps in Chad, are characteristic of this state. Although framed as humanitarian measures, such sites tend to replicate the very invisibility and powerlessness implied by genocide. In Agamben’s definition, the camp is no exception but the concealed basis of the political order, particularly in regimes of crisis management such as post-conflict zones. Effectively, the camp is the “afterlife” of genocide: a sphere in which its exclusionary logic is not eradicated but extended indefinitely.

### *The Illusion of Voluntary Repatriation*

Perhaps the most entrenched maxim in international refugee law is the encouragement of voluntary repatriation, the notion that displaced individuals, once security conditions improve, should head back home. Alas, this maxim tends to fall apart under the pressure of geopolitics and state interests. In Rwanda and Sudan,

“returns” have been mobilized as performative indications of post-genocide recovery, often neglecting the political, psychological, and material contexts of returnees. This leads to enforced normalization of unsafe returns in the name of voluntariness.

In Rwanda, for instance, Hutu refugees in the Democratic Republic of Congo have frequently been coerced into returning despite continued fears of monitoring, arrest, or deprivation of property upon return. The state’s push for repatriation is more about reinforcing political narratives of reconciliation and unity than restoring rights. In Sudan, despite conditions on the ground remaining largely unstable, Darfuris have been called back based on their peace agreements that do not resolve underlying displacement drivers or ensure security.

This trend discloses the discrepancy between principle and praxis. Voluntary repatriation, in theory, should be based on informed consent and sustainable reintegration. Practically, it is used as an instrument of depoliticization, recasting protracted displacement as a personal decision rather than as a collective harm. Policies that do not consider risks of return, or use repatriation as a measure of success, reaffirm the marginalization that they aim to eliminate.

### *Statelessness as Policy Design, Rather than Anomaly*

The other significant implication of this redefinition is the acceptance that statelessness is not a natural or random state. In most cases, it is a direct consequence of policy choices aimed at making some populations politically inactive. Throughout post-genocide settings, citizenship has been used to involve or exclude, not just based on legal paperwork but on ethnicity, perceived allegiance, or geopolitical expediency.

In Sudan, the groups targeted in the Darfur genocide are still subjected to bureaucratic obstacles in obtaining identification documents. Without these documents, they cannot vote, have access to services, or own land. In Rwanda, too, former exiles returning from exile frequently have indeterminate legal status. Although they might be accorded de facto residence, they are excluded from full political rights, especially if they are perceived as being associated with dissident histories or diaspora opposition elements.

Global legal regimes have faltered to meet this type of exclusion. Although the 1954 and 1961 Statelessness Conventions provide models for protection, few nations are parties, and there are no effective mechanisms for enforcement. The result is a vacuum of law where states may voluntarily create statelessness with impunity. This is not a humanitarian failure; it is a human rights failure, and one that reinforces the same logics of dehumanization that characterize genocide.

### *Performative Humanitarianism and Reproduction of Harm*

Another implication relates to the agency of international humanitarian players. While UN agencies and NGOs contribute importantly to relief efforts, they are

frequently organized by short-term financing strategies, bureaucratic neutrality requirements, and geopolitical obligations. These can result in what Didier Fassin (2012) refers to as “humanitarian reason”—a logic that replaces care with justice, and administration with transformation. Aid is provided, camps are sustained, and displacement is managed, but the underlying infrastructures of exclusion are never addressed.

In fact, humanitarianism can inadvertently perpetuate the social death architecture by allowing states to subcontract their duties to international organizations. Refugees are sustained instead of incorporated. Returns are tracked instead of evaluated for equity. Citizenship is marketed as a personal solution instead of a communal right. Within this frame, humanitarianism facilitates the perpetuation of genocide, not out of ill will, but due to the bureaucratization of abandonment.

### *Toward Transformative Approaches: Policy Recommendations*

To effectively grapple with genocide’s continuity in terms of displacement, migration and human rights policy has to conceptually and structurally change.

- *Redefine genocide’s temporal boundaries*: Frame genocide as a process of long-lasting sociopolitical implications, rather than as a short-term event. This makes it possible to deal with displacement, exile, and statelessness as part and parcel of genocide’s effects.
- *Incorporate lasting solutions into justice, not appearance*: Repatriation, resettlement, and local integration must be based on rights-based responses, with survivor agency in the foreground, not as check-box measures of humanitarian “achievement.”
- *Acknowledge statelessness as intentional*: International institutions have to address statelessness as a manifestation of structural violence. Documentation, birth registration, and legal identity should be accorded top priority as human rights, and not administrative favors.
- *Depoliticize the camp*: The camps need to be addressed as sites of political exclusion, rather than neutral zones of humanitarian intervention. An effort must be taken to deconstruct the permanent temporariness that they represent.
- *Hold states accountable for structural harm*: Mechanisms should be incorporated in migration policies to hold states accountable for fabricating exclusion through administrative practices—blocking return, denial of citizenship, or silencing dissent among displaced groups.
- *Decanter state sovereignty in protection regimes*: Legal regimes should permit international intervention or protection where home states do not, or cannot, re-establish rights to the displaced.
- *Strengthen survivor participation*: Refugees and stateless individuals should have meaningful participation in framing policies that impact them. Consultation should turn into co-governance, particularly in transitional justice and reintegration efforts.

## Conclusion

This essay has pushed a remapping of genocide not just onto the instant of mass slaughter but also onto its migratory afterlives. By regarding exile, statelessness, and long-term displacement as part of the logic of group destruction, we disrupt the hegemonic narrative that situates genocide in the past. Genocide here is not a bygone event—it is instead a continuous process that transpires across borders, laws, and bureaucracies. The rights-deprived, unrecognized, and stateless survivor is a living testament to the incomplete nature of genocidal violence.

This continuity is itself usually occluded by humanitarian and legal regimes that give priority to temporariness and emergency. Refugee camps, mechanisms of aid, and policies of return, even as they appear to be protective, can actually institutionalize the state of social death. International community members, host governments, and even post-genocide governments frequently engage, wittingly or unwittingly, in practices that put survivors in limbo, denying them justice under the guise of neutrality or stability. As this essay has demonstrated, such governance arrangements not only do not dismantle the consequences of genocide but can actually re-enact its central objective: the destruction of people's identity, history, and future.

A response to genocide aimed at justice must thus extend beyond tribunals, memorials, and humanitarian aid. It needs to examine how migration systems, donor strategies, and legal frameworks sustain structural exclusion. Survivors are not merely in need of shelter or sustenance; rather, they require restoration: restoration of legal identity, restoration of political rights, and restoration of the ability to envision and recreate communal futures. If genocide annihilates not just life but life-worlds, then responsibility must be extended to all institutions that govern the lives of the uprooted. Only then can justice begin to confront not merely the aftermath, but the afterlife, of genocide.

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# Informality, Exclusion and Social Protection: Field Evidence from Uttar Pradesh and Rajasthan

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## Abstract

The article examines multiple dimensions of vulnerability among informal labourers in India and critically evaluates existing social protection systems. Drawing on fieldwork conducted across five districts in Uttar Pradesh and two in Rajasthan, the study unravels issues such as unstable employment, delayed payments, digital divides and caste–gender hierarchies shaping the lives of this workforce. Initiatives such as MGNREGA, e-SHRAM, Ayushman Bharat and building and other construction workers welfare boards are assessed for their delivery effectiveness. A comparison between Uttar Pradesh and Rajasthan highlights the crucial role of civil society organizations in entitlement delivery and enhancing institutional accountability. Based on empirical evidence and supplementary sources, the article argues for abandoning fragmented technocratic approaches in favour of a universal social protection model grounded in a rights-based framework that better responds to local needs. Policy recommendations focus on addressing structural marginalization among informal workers.

## Keywords

Informal labour, living security, social protection, MGNREGA, e-SHRAM, civil society, migrant workers

## Introduction

The labour market in India primarily comprises an informal economy where over 90% of the population is engaged in precarious employment that is neither lawfully recognized nor offers employment security or access to social protection (MoSPI, 2023; NSSO, 2019). These casual labourers, on whom key sectors such

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as agriculture, construction, domestic service and small-scale production depend, remain formally excluded from formal labour arrangements and income security entitlements (ILO, 2018; World Bank, 2021). Informality in India is not merely transitional; instead, it is an institutionalized structure shaped by a political economy characterized by low wages and reduced law enforcement (Herring, 2015; Harriss-White, 2004; NCEUS, 2007).

The vulnerabilities embedded in informal employment are multidimensional. Workers are exposed to unstable earnings, a lack of a redress system, inadequate health coverage and retirement benefits, unsafe environments and a lack of legal support in case of disputes (Bhattacharya, 2019; Mehta & Singh, 2021). All these risks are exacerbated by socio-economic conditions such as caste, class, gender and migratory status (Dreze & Sen, 2013; Sen & Dreze, 1995). The research indicates that Dalits and Adivasis are disproportionately employed in low-paid, high-risk and insecure enterprises (Breman, 2013; Gupta & Iyer, 2020). Informal female workers face significant burdens: They perform both paid work and unpaid care and are also consistently excluded from managerial or administrative positions (ILO, 2021; Kabeer, 2019). Often invisible to welfare provisions in both their origin and destination states, migrant workers are frequently undocumented at their destinations, potentially remaining unaccounted for (Bhan et al., 2020; Deshingkar & Akter, 2009; Reddy & Sekher, 2017).

The inefficiency of the fragmented welfare system in India was clearly illustrated by the COVID-19 pandemic. When a nationwide lockdown was declared in March 2020, millions of migrant workers found themselves susceptible to a crisis revealing a lack of food security, transport support or direct income payments (Roy & Kumar, 2020). Based on reports, as many as 73% of all the potential informal workers who were to be registered on systems to allow them to get ration entitlements or cash benefits failed to do so either due to Aadhaar mismatch, failure to get themselves registered on the systems, or due to exclusion of the digital systems (Ray & Subramanian, 2020; SWI, 2021; Sinha & Mehta, 2021). Reality of exclusion was a reflection on the necessity to reform the social protection regime in India and move to a regime that is grounded in the principles of rights and the universality (Ghosh, 2020; ILO, 2021).

This article is a critical review of the social–economic vulnerabilities of the informal workers and the ability of the currently existing social protection measures to tackle them. In particular, it endeavours to address the following questions: To what extent are the existing social protection schemes effective to reduce the multidimensional precarity that informal labourers experience and how can differences in how they are implemented and the extent to which they affect people across regions be explained? It is based on primary fieldwork in five districts in the state of Uttar Pradesh (Sitapur, Hardoi, Barabanki, Unnao and Lucknow) as well as two districts in the state of Rajasthan (Ajmer and Rajsamand) to describe the experience of workers under the schemes of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), e-SHRAM, Ayusman Bharat and Building and Other Construction Workers (BOCW) Welfare Board. It talks about the importance of local governance, civil society engagement and the issue of technology in the determination of access to rights. The argument of the article

based on secondary data and literature is that there is a need to reform the system and processes of livelihood security, hitherto characterized by the technology-managed, top-down, to a decentralized, inclusive and rights-based system. The article first presents the methodological approach, outlines and discusses key empirical findings and then concludes and gives future research directions.

In India, informal work occupies a wide variety of activities, such as construction, domestic labour, manufacturing at home, agricultural services and small-scale trade (MoSPI, 2023). Such forms of labour are generally described as having no formal contracts, uneven remuneration support, a dangerous work environment and poor social security, especially in reference to pensions, expendable insurance, healthcare, medical care and provisions funds (NCEUS, 2007). The absence of institutional dispute-resolution mechanisms for most informal employees creates a high risk of exploitation, as they have limited direct legal avenues for seeking justice. India's widespread informality takes distinct forms across rural and urban settings. In rural areas, it typically involves seasonal agriculture or MGNREGA work, while urban informal employment encompasses daily wage, domestic and other precarious jobs. Far from a temporary phase, Indian informality is an entrenched institution characterized by low wages and weak law enforcement, shaped by its unique political economy (Harriss-White, 2004; NCEUS, 2007).

Insecurity of informal workers is driven by three dimensions that are related to the instability of work, lack of protective labour regulations and the limited collective voice. To begin with, informal employment is precarious in nature, which relies on other factors such as seasons, weather, flux in demand and the often-volatile market. Second, there are no statutory rights like sick leave, wage security and occupational health and safety standards. Third, informal labourers lack access to the labour unions, collective bodies and official system of appeals to the authorities (ILO, 2021), which once again marginalizes them and makes it more difficult to seek redress.

This structure deeply embeds caste and gender issues. Dalit and Adivasi workers are disproportionately in the most precarious and unprotected jobs (Bremant, 2013; Mohanty & Pati, 2020), often suffering wage theft, discrimination and assignment to manual-intensive tasks. Moreover, women labourers face additional disadvantages, with risks from gender pay gaps, unequal childcare access, limited supervisory roles and domestic burdens increasing their precarity (Patel & Desai, 2018). A nuanced understanding reveals how intersecting forms of patriarchy and informality compound these challenges (Nair, 2023; Taneja, 2022). Furthermore, the notion that the 'state's welfare system purports to be neutral' but reproduces and even entrenches existing inequalities demands critical examination (Venkatesh & Reddy, 2019). Many women work in home-based or piecework arrangements, which, despite being labour-intensive, frequently fall outside current welfare systems (Chen, 2012; Deshpande, 2020; ILO, 2021).

Migrant informal workers are in a particularly precarious situation. Internal migrants, largely seasonal rural–urban labourers, often lack legal protections from both their home and host states. At host sites, they commonly do not have ration cards, and their registration in national databases like e-SHRAM and the

One Nation One Ration Card (ONORC) is often incomplete or faulty (Agarwal et al., 2020; Deshingkar & Akter, 2009). Construction, brick kiln and domestic workers often experience wage theft and lack proper housing, sanitation and health facilities.

The intersecting vulnerabilities of occupation, caste, gender and migration status confirm that informal employment is not neutral. Instead, it is a socially and politically constructed category that creates hierarchies and exclusions, even in so-called protective institutions. Although the analysis by Drèze and Oldiges (2022) forms the very basics of technological intervention, a more broadly theorized interconnection of digital governance and vulnerable groups, supported by the similar readings of Pariroo Rattan in their analysis of the concept of Digital Developmentalism and Street Vending (2025), further emphasizes that digital tools have often disempowered rather than enabling workers. Jan Breman and Barbara Harriss-White state that Indian informal work not only is unemployable but can be described as consciously disempowering. Its popularity stems from its versatility, low cost and ability to bypass formal accountability. Therefore, a robust understanding of informal employment must move beyond mere statistics. It must instead scrutinize structural forces like economic liberalization, weak labour law enforcement, caste patriarchy and the gradual shrinking of the welfare state, all of which determine who benefits, who is excluded and who never accesses state support.

The article is structured as follows: The second section details the research methodology, including site selection, sampling and qualitative methods. The third section presents fieldwork observations from Uttar Pradesh and Rajasthan. The fourth section analyses the major findings and systemic explanations for disparities in scheme implementation. The fifth section concludes with policy recommendations and implications for universal social protection.

## Research Methodology

The article will be based on primary field work in five districts of Uttar Pradesh (Sitapur, Hardoi, Barabanki, Unnao and Lucknow) and two districts of Rajasthan (Ajmer and Rajsamand). The aim of the study was to understand the lived experiences of workers in the major social protection policies, including MGNREGA, e-SHRAM, Ayushman Bharat and BOCW Welfare Board.

Mainly, the qualitative methodology was applied in the field work, including in-depth interviews and focus group discussions with informal workers, local communal leaders, gram panchayat members and local members of the Civil Society Organization (CSOs). The approach was adopted under this theme to ensure a detailed understanding of complex, multidimensional experiences of vulnerability that are mostly rampant in the informal sector and the challenges these workers face in accessing social protection systems.

These specific districts were chosen on the consideration of a variety of informal labour markets, socio-economic conditions and different variations in the implementation of schemes. The districts selected in Uttar Pradesh are

representative of a combination of rural and peri-urban regions that have numerous informal work type and the challenges noted in the implementation of major projects such as the MGNREGA. Ajmer and Rajsamand were chosen in Rajasthan for their more successful implementation of the social protection schemes and the high activity of civil society organizations (including Mazdoor Kisan Shakti Sangathan (MKSS)), as documented in the existing sources. This intentional selection made comparative analysis of different institutional and grassroots actions possible, permitting us to understand how it contributes to the outcomes of informal workers.

### **Fieldwork Observations: Uttar Pradesh and Rajasthan**

The situation becomes evident in the result of a comparative study across five districts of Uttar Pradesh and two districts of Rajasthan. Awareness of beneficiaries and responsiveness of the institutions turned out to be highly different in selected places of both states. These disparities may be explained by the differences in the ability to govern at the local level, the magnitude and nature of involvement of the civil society and varying rates of digital preparedness.

This section elaborates on the insights provided through the fieldwork as well as draws on comparative tables to represent the differences and similarities evident in the process of implementing social protection schemes in Uttar Pradesh and Rajasthan. The tables will enable empirical findings more convincing and

**Table 1.** Comparative Effectiveness of Major Social Protection Schemes in Uttar Pradesh and Rajasthan.

Scheme/Aspect	Uttar Pradesh (Observations)	Rajasthan (Observations)	Key Differences/ Impact
MGNREGA Work Assignments	Complaints of mismatches, work demands not fulfilled, job cards not updated.	Improved scheme functioning, local CSOs monitored job card issuance, ensured drinking water/shade.	Significant disparity in work provision and monitoring.
MGNREGA Wage Payments	Delayed payments (up to several months), no automatic compensation for delays.	Timely payments, awareness of payment operation schedules.	Direct impact on livelihood security due to payment consistency.
NMMS App Usage	Disproportionately affected elderly/ women, poor network, technical faults, marked absence despite attendance.	Not explicitly detailed, but implied better adoption/less issues due to CSO support.	Digital divide exacerbates exclusion in UP.

*(Table 1 continued)*

*(Table 1 continued)*

Scheme/Aspect	Uttar Pradesh (Observations)	Rajasthan (Observations)	Key Differences/ Impact
Supervisory Positions (MGNREGA 'mate')	Determined by caste hierarchy, Dalit women overlooked, favouritism at the Pradhan level.	Not explicitly detailed, but implied less caste-based discrimination due to MKSS.	Caste-based discrimination in UP limits opportunities.
Women's Wage Access	Lack of clarity on wages, bank accounts in husbands' names, Aadhaar-bank mismatches.	Reported registering RTI requests for transparency.	Empowerment of women in Rajasthan through transparency and access.
e-SHRAM Portal Utility	Limited utility, unaware of subsequent benefits, and opacity surrounding eligibility/delivery.	Not explicitly detailed, but implied better awareness/uptake due to CSO mobilization.	Data collection without effective policy implementation in UP.
Ayushman Bharat (PMJAY) Access	Difficulties accessing hospital services, denied claims, out-of-pocket payments, limited knowledge of empanelled hospitals/claiming costs.	Conflicting effects, but implied better access in some localities.	Inadequate implementation and digital verification issues in UP.
BOCW Welfare Boards Awareness	Near-zero awareness, believed to be for government employees, improper registration.	Some registered workers received maternity/child education benefits.	Significant gap in awareness and access to benefits in UP.
Overall Grievance Redressal	Most respondents could not identify organized means, complaints unofficial/unpursued.	MKSS-led social audits, culture of questioning, RTI requests.	Stronger accountability mechanisms in Rajasthan.
Local Governance Role	Limited knowledge of programmes, deferred accountability to higher levels, reduced participation.	Proactive work planning, grievance redressal and mobilization for digital initiatives.	Active vs. passive role of local governance.

comprehensible, offering the quick overview of the systematic differences across variables. Table 1 presents a comparative review of the efficiency of the major social protection schemes in both states, which invalidates the empirical basis of

the arguments developed in this article. The visual representation of these variations strengthens the overall case of the central argument of the article regarding the criticality of local variables (CSOs, governance) even more strongly. It becomes much easier to directly quote specific results to be later used in discussion and in the policy imperatives.

In contrast, a sizeable percentage of MGNREGA employees in Uttar Pradesh grumbled about work allocation mismatch and delayed wages. Some villagers stated that their work requirements have not been met or their job card has not been updated. The issue of attendance was worsened by the addition of the NMMS app as a photo-based attendance system, which mostly disadvantaged the elderly and the female participants who did not have smartphones or access to stable internet signals. Employees in Unnao and Sitapur claimed that they were marked absent because of technical glitches despite doing full day work. In the peri-urban region of Lucknow, migrant street vendors and migrant construction workers were not granted any of the fringe or rural benefits in addition to their city benefits.

It was not just the digital exclusion, but caste hierarchy also affects supervisory roles like ‘mate’ positions in MGNREGA. In Hardoi and Barabanki, Dalit women were alleged to be ignored regardless of their seniority and experience. In some gram panchayats, nepotism on Pradhan level led to the ad hoc allocation of work to the members of the dominant caste or families. Another challenge was that majorities of women do not have a clear notion of their salaries or access to their bank accounts, as they were usually named on their husbands’ accounts, or they were blacklisted due to the Aadhaar-bank mismatch issue.

**Hardoi (UP):**

‘I don’t know how much money comes into my account. I don’t go to the bank—my husband says it’s better if everything comes to his account.’—*Santoshi Devi, MGNREGA worker, 12 March 2023*

**Barabanki (UP):**

In one panchayat, a Dalit woman who had been working under MGNREGA for over 8 years was never considered for the position of mate (site supervisor). The Pradhan reportedly told her, ‘Only upper-caste women can manage people and give orders. You won’t be able to handle it’. 14 June 2023.

On the contrary, Rajasthan showed a better functioning of the schemes and greater awareness in the villages of Ajmer and Dev Dungi. The presence of MKSS was instrumental in reducing the gap between policy and practice. Dev Dungi labourers could very well explain their rights, such as 100 days of work guarantee, wage payment periods, grievance redressal mechanisms and the importance of social audits. Women of these villages stated that they filed right to information (RTI) applications demanding clarity into muster rolls and materials procurement. This has created an inquiry culture, helped by the high level of civil society engagement and local-level officials.

A comparative contrast was observed in the administration of Gram panchayats in Rajasthan and in Uttar Pradesh. In Rajasthan, the elected committees were proactive in terms of work planning, grievance redressal and mobilizing residents towards digital literacy in e-SHRAM registration and Ayushman Bharat cards. Conversely, the Panchayat-level officers in Uttar Pradesh had poor knowledge about various programmes of the government and had a tendency to transfer responsibilities to a higher level of government administration. This dilution of the responsibility introduced confusion among field workers, and the level of participation of the panchayat was diminished significantly.

Similar disparities were evident in the implementation of BOCW welfare boards. Some of the registered construction workers in Rajasthan reported that they were provided with maternity and child education allowances. In Uttar Pradesh, however, the awareness of BOCW schemes was almost zero among the beneficiaries. Field investigators asserted that the majority of the informal construction employees were poorly registered and unaware of the mechanisms to access these benefits.

The empirical evidence reveals a significant variation in the execution of the nationwide programmes, directly linked to the existence or lack of community mobilization, effective local governance and strong grievance mechanisms. Rajasthan is the best example of what can be done with grassroots activism and the strong partnership between governments and civil society. Uttar Pradesh is an indicator of how exclusion persists despite all the apparent efforts of having a programme, when this was not effectively happening at the grassroots level.

## Major Findings and Explanations

The reasons identified in the article of underlying dissimilarities in the implementation of welfare schemes, awareness of the beneficiaries and responsiveness of the institutions across Uttar Pradesh and Rajasthan are due to differences in capacities of local governance, scale and quality of civil society engagement and level of digital preparedness. This section will explore these in depth. It does not simply observe but attempts to describe why and how such disparities occurred and their systemic consequences.

This diverse and vivid gap in scheme outcomes witnessed in Rajasthan and Uttar Pradesh is significantly influenced by the presence and nature of civil society involvement. In Rajasthan, MKSS is an excellent example of how active intervention of the civil society leads to the better functioning of schemes and empowerment of workers.

MKSS not only is present but also performs specific interventions that make a difference. They have also played a crucial role in the mobilization of workers through repeated campaigns and community meetings to educate workers in their rights, such as the right to 100 working days and wage payment cycles. Their activism especially enabled the submission of RTI petitions, which were instrumental in demanding transparency in muster rolls and procurement of materiel. Moreover, social audits, which were organized by MKSS, introduced a strong feedback process between workers and authorities, making them accountable and

responsive, which was largely absent in Uttar Pradesh. All of these direct interventions in job card tracking, more attentive management of wage payment records, making requests under the RTI act and social auditing, have direct results in transparency, accountability and, indeed, empowerment of workers, which shows in a clearly improved operation of the schemes.

**Case study: Dev Dungri (Rajasthan):**

At Dev Dungri, 10 women met to lodge an RTI, asking information on the construction material (cement and gravel) approved in their village. They took up these questions in a gram sabha meeting with the support of MKSS, which resulted in official recognition and corrective action. It is this proactive application of transparency tools which served to limit petty corruption.

**Impact of CSO engagement: Dev Dungri, Rajasthan**

- 100% of workers were aware of their right to 100 days of work
- RTI was used to track material purchases and budget allocations
- Women actively participated in panchayat meetings
- A working grievance system was in place

**In contrast:** In Hardoi (UP), over 80% of workers had no knowledge of grievance procedures or of tools like RTI or social audits.

Conversely, the weak or absent CSO infrastructure in Uttar Pradesh is also among the reasons for noted scheme failures. This disparity stems from various factors, such as historical settings that have formed state–civil society relations, varying state policies regarding NGOs and, possibly, the more fragmented local political environment, which has not fostered collective action. Without systematic and continuous struggle, Uttar Pradesh workers are usually ignorant of their rights, have no avenues to collectively raise their grievances and are victims of unaccountable bureaucratic apathy and corruption.

Local governance capacity and role, especially at the gram panchayat level, becomes another crucial factor. As could be witnessed in Ajmer and Dev Dungri in Rajasthan, elected committees were proactive in planning their work and resolving grievances, besides mobilization of residents in digital activities such as e-SHRAM registration and Ayushman Bharat. This encouraged a culture of accommodative local officers and citizen input, which led directly to improved scheme delivery and accountability.

Conversely, the panchayat-level officers of Uttar Pradesh often demonstrated limited understanding of government schemes and usually deferred responsibilities to higher administration. This knowledge gap and the problem of accountability are multifaceted in nature. They can probably be attributed to some combination of a lack of training of local officials, a lack of resource allocation towards panchayats, political intervention that erodes local autonomy and a weak culture of accountability, in which non-performance has few consequences. This dilution of responsibility creates a lot of uncertainty among the fieldworkers and severely undermines participation and trust levels at the panchayat level that results in systematic scheme failures.

Although poor network reception contributes to the problem, the issues of digital readiness extend far beyond connectivity, revealing a structural question of power and access. The NMMS app available in UP disproportionately affected the elderly and women without smartphones or reliable internet. This indicates that there are wider digital infrastructure imbalances between Uttar Pradesh and Rajasthan. Better digital readiness is implied due to stronger local governance and CSO mobilization, facilitating digital literacy.

**Sitapur (UP):**

‘We report for work every day, but the supervisor doesn’t click our photo on the app. Later, we’re marked absent, and we receive no wages’.—*Gulabo Devi, 55, MGNREGA worker, Sitapur, February 2023*

Using digital tools such as Aadhaar-based payments, mobile attendance applications and biometric authentication without addressing the underlying socio-economic inequalities, such as access to smartphones, digital literacy and gender-based restrictions in mobility, exacerbates existing inequalities and exclusions. This transforms an apparent technical issue into a structural issue of power and access. As an example of an anecdotal finding in Uttar Pradesh, women were sometimes denied work simply for lacking smartphones or in remote places where network transmission was unreliable, practically barring workers from showing up to work, regardless of their physical presence. Women, the elderly and Scheduled Caste families are particularly disproportionately affected due to limited access to technology, have less access to digital literacy and higher social barriers to mobility and resource access (Table 2). Thus, digital exclusion is directly related to the very premise of the article that ‘informality being socially and politically constructed’.

The key social protection initiatives targeting the informal labourers will be evaluated on the basis of fieldwork, empirical evidence and proven secondary literature. Though such schemes have the goal to create a conceptual support framework, they are usually hampered by administrative barriers, technological exclusion and a lack of programme convergence.

MGNREGA remains the most important rural safety net scheme targeting the informal workforce by assuring a household of 100 days of employment every year. However, in Uttar Pradesh, the interviewees consistently reported a lack of

**Table 2.** Barriers Faced by Women Workers in Accessing Digital Systems—Hardoi, UP.

Aspect	Observation (Out of 10 Women)
Own smartphone access	Only three had a personal mobile phone
Direct control over the bank account	Seven accounts linked to husbands or male relatives
Marked absent despite presence (NMMS)	Five faced wage denial due to technical glitches

work, delayed payments (it might take months) and job card updates were not recognized. The mandatory application of the NMMS app, where geo-tagged pictures needed to be posted twice a day, was especially discriminating. Many workers also found their names falsely marked absent due to bad network coverage, lack of training or misinformation about the app. Such findings are consistent with the data at the national level, where digital tools have served as a source of disempowerment rather than empowerment of workers (Drèze & Oldiges, 2022).

In contrast, Rajasthan shows a more promising development trend. In this case, MGNREGA was implemented fairly closely to what appeared to be an ideal: local civil society organizations monitored distribution of job cards, provided drinking water and shade at the worksites, and, in general, increased vigilance of public wage payment records. Workers were aware of the demand system and payment schedules. Social audits took place on a regular basis, which established a feedback loop between administration and the workers, a mechanism largely non-existent in Uttar Pradesh (LibTech India, 2021).

The Ministry of Labour and Employment has launched the e-SHRAM portal to build a widespread national database of the unorganized labour to make their enrolment easy in welfare programmes. In field studies, however, there was little usefulness. In the surveyed areas, the workers had enrolled through facilitation drives or local common service centres but remained unaware of the subsequent benefits. The veil of secrecy over eligibility, methods of delivery and the actual matching of registration with minimal visible take-up underlines the pattern of data gathering without the effective policy implementation (ILO, 2021).

The Ayushman Bharat–Pradhan Mantri Jan Arogya Yojana (PMJAY) is another similar programme that aims to guarantee free tertiary/secondary healthcare which yielded contradictory effects. In urban Lucknow and some localities within Ajmer, Ayushman-card families experienced challenges in obtaining hospital services, such as claim rejections and out-of-pocket expenses to use the card or the diagnostic bill. Unorganized workers interviewed were not well informed with regard to empanelled hospitals or reimbursement of costs. Thus, PMJAY seems to be a financial security to the poor, but due to weak implementation marked by tedious formalities of digital verification, absence of transparency and limited scheme portability, this programme promotes the ongoing exclusion in the informal sector (Ghosh, 2020; Jain & Mor, 2021). There was low enrolment in social insurance schemes, including Pradhan Mantri Shram Yogi Maan-Dhan (PM-SYM), Pradhan Mantri Jeevan Jyoti Bima Yojana and Suraksha Bima Yojana (PMSBY). The idea of monthly contributions was considered unaffordable, and workers lacked confidence in the claims process. Most of the workers were self-employed; hence, they preferred direct benefits over contributory benefits. It is also proposed in academic criticism that contributory pensions are ill-suited in the volatile income conditions of informal jobs (ILO, 2021; NCEUS, 2007).

The welfare boards set established under the Building and Other Construction Workers Act, 1996. BOCW welfare boards held out some hope but were not used to their full potential. In Rajasthan, a few registered construction workers also got maternity allowances, safety supplies or training incentives. On the contrary, workers in Uttar Pradesh had no idea of this board, and often believed that it was

available only to government workers. Most cases were found to automatically block registration by contractors or brokers, and in case they were registered, still no further course of action was taken to avail the benefits.

Poor convergence became one of the most widespread obstacles to the schemes. Employees had to deal with numerous credentials and portals, bank accounts and biometrics. No platform provided benefits under a single window. With this sort of fragmentation, though a majority of informal workers may not appear on any given listing platform, they may be listed elsewhere, and this creates confusion and wastage of welfare opportunities. This atomization not only hinders administrative capacity, but it also imposes unfair access costs on vulnerable employees.

Decentralization is one of the main disadvantages to the efficiency of the Indian welfare structure, especially for informal workers. Despite the many schemes being in operation in the country, their management and distribution are fragmented, thus interrupting horizontal and vertical accountability. This coordination failure leads to redundant databases, incomplete coverage of eligible beneficiaries and reduced welfare effects (ILO, 2021).

Digital exclusion is directly correlated with fragmented targeting, wherein workers are forced to enrol separately under MGNREGA, e-SHRAM, the Ayushman Bharat health scheme and pension schemes. There are different eligibility requirements, documentation procedures and administrative regimes in each initiative. There is no overarching platform for integration or portability, leading to what can be termed 'welfare fatigue' as workers become disheartened by repeated, often unsuccessful, attempts to obtain benefits. Without integrated databases and a common delivery window, the principle of convergence remains largely rhetorical (Ghosh, 2020).

The urban informal workers and migrants face profound invisibility. Although the government has schemes like MGNREGA, which can offer concentrated employment in rural areas, equivalent security is not extended to the informal workers in the cities. Because of the lack of portability, migrants who perform jobs as construction workers, transport workers and street vendors in their destination states are not entitled to the same benefits as their native counterparts in their home states as well as the destination states. Another approach that worsens food insecurity among migrants is the poor performance of ONORC initiative (Bhan et al., 2020). Poor decentralized housing policy promotes residential precarity and hinders the registration and traceability of residences.

Institutional accountability mechanisms are also weak, which is another structural bottleneck. Grievance redressal forums, ombudsman offices and social audits get less funding and are politically neglected. In Uttar Pradesh, the vast majority of respondents were unable to point to a formal system of complaint; complaints were mostly unofficial or unpursued. Conversely, the example of MKSS-led social audits in Rajasthan shows how transparency and supportive relations can be increased through participatory monitoring. Nonetheless, this process will require an active civil society and a conducive local government that cannot be substituted with digital dashboards and centralized programmes (Roy, 2022).

Beyond scheme-related issues, our comparative analysis also indicates the extent to which structural gaps and cross-cutting themes are affected differently across the two states. Such a distinction is crucial to explain why systemic problems cannot be deemed equal but tailored to local dynamics, in turn enhancing the discussion as to why Rajasthan is regularly doing better in some areas as compared to other states because of the presence or lack of certain mitigating variables (e.g., high-performing CSOs). Discussion of these broader issues is aided by the presentation in Table 3, and the table itself has a straightforward connection to policy imperative by defining where the most significant structural gaps have been identified in which context, so that specific efforts can be targeted to these areas.

**Table 3.** Cross-cutting Themes and Structural Gaps in Uttar Pradesh and Rajasthan.

Theme/Gap	Uttar Pradesh	Rajasthan	Impact on Informal Workers
Fragmentation of schemes	Multiple IDs, portals, bank accounts, biometric verifications; no single-window access.	Not explicitly detailed, but implied better convergence due to CSO efforts.	Imposes unfair access costs, confusion and missed opportunities.
Technological exclusion	Aadhaar mismatches, NMMS app issues, poor network, shared devices and software failures.	Implied better digital readiness due to local governance/ CSO mobilization.	Gatekeeping device disproportionately affects vulnerable groups.
Caste and gender hierarchies	Dominant-caste 'mates' overrepresented, women denied work (smartphone pretext), restricted mobility for grievance.	Implied less overt discrimination due to CSO intervention.	Reproduces existing inequalities and limits opportunities for the marginalized.
Migrant worker invisibility	Deprived of rural/ urban entitlements, lack of portability and food insecurity (ONORC underperformance).	Not explicitly contrasted, but the general issue of migrant invisibility is a national concern.	Lack of legal protection, basic amenities and traceability.
Institutional accountability	Underfunded/ politically marginalized social audits, unofficial/ unpursued complaints.	MKSS-led social audits, participatory monitoring and enhanced transparency.	Direct impact on trust and responsiveness of the system.

In conclusion, the current strategy of the modern state regarding workers' welfare and informal labour is socio-economically insufficient, technologically overwhelming and structurally divided. These weaknesses undermine the confidence of the community and continue the politics of invisibility, where the informal workers are often tallied, tracked, but hardly protected.

## Conclusion

The informal employment regime in India is not a temporary event or a transitional stage; it is an institutionalized and established fact that has been formed over decades of policy ambiguity, disjointed welfare planning and structural inequalities. Although many welfare programmes like MGNREGA, e-SHRAM and Ayushman Bharat have been implemented, the informal workforce is still mostly left out, which can be explained by the poor implementation, low awareness and insufficient institutional responsiveness. The excessive dependence on technological solutions has also contributed to the exclusion, which has led to a data-rich but delivery-poor system. A substantive change requires the breaking down of the existing fragmented, top-down system and the implementation of a universal social protection floor that ensures basic income security, healthcare, housing and nutrition to everyone.

The next imperative steps involve fortification of grassroots governance, protection of benefit portability of migrant workers and the creation of gender sensitive and rights-based welfare institutions. The decentralization of civil society organizations, by granting them legal power, financial independence and immunity against political pressure, is also critical in promoting accountability.

Finally, these reforms require long-term political commitment, institutional capacity-building and inclusive decision-making to be successful. The experience of Rajasthan and Uttar Pradesh shows that local responsiveness, administrative integrity and participatory social audits can collectively transform welfare delivery, making social protection equitable and sustainable.

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# Quantity–Price Relationship: Revisited with Indian Data

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## Abstract

This article analyses the quantity–price relationship using the GDP and the wholesale price data for India for the period 1983–2023. The relationship is, however, assessed not in isolation rather in the broad context of share market functioning and employment growth. The advantage is that we are able to understand the linkages between economic growth and employment growth, on the one hand, and the real sector and financial sector as well. Findings confirm that employment loss resulting in a deceleration in demand can actually retard economic growth. On the other hand, the role of the share market in raising economic growth is nominal. Price is not seen to influence economic growth significantly, and it is difficult to reduce the price even after augmenting production, once it has already shot up. Hence, the price strategy to provide an incentive to the producers must be played carefully. The measurement of core inflation shows that it comprises a significant component of the total price rise, though the core inflation part has come down significantly over the years, unravelling the efficiency of the government in pursuing price management.

## Keywords

Inflation, growth, employment, share market, demand

## Introduction

Whether prices affect quantity and vice versa is a pertinent question, and it has been a matter of concern from both an academic and a policy point of view. The standard macroeconomics would suggest that a shortage in the supply of goods

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and services may raise prices while a glut may cause a reduction. From another perspective, price growth may act as an incentive for the producers while it may affect the consumption demand adversely, unravelling both a positive and a negative impact simultaneously. Contrary to Tobin's (1972) argument that positive inflation facilitates relative price adjustments, Ball and Mankiw (1994) argued that zero inflation is optimal. Inflation in their conceptualization exacerbates relative price variability and imposes welfare costs without offsetting benefits. The endogenous nature of asymmetric price adjustment underpins this finding, as inflation-induced asymmetry disappears under price stability. It has been found by recent studies that the core inflation, after being under the effects of supply shocks, will still tend to go upwards temporarily despite the price stabilization policies, and an example of such supply shocks is the increased cost of energy after the pandemic (Guerrieri et al., 2023).

Some of the studies disaggregated the observed price change or inflation in terms of a long-term growth inherent in the series and another, sensitive to quantity changes or being in a relationship with quantity, termed as core and non-core inflation, respectively. Similarly, as a real variable grows, part of its movement is attributable to price change, and part of it, which is growing persistently over time, needs to be reflected upon. This article aims to capture the quantity–price relationship in the Indian context from 1983 to 2023 and proposes to decompose inflation into core and non-core components, following the time series framework. The rest of the article is organized as follows. The next section offers a conceptual framework, reflecting on the quantity–price relationship and associating it with employment and the share market behaviour.

## **Analytical Frame**

As a quick review of the inflation–growth literature, it is noted that the positive association between inflation and growth had its origin in the Keynesian strand on non-neutrality of money, which suggests that an increase in money supply resulting in a price rise reduces the real wage rate. This, in turn, raises the level of both economic activity and labour demand. Thus, price stability can actually be growth hampering. However, the Keynesian view came under severe attack in the 1970s when high inflationary pressures led to a sharp deceleration in employment and growth levels in a persistent manner. The rational expectations school opposed the non-neutrality proposition of Keynesians by arguing that, under flexible markets, repeated monetary shocks given to facilitate economic growth could only result in recurrent price rise (Rangarajan, 1998). The recent empirical evidence reaffirms the classical monetarist perspective where the short-run deviations from demand or velocity shocks allow money supply increases to be proportionally correlated with inflation in the medium run (Gao & Nicolini, 2023).

The evidence on an inverse relationship between inflation and growth became significant since the beginning of the 1980s: Kannan and Joshi (1998) cite a large number of empirical studies (Barro, 1995; Fischer, 1993), confirming the negative impact of inflation on growth. Recent findings indicate a time-varying character of inflation–growth trade-off; while in the short run, there is a minimal correlation

between them, at the medium run, inflation and growth are found to be feedback-adjusted (Tiwari et al., 2019). With respect to the Indian situation, the inflation threshold estimated roughly at 6% and above is taken to severely impede growth, while moderate inflation is not likely to cause any adversity (Dholakia et al., 2021).

Core inflation may be interpreted as the underlying trend inflation after eliminating temporary price changes caused by supply interruptions or erratic market behaviour (Clark, 2001). Recent investigations have sought to build on this theoretical framework and have rather emphatically shown that, on account of being efficient in forecasting the long-run trends in inflation, core inflation continues to be an important indicator for policymakers (Almuzara & Sbordone, 2024). In the Indian setting, Raj et al. (2020) have empirically tested measures of core inflation and established that exclusion-based indices, especially the CPI excluding food and fuel, do quite well in tracking trends in prices that are persistent. It should disregard relative prices and reflect only on the permanent components of inflation that are important for policies (Bryan & Cecchetti, 1994). Further examining the issues in the long run, it is noted that the core inflation serves the purpose of predicting medium-term inflation dynamics (Blinder, 1997).

The process of estimating core inflation options is to ignore the price volatile components like food and energy, thereby reducing signal-to-noise ratios in the inflation data (Clark, 2001). Applying VARs, the responses of the economy to monetary policy shocks have been estimated: monetary tightening is seen to lead to sustained output and price declines (Bernanke & Gertler, 1995). A tighter monetary policy erodes borrowers' net worth because asset values decline and interest expenses increase, and this unravels the decline in investment and spending (Bernanke & Gertler, 1995). Others contended that India's inflation reduction after 2016 was spurred by structural drivers like better agricultural output and lower international commodity prices, instead of a tight monetary policy (Balakrishnan & Parameswaran, 2022).

Recent analysis by the International Monetary Fund (2025) underscores India's robust economic growth trajectory, projecting a 6.6% expansion for 2025–2026 amid resilient domestic demand. This perspective on aggregate quantity is complemented by the Reserve Bank of India (2025a), which highlights a continued focus on price stability with core inflation remaining contained. The RBI's monetary policy framework aims to align headline inflation with the 4% target while supporting economic activity (Reserve Bank of India, 2025b). Furthermore, the RBI Governor (2025) has emphasized strong macroeconomic fundamentals, noting that the Indian economy is well-positioned to navigate global headwinds. These institutional assessments provide a critical contemporary backdrop for analysing the dynamics between price levels and economic output in India.

Quah and Vahey (1995) identified the core inflation as that which is capable of affecting the real output in the short-medium or short term only and not in the long run. Thus, it coincides with the vertical long-run Phillips curve. The authors applied the vector autoregression (VAR) framework in measuring how inflation is affected by the dynamic restrictions. Shocks have been categorized into two kinds: core inflationary disturbances and non-core disturbances. The core

inflation disturbances are medium- and long-term output-neutral while the non-core disturbances are transitory shocks which propagate to inflation but have no substantial and persistent impact on inflation (Quah & Vahey, 1995). This allows for making meaningful distinctions between different inflation components based on their effects on the macro-economy. The identification of core inflation as the inflation to which economic agents adjust without affecting output or employment in the long run is important from the point of view of assessing the effectiveness of monetary policy. If money supply and price changes do not affect the real variables like output and employment in the long run, monetary policy will be treated as ineffective. So in the VAR framework, the rate of growth in prices, which is related only to its past magnitudes, can be considered as the core inflation. However, before dropping the lagged quantity-specific variables from the price equation and estimating the core inflation, it will be desirable to pursue the Granger causality test first.

In this study, we have, however, extended the analysis by considering two additional variables: employment and the share market behaviour captured through the SENSEX. The effect of output on employment is not always positive. Depending upon the type of technology used by the entrepreneurs, the relationship between output and employment can be deciphered. For example, with the adoption of capital-intensive technology, output may increase, but employment will not. In contrast, with a rise in factor input (employment), output is expected to rise. But with the redundancy of labour, the output response may be nil. However, the demand linkage can still be positive: with enhanced employment, effective demand may increase, leading to expansion in output, though meagre wages and sluggish growth in wages may not lead to any acceleration in demand irrespective of employment expansion.

The early survey on the behaviour of stock returns was done by Fama (1970). Fama's theory of efficient market hypothesis suggests that stock markets are efficient because they reflect the fundamental macroeconomic behaviour. The term 'efficiency' implies that a financial market incorporates all relevant information (including macroeconomic fundamentals) in the market and, thus, the observed outcome is the best possible one under the circumstances. Bhattacharya and Mukherjee (2002) showed a two-way causation between stock price and the rate of inflation, with the index of industrial production leading the stock prices. Studies suggesting a negative relationship between stock prices and inflation (Fama, 1981) envisage that high inflation predicts an economic downturn, and keeping this in view, the firms start selling off their stock. An increase in the supply of stock then reduces the stock prices. Since stocks reflect firms' future earning potential, an expected economic downturn prompts firms to sell off the financial stocks and, thus, high inflation and low stock prices tend to go together. On the other hand, a positive relationship is also possible between inflation and stock prices as unexpected inflation raises the firms' equity value if they are net debtor (Ioannidis et al., 2005; Kessel, 1956). A recent cross-country analysis strongly contends that inflation adversely affects stock market performance, particularly when central banks react with contrasting countercyclical policies to control inflation (Zhang, 2021). This view finds empirical support in the Indian

context, proving that inflation has an inverse relation with stock returns and creates higher volatility in the market (Sreenu, 2023).

The stock traders are made up of professional traders who buy and sell shares all day long, hoping to profit from changes in share prices. They are not really interested in the long-term profitability or the value of the assets of the company. When traders believe that others will buy shares (in the expectation that prices will rise), then they will buy as well, hoping to sell when the price actually rises. If others believe the same thing, then the wave of buying pressure will, in fact, cause the stock price to rise (Aga & Kocaman, 2006). Thus, the stock demand and also the stock prices rise when the economy is about to enter an upswing, and on the other hand, they all fall when the economy is about to experience a downswing. Thus, just before the upswing occurs, an increased stock price and a modest inflation can coincide, and similarly, just before the downswing starts, a depressed stock price accompanied by a high inflation may co-exist. For the structural development of the capital market and for growth to take place, it is important that the RBI's monetary policy must look into the issue of inflation management (Desai, 2011). Price stability should be the main goal of the monetary policy because it is only slow and stable inflation which is conducive to growth. At a time of low share prices, firms are reluctant to tap the capital market. Unless bank finance can substitute adequately for the capital markets, firms' investment plans are bound to be hit. Thus, production may decline. Theoretical models suggest that optimal monetary policy should target inflation in the sticky-price sector rather than headline inflation, as it has greater influence on long-run output stability (Aoki, 2001; Mankiw & Reis, 2003).

Monetary policy impacts the stock market as well. As Ioannidis and Kontonikas (2008) point out, monetary policy influences stock returns by influencing the discount rate (the weighted average cost of capital) and the future stream of cash flows. Tightening of the monetary policy raises the rate of interest and thus reduces net profits. It also reduces the supply of bank loans. Hence, it may be inferred that tightening of monetary policy reduces the inflation rate and also stock prices as it leaves less money in the hands of individuals to demand goods or to buy stocks. From this point of view, inflation and stock prices may move in a similar direction.

## **Empirical Results**

Keeping in view the theoretical possibilities, we have considered the annual time series on GDP, employment (KLEMS Database, India), price index (WPI for all commodities from *RBI Handbook of Statistics*) and the share market indicator (SENSEX from SENSEX Historical Data)—all in logarithmic form from 1983 to 2023. The variables are non-stationary in level form, and further, there is no cointegrating relationship among them (Table 1a and Table 1b). The variables in their first difference form (rate of growth) are stationary. Suitable diagnostic tests confirm the statistical validity of the estimated VAR model. The residuals are well-behaved. The serial correlation LM test ( $p$  values  $> .05$  for lags 1–3) shows no

**Table 1a.** Johansen Cointegration Test.

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob <sup>***</sup>
None	0.384	40.689	47.856	.199
Atmost 1	0.235	20.314	29.797	.402
Atmost 2	0.113	9.084	15.495	.358
Atmost 3*	0.092	4.058	3.841	.044

**Table 1b.** Unit Root Test on log Levels and First Difference Forms.

Variable	ADF Test Statistic	Conclusion
lnEmployment	0.657	Unit root exists
lnRealgva	-0.507	Unit root exists
lnPrice	-2.857	Unit root exists
lnSensex	-1.329	Unit root exists
Rog in Employment	-2.880	No unit root
Rog in Realgva	-6.339	No unit root
Rog in price	-3.780	No unit root
Rog in SENSEX	-8.005	No unit root

autocorrelation, the heteroskedasticity test (joint  $\chi^2 p$  value = .7248) confirms homoskedastic variances and the Jarque–Bera normality test (joint  $p = .3805$ ) fails to reject the null hypothesis of multivariate normality. The stability condition is also satisfied as all inverse roots of the AR characteristic polynomial lie within the unit circle. Hence, the model validates the ensuing impulse response and variance decomposition analyses.

We, therefore, apply the vector autoregression model after converting the variables into their first difference form (rate of growth). Two lags seem to be optimal as the AIC is minimal (Table 2a; hence, the VAR model is estimated with two lags on the following transformed variables: rate of growth in prices, rate of growth in gross domestic product, rate of growth in employment and the rate of growth in SENSEX (Table 2b).

The interpretation of the VAR model is unwarranted. Rather, the impulse response and the variance decomposition exercises based on the VAR model hold a great deal of relevance. As there are four endogenous variables, there are four shocks. The response of each of the variables to all these four shocks is necessary for analysing the results.

Response of price growth to price shock is very much evident at least in the short and medium run, though after almost seven years, the effect of price shock on prices disappears (Figure 1; Appendix table gives the figures). SENSEX, on the other hand, stabilizes much faster in response to price shock, though both employment and output take a longer time horizon to indicate stability. While employment growth declines initially in response to price shock, it improves

**Table 2a.** Lag Order Selection.

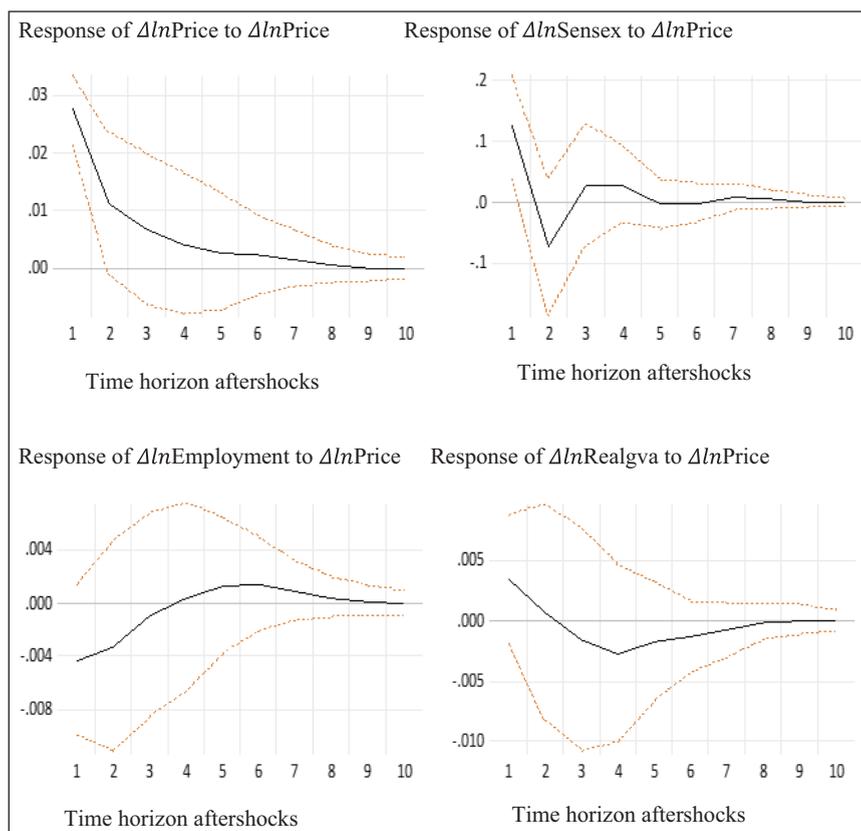
Lag	LogL	LR	FPE	AIC	SC	HQ
0	267.257	NA	1.61e-11	-13.500	-13.330*	-13.440
1	291.154	41.667*	1.08e-11	-13.905	-13.052	-13.599
2	308.045	25.986	1.06e-11*	-13.951*	-12.415	-13.400
3	316.044	10.665	1.72e-11	-13.541	-11.323	-12.745

**Notes:** \*Lag order selection by the criterion; LR: Sequential modified LR test statistic (each test at 5% level); FPE: Final prediction error; AIC: Akaike information criterion; SC: Schwarz information criterion; HQ: Hannan-Quinn information criterion.

**Table 2b.** The Estimated VAR.

Variables	$\Delta \ln \text{Price}$	$\Delta \ln \text{Sensex}$	$\Delta \ln \text{Employment}$	$\Delta \ln \text{Realgva}$
$\Delta \ln \text{Price}(-1)$	0.607*** (0.208) [2.915]	-1.467 (2.152) [-0.682]	-0.025 (0.139) [-0.182]	-0.101 (0.130) [-0.781]
$\Delta \ln \text{Price}(-2)$	-0.0395 (0.186) [-0.212]	2.668 (1.919) [1.390]	0.020 (0.124) [0.158]	-0.037 (0.116) [-0.323]
$\Delta \ln \text{Sensex}(-1)$	-0.007 (0.018) [-0.401]	-0.205 (0.188) [-1.095]	0.003 (0.012) [0.254]	-0.006 (0.011) [-0.550]
$\Delta \ln \text{Sensex}(-2)$	0.005 (0.017) [0.298]	-0.284 (0.180) [-1.580]	0.003 (0.011) [0.299]	-0.000 (0.011) [-0.029]
$\Delta \ln \text{Employment}(-1)$	1.019*** (0.268) [3.798]	0.320 (2.772) [0.115]	0.619*** (0.179) [3.451]	-1.060*** (0.168) [-6.309]
$\Delta \ln \text{Employment}(-2)$	-0.524 (0.388) [-1.351]	2.963 (4.008) [0.739]	-0.328 (0.259) [-1.264]	0.751*** (0.243) [3.092]
$\Delta \ln \text{Realgva}(-1)$	0.0523 (0.246) [-0.212]	-1.411 (2.547) [-0.554]	-0.084 (0.165) [-0.509]	0.059 (0.154) [-0.384]
$\Delta \ln \text{Realgva}(-2)$	0.2490 (0.244) [1.017]	1.866 (2.528) [0.738]	-0.187 (0.163) [-1.142]	-0.016 (0.153) [-0.106]
Constant	0.0043(0.028) [0.150]	0.060(0.298) [0.200]	0.027(0.019) [1.398]	0.076*** (0.018) [4.209]

**Notes:** \*\*\*Significant at the 1% level. Standard errors are given in parentheses and *t*-statistics are in square brackets.



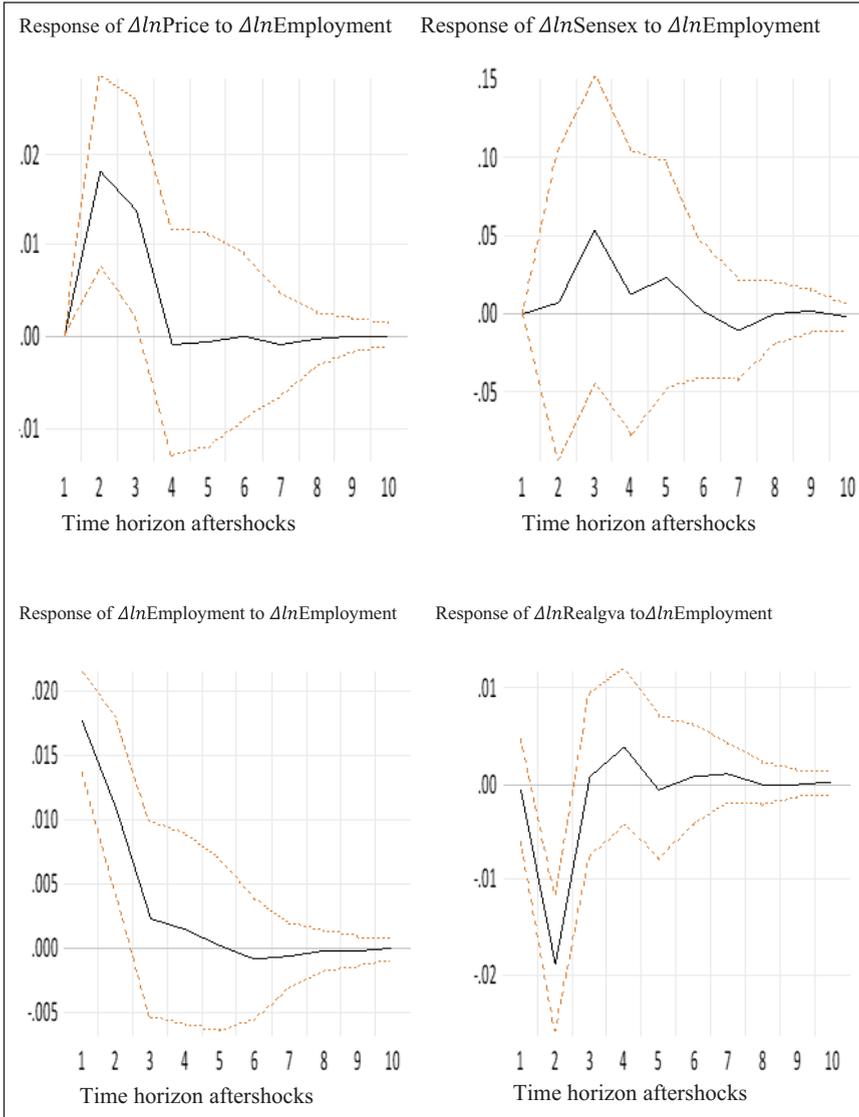
**Figure 1.** Dynamic Response to Price Shock.

**Note:** Time horizon aftershocks is on the x-axis and response variable on the y-axis.

slowly to become slightly positive and thereafter stabilizes at around zero value in the long run. Output growth falls sharply from a positive response to a negative one in the short run and thereafter moves towards a zero value in the long run. So, price incentive does not seem to be working in the long run, though in the very short run, producers may be tempted to augment production. However, it may be undertaken through cost-cutting mechanisms such as fewer recruitments.

Employment shock does not impact prices for a long time, though a positive employment shock may raise prices due to a sudden hike in demand (Figure 2). SENSEX, in response to employment shock, also shows a sudden jump in the short run. Both employment growth and value-added growth stabilize soon after the disturbance in the short run.

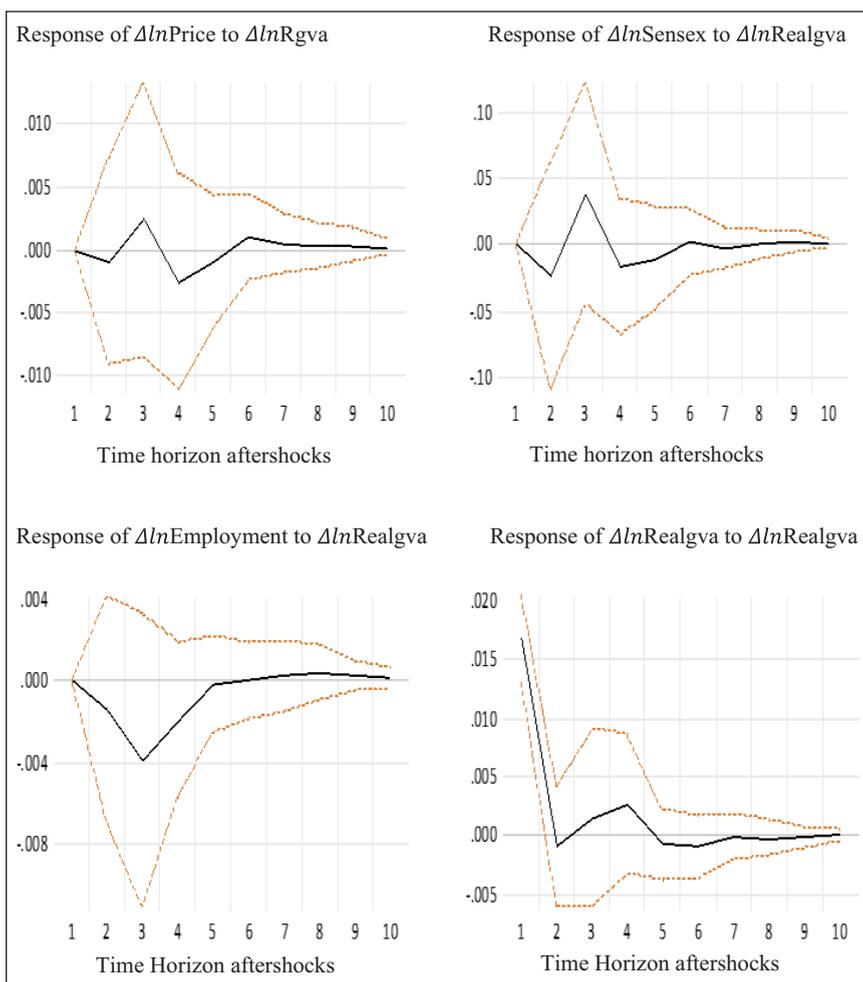
Value-added shock creates volatility in price growth and SENSEX growth as well. Quite expectedly, it also affects employment growth adversely in the short to medium run (Figure 3). However, the share market shock does not show any persistent effect on the real variables after initial disruptions (Figure 4).



**Figure 2.** Dynamic Responses to Employment Shock.

**Note:** Time horizon aftershocks is on the x-axis and response variable on the y-axis.

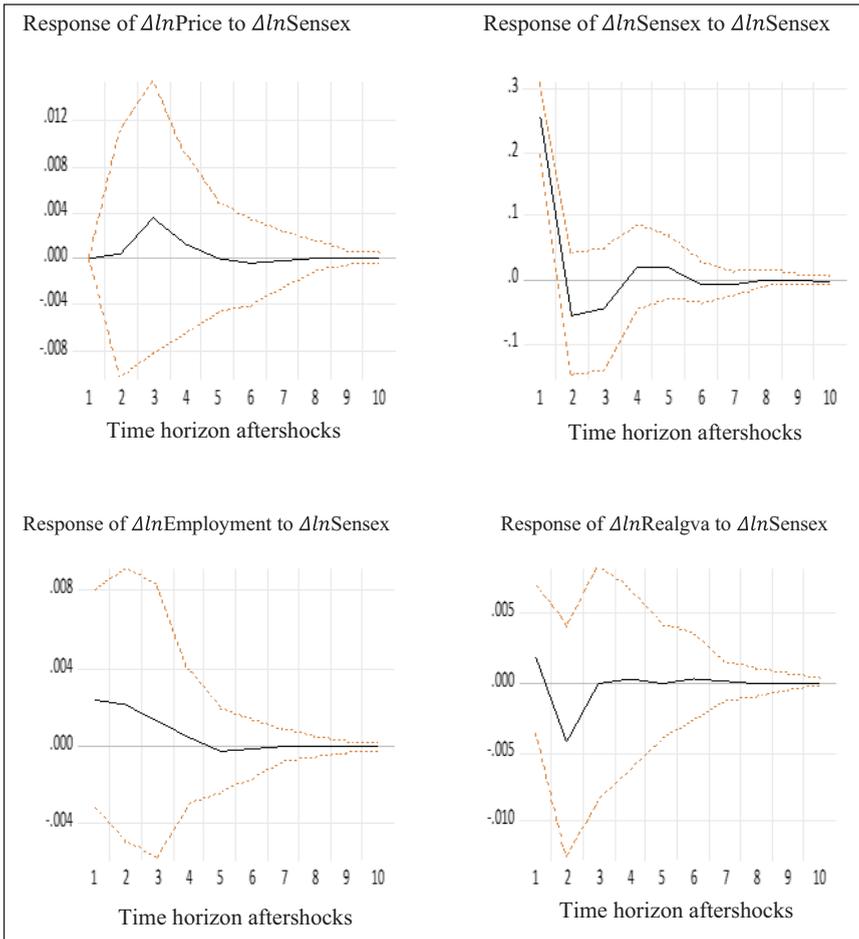
Variance decomposition results bring out the fact that a large part of the price variance (26%–34%) is accounted for by employment both in the short and long run, indicating that employment fluctuations can cause prices to fluctuate, though price does not comprise any significant variation in the employment changes (Table 3). Prices again account for significant variations in the share market indicator, though SENSEX does not explain any noticeable variation in prices.



**Figure 3.** Dynamic Responses to GVA Shock.

**Note:** Time horizon aftershocks is on the x-axis and response variable on the y-axis.

Employment variance is, by and large, rigid both in the short and long run, with a nominal impact of prices (around 6%) on employment. Value added is not able to capture any significant part of the employment variance: throughout the medium and long run, real output explains only around 4% of the employment variance. Capital-intensive technology loosens the output–employment nexus as envisaged in the standard production function and derived factor demand analysis. However, the variance in value added is largely influenced by employment both in the short and long run. In fact, the employment variance accounting for output variance is larger than the output variance itself, which tends to indicate that employment decline can lead to a major output-fall through deceleration in demand. Usually,



**Figure 4.** Dynamic Responses to Sensex Shock.

**Note:** Time horizon aftershocks is on the x-axis and response variable on the y-axis.

the demand side aspect is neglected as firms keep emphasizing on cost-cutting mechanisms through the adoption of capital-intensive technology. Though substitution of labour through mechanization may augment production, in the long run, such production will not be sustainable because of the lack of effective demand. The policymakers need to realize the strength of the demand linkage, and accordingly, employment and wage augmentation strategies need to be worked out to make economic growth sustainable in the long run.

Price inflation does not seem to account for a significant variation in value-added growth. Both in the short run and in the long run, only 4% of the total variation in value added is comprised by price growth. However, if we compare this figure with the value-added growth accounting for the price variance, it is indeed much larger as value-added growth variance did not comprise more than 1% of

**Table 3.** Variance Decomposition.

Variance Decomposition of	Period	Contribution of			
		$\Delta \ln \text{Price}$	$\Delta \ln \text{Sensex}$	$\Delta \ln \text{Employment}$	$\Delta \ln \text{Real GVA}$
$\Delta \ln \text{Price}$	1	100	0.000	0.000	0.000
	2	72.918	0.023	26.996	0.064
	4	63.471	1.014	34.637	0.878
	6	63.672	1.017	34.311	1.000
	8	63.672	1.017	34.292	1.019
	10	63.665	1.017	34.289	1.029
$\Delta \ln \text{Sensex}$	1	19.205	80.795	0.000	0.000
	2	23.161	76.166	0.048	0.625
	4	22.729	71.822	3.104	2.345
	6	22.490	71.439	3.636	2.435
	8	22.533	71.291	3.742	2.434
	10	22.532	71.280	3.748	2.440
$\Delta \ln \text{Employment}$	1	5.449	1.746	92.806	0.000
	2	6.098	2.204	91.284	0.415
	4	5.923	2.438	87.361	4.277
	6	6.585	2.430	86.736	4.250
	8	6.749	2.424	86.558	4.292
	10	6.753	2.424	86.546	4.276
$\Delta \ln \text{Realgva}$	1	4.084	1.047	0.127	94.742
	2	1.901	3.208	52.650	42.241
	4	3.237	3.062	52.189	41.512
	6	3.890	3.049	51.766	41.295
	8	3.960	3.042	51.791	41.207
	10	3.961	3.043	51.787	41.210

the price variance. This would tend to suggest that inflationary tendencies work as an incentive for producers to augment production. Mild price stimulation may trigger economic growth. However, output expansion is unlikely to reduce inflation. Once prices go up, it is difficult to reduce them even after following an output expansionary policy.

## Measuring Core Inflation

The next question relates to the measurement of core inflation, which, as defined earlier, is output neutral at least in the medium and long run. This would mean that we allow the growth rate in prices to be a function of the lagged growth rate in prices, dropping all other variables from the equation. The estimated value of the

price growth series is then the underlying core inflation. From the growth rates, the price index can be calculated, based on which the average growth rate in prices over sub-periods can be obtained.

1. This exercise is pursued under the following two conditions:

Growth in prices is regressed only on the lagged growth in prices (two lags), and the estimated growth in prices is taken to give an estimate of the core inflation.

If we consider the period 1983–2000, the core inflation (based on the WPI of all products) turns out to be 6.54% per year compared to the actual/observed inflation of 7.8% per annum. This means that core inflation accounted for almost 84% of the total price rise. In other words, a large component of the price rise was non-beneficial: it did not provide any stimulant to the producers to augment production.

Over the period 2001–2011, the actual inflation was 5.78% per annum, while the average core inflation was 5.51% per year, nearly 95% of the price rise was futile with no impact on the real variables.

As we come to the third period, comprising 2012–2023, a turning point is observed. The actual inflation rate of 3.12% per annum is lower than the core inflation rate of 4.47% per annum. In other words, with no government intervention prices which cannot influence the real variables positively by incentivizing the economic agents would have increased at a rate higher than the actual price increase during this period. The success of the present government can be envisaged in two distinct ways. First, it reduced the core or non-beneficial inflation from around 6% and 5.5% per annum as witnessed in the previous regimes to about 4.5% per annum. Second, without the role of the government, prices would have shot up at a rate higher than what was actually observed. Reducing the actual inflation to an all-time low rate of only 3.12%, which is even lower than the core inflation rate of 4.47%, unfolds massive success of the government in managing the economy. If we consider the period 2014–2023, the core inflation and the actual inflation rate turn out to be 4.57% and 3.80% per annum, respectively. Notwithstanding the external shocks led by the pandemic, the price management could actually be carried out fruitfully. The significant decline in consumption poverty during this regime can also be rationalized in the backdrop of this efficiency in price supervision.

2. The growth in prices is regressed on the lagged growth in prices (two lags) and the lagged growth in other variables. However, while calculating the core inflation, the coefficients of variables other than the lagged growth in prices are set to zero.

Between 1983 and 2001, the core inflation was around 4.86% per annum, which was around 62.5% of the actual inflation. Between 2001 and 2011, the core inflation fell to 3.52% per annum, comprising around 60.3% of the actual inflation. Finally, from 2012 through 2023, the core inflation fell to an all-time low at 2.09% per annum.

## Conclusion

In this article, we made an attempt to assess the quantity–price interaction through two other variables, employment and the share market indicator, which are also considered. Since the variables are non-stationary in their level form and there is no cointegrating relationship among them, the VAR framework is used after converting the variables into their growth rate form (in terms of which the stationary property is ascertained).

A large part of the price variance is accounted for by employment both in the short and long run, indicating that employment fluctuations can cause prices to fluctuate, though price does not comprise any significant variation in the employment changes. Prices again account for significant variations in the share market indicator, though SENSEX does not explain any noticeable variation in prices. Employment variance is by and large rigid in both the short and long run, with a nominal impact of prices and real value added on employment. Adoption of capital-intensive technology does not allow economic growth to influence employment significantly. However, the variance in value added is largely influenced by employment in both the short and long run. In fact, the employment variance accounting for output variance is larger than the output variance itself, which tends to indicate that employment decline can affect output adversely through deceleration in demand. The policy implication of this finding is that the strengthening of the demand linkage can make economic growth sustainable in the long run.

It is noted that the core inflation has declined noticeably in the latest sub-period (2012–2023) compared to the earlier phases. Price management is an important aspect of growth and stability in the economy, which seems to have been achieved in spite of the pandemic shock and other disturbances.

The fact that price variance accounts for a nominal proportion of the output variance may suggest that price incentives as a policy strategy may not be highly effective in augmenting production. Only mild inflationary tendencies may work as an inducement to the producers. Hence, for economic growth to pick up, the non-price factors must be looked into. Employment growth, for example, is seen to have a major impact on output via demand acceleration. Further, removal of the bottleneck in the production process would be important in maintaining a balance between demand and supply. Since output expansion is unlikely to reduce inflation once prices have gone up, it is pertinent that the strategy of price incentive is used carefully. At the global level, it also urged that the central banks should calibrate monetary policy to preserve price stability (IMF, 2025a).

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## Appendix

### VAR Diagnostic Tests

#### Normality test

Component	Jarque–Bera	df	Prob
1	2.701	2	.259
2	0.996	2	.608
3	6.316	2	.425
4	0.447	2	.789
Joint	10.486	8	.232

## Residuals serial correlation LM test

Lag	LRE*Stat	df	Prob	RaoF-stat	df
1	17.378	16	0.361	1.105	(16, 80.1)
2	39.174	32	0.179	1.275	(32, 82.7)

## Heteroskedasticity test (includes cross terms)

$\chi^2$	df	Prob
37.1804	360	0.305

## AR inverse roots

Root	Modulus
1.028	1.028
0.889 - 0.142i	0.901
0.889 + 0.142i	0.901
0.764	0.764
0.545	0.545
-0.087 - 0.911i	0.126
-0.087 + 0.911i	0.126
0.117	0.117

**Impulse Response Function**

Effect of Cholesky one SD.  $\Delta \ln$  Price Innovation (i.e., response of different variables to price shock)

Period	$\Delta \ln$ Price	$\Delta \ln$ Sensex	$\Delta \ln$ Employment	$\Delta \ln$ Realgva
1	0.027 (0.003)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
2	0.011 (0.006)	0.001 (0.005)	0.018 (0.005)	-0.001 (0.004)
3	0.006 (0.006)	0.004 (0.006)	0.0137 (0.006)	0.002 (0.005)
4	0.004 (0.006)	0.001 (0.004)	-0.001 (0.006)	-0.002 (0.004)
5	0.003 (0.005)	8.52E-05 (0.002)	-0.001 (0.006)	-0.001 (0.003)
6	0.002 (0.003)	-0.000 (0.002)	-6.78E-05 (0.005)	0.001 (0.002)
7	0.002 (0.002)	-0.000 (0.001)	-0.001 (0.003)	0.001 (0.001)
8	0.001 (0.002)	6.46E-05 (0.001)	-0.000 (0.001)	0.000 (0.001)
9	0.000 (0.001)	-2.24E-05 (0.000)	-2.84E-05 (0.001)	0.000 (0.001)
10	1.07E-05 (0.001)	-5.86E-05 (0.000)	-0.000 (0.001)	0.000 (0.000)

Effect of Cholesky one SD.  $\Delta \ln$  Sensex Innovation (i.e., response of different variables to share market shock)

Period	$\Delta \ln$ Price	$\Delta \ln$ Sensex	$\Delta \ln$ Employment	$\Delta \ln$ Realgva
1	0.124 (0.043)	0.255 (0.028)	0.000 (0.000)	0.000 (0.000)
2	-0.072 (0.056)	-0.054 (0.047)	0.006 (0.049)	-0.024 (0.043)
3	0.028 (0.050)	-0.045 (0.048)	0.053 (0.048)	0.038 (0.042)
4	0.029 (0.031)	0.020 (0.032)	0.012 (0.045)	-0.016 (0.025)
5	-0.004 (0.020)	0.020 (0.024)	0.023 (0.036)	-0.011 (0.019)
6	-0.001 (0.015)	-0.004 (0.016)	0.002 (0.021)	0.002 (0.012)
7	0.008 (0.011)	-0.005 (0.009)	-0.0107 (0.016)	-0.002 (0.008)
8	0.005 (0.007)	0.001 (0.006)	0.000 (0.010)	0.000 (0.006)
9	0.001 (0.005)	0.001 (0.004)	0.001 (0.007)	0.002 (0.004)
10	0.001 (0.003)	-0.001 (0.003)	-0.002 (0.004)	0.0001 (0.001)

Effect of Cholesky one SD.  $\Delta \ln$  Employment Innovation (i.e., response of different variables to employment shock)

Period	$\Delta \ln$ Price	$\Delta \ln$ Sensex	$\Delta \ln$ Employment	$\Delta \ln$ Realgva
1	-0.004 (0.003)	0.002 (0.003)	0.002 (0.003)	0.000 (0.000)
2	-0.003 (0.004)	0.002 (0.004)	0.002 (0.003)	-0.001 (0.003)
3	-0.001 (0.004)	0.001 (0.004)	0.001 (0.003)	-0.004 (0.004)
4	0.000 (0.003)	0.001 (0.002)	0.001 (0.001)	-0.002 (0.002)
5	0.001 (0.003)	-0.000 (0.001)	-0.000 (0.001)	-0.000 (0.001)
6	0.001 (0.001)	-0.000 (0.001)	-0.000 (0.001)	-3.29E-05 (0.000)
7	0.001 (0.001)	-1.66E-05 (0.000)	-1.66E-05 (0.000)	0.000 (0.000)
8	0.000 (0.001)	-6.27E-05 (0.000)	-6.27E-05 (0.000)	0.000 (0.001)
9	0.000 (0.001)	-6.16E-05 (0.000)	-6.16E-05 (0.000)	0.000 (0.000)
10	1.92E-05 (0.000)	-2.57E-06 (0.000)	-2.57E-06 (0.000)	8.44E-05 (0.000)

Effect of Cholesky one SD.  $\Delta \ln$  Realgva Innovation (i.e., response of different variables to value-added shock)

Period	$\Delta \ln$ Price	$\Delta \ln$ Sensex	$\Delta \ln$ Employment	$\Delta \ln$ Realgva
1	0.003 (0.003)	0.002 (0.002)	-0.001 (0.002)	0.017 (0.001)
2	0.001 (0.004)	-0.004 (0.004)	-0.019 (0.004)	-0.001 (0.003)
3	-0.002 (0.005)	-186E-05 (0.004)	0.009 (0.004)	0.002 (0.004)
4	-0.003 (0.004)	0.000 (0.003)	0.004 (0.004)	0.007 (0.003)
5	-0.002 (0.002)	5.78E-05 (0.002)	-0.001 (0.003)	-0.001 (0.001)
6	-0.001 (0.001)	0.000 (0.001)	0.001 (0.002)	-0.001 (0.001)
7	-0.001 (0.001)	7.71E-05 (0.000)	0.001 (0.00)	-0.000 (0.001)
8	-0.000 (0.000)	-5.45E-05 (0.001)	-3.94E-05 (0.001)	-0.000 (0.001)
9	7.14E-05 (0.001)	4.94E-05 (0.000)	-3.08E-05 (0.001)	-0.000 (0.000)
10	7.01E-05 (0.000)	1.18E-05 (0.000)	7.17E-05 (0.002)	1.23E-05 (0.000)

### Regression of price growth on its lagged values:

$$\Delta \ln \text{ Price} = 0.032924 + 0.491404 \Delta \ln \text{ Price} (-1) - 0.075476 \Delta \ln \text{ Price} (-2)$$

$$(2.87)^* (2.79)^* (-0.43)$$

$t$  ratios in parentheses: \*Significant at the 5% level. AIC = -4.01.

# Revisiting Sovereignty in the Age of Cyber Warfare: Legal, Ethical and Geopolitical Dimensions

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## Abstract

The frequency and sophistication of cyber warfare pose novel challenges to conventional ideas of sovereignty and international law. As state and non-state actors leverage cyber capabilities to launch attacks, the legal frameworks that have long regulated the use of force and state sovereignty are being challenged. This article discusses the changing dynamic between sovereignty and international law in the context of cyber warfare, highlighting the necessity for a reimagined approach to meet the fast-paced technological developments. Based on international case studies, including the 2007 cyberattack on Estonia and the current cyber tensions between the USA and Russia, this research investigates how states are attempting to navigate the intricacies of cyber sovereignty in a connected digital world. It also looks at the lacunae in current international law and the issues of attribution, proportionality and protection of civilian infrastructure. The article also identifies national legal systems and the need for international collaboration to construct a harmonious legal structure to combat cyber threats. Considering the accelerated pace of technological advancements, the article makes the case for creating international treaties and norms that give states responsibility and accountability in cyber warfare clearly. Ethical aspects involving human rights, digital infrastructure and privacy are also touched upon. Finally, this will advocate for drastic reforms in interdisciplinary reflections on law, ethics and global power to guarantee that sovereignty can be properly protected against advanced cyber threats.

## Keywords

Cyber warfare, sovereignty, international law, cyber security, attribution, digital infrastructure, international cooperation, global power

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## **Introduction**

The idea of sovereignty has historically been defined as the supreme power of a state over its own territorial boundaries, untainted by interference from outside entities. In the past, sovereignty was based on the physical, geographical sphere where states had exclusive jurisdiction over their land, their people and their resources. But since the 21st century, the emergence of digital technologies and cyber warfare has threatened the very essence of this old concept, compelling international law to deal with new, transborder aspects of conflict.

However, cyber warfare, defined by the application of digital attacks against critical systems with the aim of disrupting, damaging or obtaining unauthorized access to them, has become a central threat to national security. As opposed to traditional warfare, which is fought on the tangible domain of borders, cyber warfare exists in the intangible realm of cyberspace a networked, virtual geography without borders. The simultaneous attack, aimed at the country's cyber infrastructure, caused widespread disruptions in government services, banking and media. This event proved that cyber warfare has the capability to disable a country's economy and administration without ever entering its territory. Subsequent years have seen other nations, such as the USA, Russia and China, pursuing similar actions, proving further the global reach of cyber warfare (Schmitt, 2013). Yet, despite the growing prevalence of cyber threats, international legal norms continue to be shaped by an outdated understanding of sovereignty that prioritizes physical borders and territorial integrity.

Furthermore, ongoing international law, which includes treaties such as the United Nations Charter and the Geneva Conventions, has struggled to provide clear guidelines for regulating cyber warfare. Although the UN Charter codifies the doctrine of sovereignty and non-intervention in the internal affairs of a state, these provisions were drafted when warfare was characterized by physical, armed conflicts. The Geneva Conventions, which afford critical protections during armed conflict, also do not capture the complexities of cyber warfare, especially the issues of attribution, responsibility and the protection of civilians in the virtual environment (Schmitt, 2013). Therefore, the need to redefine sovereignty within the context of cyber warfare is urgent, with international law following the pace of this fast-developing threat. Through the study of the sophistication of cyberattacks, the problems of attribution and the potential of international cooperation in countering cyber threats, this article shall contend that a reevaluation of sovereignty and new international legal standards are needed at once. These new structures would not only preserve state sovereignty in the information era but also keep countries in a better position to counter the shifting threats of cyber warfare.

### *The Evolution of Sovereignty in the Digital Age*

The conventional understanding of sovereignty has been radically changed in the last century, especially with the advent of globalization, technological advancement and the growing influence of digital platforms in domestic and global politics. Sovereignty, which was originally understood in physical and territorial terms, is now challenged by new forces as cyberspace becomes a theatre of power,

influence and conflict. Traditionally, sovereignty was understood as an absolute, undivided right of states over their territory and population to the exclusion of outside interference. Based on the Treaty of Westphalia (1648), which created the contemporary international system of statehood, sovereignty has been a pillar in international relations and law (Osiander, 2001). The Westphalian framework established well-defined borders, with stress laid upon territorial integrity and non-interference in internal matters. In this system, states were taken to be the main actors within the international realm, capable of enforcing laws, upholding order and protecting themselves within their territorial boundaries.

Furthermore, as the process of globalization gained momentum towards the end of the 20th and early 21st centuries, the concept of sovereignty also started evolving. The globalization of trade, communication and migration created hazy boundaries which made it almost impossible to retain complete control over one's state. Meanwhile, technological advancements like the emergence of the internet and digital communication technology introduced new venues for power and influence, subjecting states to dilemmas in exercising sovereignty over cyberspace. Cyberspace has radically reshaped the topology of sovereignty by making the world borderless and connected. The introduction of the internet has facilitated the quick dissemination of information, business and ideas but, in the process, has opened new vulnerabilities. Cyberattacks can attack infrastructure, disrupt political processes and even influence public opinion, all without physical presence. This has resulted in a point where state sovereignty is no longer limited to the physical space of territory but must extend to the digital space as well, giving rise to a complicated, multidimensional landscape for international law (Kello, 2017).

In addition, this article categorized an interdisciplinary approach of how cyber warfare is reshaping the meaning of sovereignty in today's interconnected world. Its originality lies in coordinating three distinct yet interrelated domains; therefore, it can be understood as the notions of law, ethics and international politics to move beyond a purely legal or technological reading of the issue. It adopts a qualitative and analytical approach, drawing from international legal instruments such as the UN Charter and the Tallinn Manual, as well as ethical theories of responsibility and justice. It also integrates perspectives from global power relations to understand how states negotiate control and accountability in cyberspace. However, rather than relying on statistical data, the research uses doctrinal and comparative analysis to interpret principles, case studies and moral implications, aiming to provide a holistic and human-centred understanding of sovereignty in the digital age.

## Literature Review

The new and developing field of cyber warfare has posed essential questions regarding the interface between sovereignty and international law. The expanding use of cyber weapons in statecraft, war and terrorism has highlighted essential gaps in the prevailing international legal structures that have hitherto regulated conventional warfare. This review of the literature examines several scholarly views on the implications of cyber warfare for sovereignty and international law,

examining the intricacies and challenges that have arisen as the digital world becomes a stage for geopolitical rivalry.

*The Challenge to Traditional Sovereignty* has been the foundation of international law, based on the Westphalian system that prioritizes territorial integrity and the sanctity of national borders (Keohane, 2002). But the advent of cyber warfare contradicts this conventional perception since cyberspace has no borders. According to scholars, cyber threats, by definition, erode the territorial components of sovereignty since they cross national borders and frequently come from outside jurisdictions, thus making them hard to assign (Krasner, 2001). This transnational extension of cyberattacks makes sovereignty a critical concept that needs to be reassessed in an environment where action and reaction can take place simultaneously in the world. As Keohane (2002) posits, the states need to redefine their definitions of sovereignty to accommodate the realities of the virtual world, where internal and external threats become intertwined. The *Tallinn Manual* is perhaps the most influential academic effort to transpose international law to cyber warfare. It offers a critical examination of the application of established legal principles, including the law of armed conflict, to cyber operations (Schmitt, 2013). The manual has played a critical role in structuring the discourse on cyber war and sovereignty in that it has sought to address how the principles of war apply to the digital world. Yet, the Tallinn Manual is not binding in law, and its application is contentious. Its critics say that while it is helpful to have guidelines, it does not go as far as providing tangible solutions to the urgent issues of cyber warfare. Kello (2017) contends that as useful as the manual is, however, the fact that it is founded on pre-existing models means that it does not adequately deal with one of the most special challenges that cyber warfare presents, including the problem of attributing effects and the constantly changing nature of cyber threats. The doctrine of proportionality, which is at the heart of international humanitarian law, is key to controlling the application of force in both traditional warfare and cyber warfare. As it applies in the case of cyber warfare, proportionality makes it mandatory that a response to a cyberattack should be as the scale and extent of the initial attack (Schmitt, 2013). Yet, since numerous cyberattacks go unnoticed and might not be promptly felt, following this principle would become extremely daunting. Experts reason that identifying responses proportionate to cyberattacks implies reevaluating the measurement of damage and influence in cyberspace. Tikk (2015) implies that proportionality needs to be understood more subtly, in terms of its direct and indirect effects, including lasting economic or political implications that will not necessarily be immediately apparent.

*The Imperative of Multilateral Legal Responses:* As cyberspace is transnational, it is increasingly felt that unilateral legal measures for cyber warfare may not be adequate to meet the international nature of cyber threats. Scholars call for a multilateral solution to cyber warfare, in which global cyber norms are shaped and enforced through international cooperation (Mueller, 2010). Since cyberspace transcends any single state, collective action by states must be taken to prevent the escalation of cyber conflicts and create stability in the virtual space. Held and McGrew (2007) stress that international institutions, including the United Nations,

must take a leading role in governing cyber activities so that states come together to establish binding agreements on cyber defence, offence and the conduct of cyber warfare. The *Future of Cyber Sovereignty and International Law*: As the international community continues to come to terms with the reality of cyber warfare, there is also a developing understanding that the very notion of sovereignty needs to change. There has been the development of the idea of 'cyber sovereignty', where countries define control over their virtual spaces, but this must be reconciled with global cooperation (Krasner, 2001). The dilemma is how to balance states' urge to manage their virtual borders and the necessity for joint action in confronting cyber threats that tend to transcend national borders.

## Global Power and Cyber Warfare

Traditional international law, based on state sovereignty and territorial integrity, has been gradually adapting to increased global complexities in challenges, particularly in the wake of sophisticated modern technological warfare. Cyber warfare has been a highly challenging issue for international legal processes since it has no conventional description or definition for warfare and associated legal implications. Unlike classical forms of war, cyber war frequently employs non-kinetic techniques that may disrupt essential infrastructure, inflict economic harm and impede political structures without territorial borders being crossed (Schmitt, 2013). The new form of conflict has raised serious issues regarding the application of existing international law to cyber operations, particularly about sovereignty, responsibility of states and the use of force.

Sovereignty, which is one of the fundamental principles of international law, holds that states possess absolute authority in their own territory without interference from outside. Cyberattacks undermine this principle since they can be launched across borders without the direct intervention of state actors. Cyberattacks may come from non-state actors or state-sponsored actors, making it difficult to define accountability and enforcing sovereignty (Tikk, 2010). This change in conflict has compelled a reconsideration of the classical definition of sovereignty in international law. Traditional sovereignty implies authority over a defined space, yet cyber warfare poses the question as to whether states can be considered to have sovereignty over their digital networks (Shackelford, 2014). Others feel that new definitions and rules must be developed to recognize the intangible character of cyber operations that do not easily fit into the existing international legal order (Klabbers, 2013). However, the use of the ban on the use of force, enshrined under Article 2(4) of the UN Charter, is yet another area of disagreement. In conventional war, the employment of force is evident, whereby physical violence occurs between military units. This uncertainty has raised questions about whether cyberattacks should be regarded as a use of force in international law and, if they can be, what requirements need to be fulfilled so that an action of cyber warfare would activate self-defence (Schmitt, 2017).

*The Tallinn Manual*, which is a code of guidelines on cyber warfare law established by NATO, gives some indication on this matter, stating that a cyberattack

will be an act of force if it results in 'significant harm' to a state, including damage to essential infrastructure or disruption of critical services (Schmitt, 2013). Still, the guide also emphasizes the necessity of a case-by-case approach since the benchmark for deciding if a cyberattack would amount to a use of force is uncertain and extremely dependent on context (Shackelford, 2017). State responsibility is yet another principal matter in cyber warfare. Conventional concepts of state responsibility in international law centre around the activities of state agents, but the use of anonymity in cyber operations makes this paradigmatic approach challenging. In most instances, it might be challenging to point to a state or actor responsible for a cyberattack because the actors may have used proxies, false flags or other methods to obscure the origin of the attack (Nakashima, 2018). This transparency problem presents immense challenges in identifying at what point a state can be held responsible for cyberattacks, particularly in cases where non-state actors, like hackers or terrorist organizations, are implicated. But these efforts are usually not globally coordinated, and there arises a patchwork approach to cybersecurity and law. Whereas international law establishes a basic framework for the control of conventional modes of warfare, cyber warfare raises new issues and challenges. Sovereignty, the meaning of the use of force, state responsibility and international cooperation all need to be reassessed in the wake of the emergence of cyber operations.

### *Global Case Studies on Cyber Warfare*

Cyber warfare has become a major geopolitical instrument, with nations using cyber operations to gain strategic benefits. Analysing significant cyber wars assists in comprehending how international law, sovereignty and security paradigms are being challenged. The following case studies present major incidents that have influenced global debate on cyber warfare and its legal aspects. These international case studies illustrate the critical necessity for global legal mechanisms to regulate cyber war.

#### **The Estonia Cyber Attacks (2007): A Wake-up Call for Cybersecurity**

In 2007, Estonia was the first country to face a massive cyberattack that disabled its virtual infrastructure. After a political row regarding the removal of a Second World War memorial, Estonian government sites, banks and media were bombarded with Distributed Denial-of-Service (DDoS) attacks. While the attacks were generally ascribed to Russian interests, no definitive evidence of state actions existed (Ottis, 2008). The Estonian government replied by firming up its cybersecurity policy and calling for global cooperation. NATO then went ahead to create the Cooperative Cyber Defence Centre of Excellence in Tallinn, reflecting the growing seriousness of cyber warfare as a security threat (Tikk, 2010). This incident was criticized as to whether or not such acts qualify as acts of war according to international law since no actual physical force was employed.

### **Stuxnet (2010): Cyber Weapons in Military Operations**

Stuxnet, a highly advanced malware that was found in 2010, was the first known instance of a cyber weapon inflicting physical damage. It was supposedly created by the USA and Israel and was aimed at Iran's nuclear enrichment plants, crippling close to 1,000 centrifuges at the Natanz plant (Zetter, 2014). The cyberattack brought with it crucial legal and ethical concerns: Is cyber sabotage against key infrastructure an act of war? How does international law control cyber weapons use? Iran condemned the attack as a breach of its sovereignty, yet since there were no clear international legal norms, no official charges were made against the suspected states. Stuxnet established a precedent for state-sponsored cyber activities as an instrument of foreign policy (Lindsay, 2015).

### **China–India Cyber Conflicts: Espionage and Cyber Sovereignty**

India and China have experienced increased cyber tensions, especially following military border skirmishes. Chinese Advanced Persistent Threat (APT) actors have been associated with cyber espionage against Indian government institutions, defence agencies and infrastructure (Singh, 2021). One of the most important features of China's cyber policy is the 'Great Firewall', which strictly controls internet access and advances cyber sovereignty, with the state exerting control over online spaces. India has an open internet policy but has countered cyber threats by blocking Chinese apps and increasing cybersecurity efforts (Chaudhary, 2020). This tension serves to exacerbate the intersection of national sovereignty and cybersecurity, illustrating how norms in cybersecurity vary across democratic and authoritarian regimes. The absence of global agreement on cybersecurity governance makes diplomatic attempts at controlling such tensions challenging (Weber, 2022).

## **Proposals for Redefining Sovereignty and International Law in Cyber Warfare**

The development of cyber warfare has highlighted the insufficiency of current international legal regimes in responding to state sovereignty, responsibility and conflict resolution. Conventional legal tools like the UN Charter (1945) and the Geneva Conventions mainly regulate physical warfare and territorial integrity but do not fully consider the virtual battlefields where contemporary conflicts increasingly take place. Considering the borderless environment of cyberspace, states are still in a legal limbo in which cyber aggressions are consistently answered with uneven measures, and attribution continues to be an important problem. This calls for a serious re-examination of sovereignty in cyberspace and the establishment

of clear-cut legal frameworks to regulate state actions in this environment. One of the greatest anxieties about redefining sovereignty in cyberspace is the development of cyber sovereignty norms in international law. Sovereignty in the digital world is still contentious, with some calling for total dominance over digital infrastructure and others for an open and globally connected internet. China and Russia have always advocated for a cyber sovereignty model that enables states to have complete control over their internal internet, limiting outside influences in the interest of national security. This model, however, is directly opposed to the principle of Western democracies focusing on internet freedom, information flow across borders and multilateral management of cyberspace. Closing this ideological gap is required to build a feasible international legal system. A definition of what represents a breach in cyber sovereignty is required, which should be spelled out clearly through law, specifically in instances involving election interference, cyber espionage or state-sanctioned cyberattacks. There are also insufficient answers to queries on how such threats should legally be responded to by states and whether cyber war warrants military responses. Tools such as the Tallinn Manual 2.0 offer non-binding advice, but what is needed most urgently now are binding international treaties that create accountability and state responsibility in cyberspace.

Whereas one of the key components of cyber sovereignty is international cooperation, current initiatives are still very much fragmented and have no enforcement power. The United Nations Group of Governmental Experts (UN GGE) and instruments such as the Paris Call for Trust and Security in Cyberspace emphasize cooperation but, being non-binding, have state compliance neither uniform nor compulsory. In the absence of binding measures, cyber conflicts are substantially unregulated and open to escalation without definite penalties. To answer this, the establishment of an international cyber tribunal could offer a stage for states to settle cyber grievances through law instead of reprisal. Intelligence-sharing treaties between states with allied relationships could enhance cyber defences against state-aided attacks. Regional cybersecurity architectures, like that of NATO's Cyber Defence Pledge, could be used as an example for extended multilateral treaties to secure collective security within cyberspace. Creating a *Cyber Sovereignty Accord* within the United Nations, establishing norms and proportional reactions to cyberattacks, would be a crucial step towards global stability.

Perhaps the most legally unclear element of cyber warfare is the categorization of cyberattacks in international law. Today, cyberattacks are not globally accepted as acts of war unless they cause extensive physical damage or loss of life. This legal classification gap provides a loophole through which states can practice cyber aggression without fear of conventional military counterattack. It is important to create a clear legal framework that distinguishes between cyber espionage, cyber sabotage and large-scale cyber warfare in order to establish appropriate responses. Cyber espionage, which is the collection of intelligence by unauthorized digital access, is generally handled as a diplomatic transgression and not an act of war. Cyber sabotage, for example, against financial institutions or government databases, is a more serious violation of sovereignty and must be considered an act of aggression. Large-scale cyber warfare, where attacks disable national

infrastructure or threaten civilian lives, must be explicitly defined under Article 51 of the UN Charter as an armed attack, thus warranting state self-defence actions. By defining these legal thresholds, the states can create proportional responses that avoid unnecessary escalation and provide accountability for cyber aggression.

Another essential issue is the absence of an all-encompassing international treaty that regulates cyber warfare. Although the Budapest Convention on Cybercrime deals with cybercriminal behaviour, it does not adequately regulate state-sponsored cyber action. In contrast to nuclear and chemical warfare, which are controlled by stringent treaties like the Nuclear Non-Proliferation Treaty, there is yet no global treaty that governs cyber warfare. Establishing a Global Cybersecurity Treaty within the United Nations would create much-needed legal ground for states to manoeuvre in cyber conflict. The treaty should consist of agreements on cyber arms control, limiting the employment of offensive cyber weapons against civilian infrastructure like hospitals, power grids and financial systems. It should also have a cyber non-aggression agreement prohibiting attacks on digital infrastructure that is key to humanitarian activities. For enforceability, a body for monitoring cybersecurity under the UN could exist to probe cyber breaches and sanction offenders. Without such legally enforceable agreements, cyber warfare will remain in an arena where attackers operate with impunity, further destabilizing international security. One of the most contentious areas in cyber warfare law is the issue of countermeasures and deterrence. Numerous states have started taking active cyber defence measures in which they respond to cyberattacks through offensive cyber action. But international law today does not clarify the legality of such countermeasures, which makes state responses uncertain. The lack of regulation has brought about an environment where powerful states justify retaliatory cyber measures under the mantle of self-defence, which increases the threat of uncontrolled escalation. Existing legal doctrines are inadequate in confronting the phenomenon of cyber war, with such doctrines lacking full accountability, responsibility of states and response models. A redesigned legal framework addressing cyber sovereignty conventions, enhancing multilateral cooperation, setting transparent lines for classifying cyber warfare, creating robust cyber security treaties and controlling countermoves is essential to ensure cyberspace stability. Without an active strategy of legal reform, the international community can create a vacuum that would allow cyber conflicts to develop into a normless space where non-state and state actors act without limit. As the following section discusses, ethical and human rights issues in cyber warfare further complicate the discourse on sovereignty, especially concerning privacy, digital freedom and humanitarian law.

## **Ethical and Human Rights Implications in Cyber Warfare**

The potential for cyber warfare has brought far-reaching ethical and human rights issues, especially in relation to privacy, online freedom and the humanitarian effect of cyber warfare. In contrast to traditional warfare, where the law of armed

conflict governs actions by states and safeguards civilians, cyber warfare exists in a legal and ethical area where the effect on human rights tends to be disregarded. The increasing trend of using cyber operations for the purpose of spying, monitoring and cyberattacks has serious issues related to infringements of universal rights such as the right to privacy, the freedom of speech and information access. Cyber warfare as an instrument of national power is crucial in analysing the ethical dimensions, and it requires the formulation of a legal norm that protects the rights of humanity in cyberspace. One of the most urgent ethical issues in cyber war is the wholesale invasion of privacy by state-led surveillance and cyber espionage. Governments across the globe have increasingly used cyber means to intercept communications, monitor online activities and harvest personal information in the name of national security. The emergence of mass surveillance initiatives, including the PRISM programme by the US National Security Agency (Greenwald, 2013), has brought to light the degree to which intelligence agencies of states abuse online platforms to maintain secret surveillance, sometimes in the absence of judicial review. Although these are justified by states as required for national security and counterterror measures, they pose severe ethical concerns over the reconciliation of security and civil liberties. Both the European Court of Human Rights and the United Nations have continued to assert time and again that mass surveillance campaigns are against Article 17 right to privacy as provided in the International Covenant on Civil and Political Rights. Ethically, therefore, the issue is whether the state can resort to mass surveillance without compromising the values of a democratic society as well as human rights. There is an increasing need for global legal frameworks imposing limits on state surveillance, ensuring that intelligence gathering respects principles of necessity and proportionality.

Apart from issues of privacy, cyber warfare is also extremely consequential for freedom of expression and information access. Authoritarian states have increasingly used cyber technologies to manage digital spaces, censor online material and repress political opposition. China's 'Great Firewall' is a classic case of how governments control cyberspace to limit access to international information and track citizens' online activities (Deibert, 2018). Likewise, in times of political unrest, governments in nations like Iran and Myanmar have shut down the internet to suppress opposition movements, essentially curtailing citizens' capacity to communicate and mobilize protests. These state-imposed restrictions directly violate Article 19 of the Universal Declaration of Human Rights, which promises freedom of expression and the right to receive information. The ethical dilemma is how to define the degree to which states can control digital spaces without violating basic freedoms. The global community needs to respond to this problem by implementing laws that limit the misapplication of cyber technologies for political persecution while taking into consideration the necessity for cybersecurity. Cyber warfare also inflicts enormous threats upon critical infrastructure, which in turn threatens civilian populations. In contrast to conventional military attacks, cyberattacks against vital services such as healthcare systems, power infrastructure and financial institutions have indirect but crippling humanitarian consequences. Cyber warfare, however, obfuscates the line between civilian and military targets, such that these legal protections cannot effectively be applied. To

counteract this, international legal frameworks must provide clear directives that ban cyber operations against civilian infrastructure and entail accountability measures for violations.

Furthermore, the psychological and social effects of cyber warfare pose significant ethical considerations. Unlike traditional warfare, where damage is palpable and immediate, the impact of cyberattacks is intangible yet just as disruptive. Cyber warfare has the potential to influence public opinion, disseminate fake news and destroy democratic institutions' trust. The 2016 US Presidential Election meddling, which was blamed on Russian cyber activities, illustrated how campaigns of disinformation have the potential to demote public confidence in electoral processes and democratic leadership (Benkler et al., 2018). Likewise, deepfake technology and AI-powered propaganda campaigns have heightened the anxiety regarding the moral implications of cyber manipulation. The test for international law is how to devise tools that fight disinformation without suppressing freedom of speech and political discourse. Governments and tech companies must work together to enact solutions that boost digital literacy, fact-checking programmes and protections against algorithmic manipulation. The human rights and ethical concerns of cyber warfare emphasize the necessity to establish an international legal framework that balances security needs with inherent freedoms. States have exploited cyber technologies in ways that endanger individual rights and democratic values due to the lack of distinct legal norms. In the future, the global community has to create binding international agreements governing state surveillance, defending digital rights, protecting civilian infrastructure and establishing ethical norms for cyber activities. Mechanisms for accountability, such as international courts and human rights monitoring institutions, must also be fortified to deal with breaches of cyber ethics. As cyber war develops, the legal and ethical arguments around it will determine the future of international security and human rights in the digital era.

## Recommendations and Future Directions

As cyber war continues to evolve, it becomes increasingly clear that the current structures of international law and conventional concepts of sovereignty are insufficient in responding to the challenges brought about by cyber wars. The speedy development of technology, the emerging prominence of state-sponsored cyber actions and the increasingly prominent position of non-state actors within cyber warfare have created a need to revisit the definition of sovereignty in the digital age. In the future, the global community needs to introduce sound legal frameworks, improve international governance institutions and create new norms that promote stability, security and the safeguarding of digital rights in cyberspace. One of the most urgent concerns in redefining sovereignty in the cyber environment is establishing legal norms that regulate state behaviour in cyber warfare. *The Tallinn Manual*, a non-binding legal document formulated by an international team of experts, offers a key foundation for the application of international humanitarian law to cyber operations (Schmitt, 2017). But the manual is very

limited in that it is not legally binding and does not enjoy universal acceptance among states. Whereas some nations believe that current international law is adequate to govern cyber warfare, others highlight the importance of new treaties specifically addressing cyber wars (Hathaway et al., 2012). The challenge is to find international agreement on legal principles governing cyber aggression, holding states accountable for cyberattacks and the conditions under which cyber operations are an act of war. In the absence of clear legal guidance, states will continue to use cyber warfare as a strategic means with impunity. The future of cyber governance hinges on whether the states can resolve these differences and agree on a cooperative system balancing national sovereignty and global cyber stability needs. A solution is the creation of a specialist international cyber security agency, comparable to the International Atomic Energy Agency, which observes cyber threats, settles disputes and ensures observance of norms agreed upon. The future of sovereignty in the cyber realm also poses challenges about the coexistence of national security and virtual liberties. The growing militarization of the cyber domain has contributed to the proliferation of state surveillance initiatives, censorship of the internet and the enactment of cybersecurity legislation that frequently erodes the rights of individuals (Deibert, 2020). One of the biggest challenges to defining sovereignty in cyberspace is the problem of attribution the challenge of attributing perpetrators of cyberattacks with certainty. In contrast to conventional warfare, where the origin of an attack tends to be apparent, cyber operations may be carried out anonymously, and it may not be easy to hold aggressors responsible (Rid & Buchanan, 2015). This attributability sets a risky precedent, as states and non-states can carry out cyberattacks with little chance of retaliation. Future legal systems should include mechanisms of cyber attribution, including international collaboration on digital forensics, standardized attribution protocols and the establishment of impartial investigative organizations that evaluate cyber incidents (Lindsay, 2020). Enhanced attribution capacities will be necessary in preventing cyber aggression and making states accountable for hostile cyber operations. Besides legal structures, future debates on sovereignty in cyberspace need to consider the role of private corporations in determining digital governance. The establishment of international regulatory regimes that make corporations answerable for protecting data, disinformation and cybersecurity incidents will be imperative in having a fair and secure digital world. In the end, the destiny of sovereignty and international law in cyberspace will be in the hands of states' willingness to cooperate and evolve according to the realities of the digital era. Although national security interests and geopolitical competitions tend to hold back progress, the growing gravity of cyber threats calls for immediate action. Lack of well-defined legal norms has brought about a space in which states, non-state actors and private enterprises exercise limited responsibility, resulting in increased instability in the cyber sphere. In the future, the international community must take precedence to ensure the crafting of legally binding accords governing cyber warfare, securing digital rights and establishing a system for cyber attribution and dispute resolution. The digital age has fundamentally altered the concept of sovereignty and international law must evolve accordingly to ensure security, stability and justice in the cyber domain.

### *Recommendations for the Scope of Future*

Technological development proceeds at an unrivalled pace, and along with it, new challenges face the conventional state of sovereignty and international law. The advent of technologies such as artificial intelligence (AI), internet of things (IoT) and 5G networks has had a critical influence on cyber warfare and on the concept of sovereignty in the cyber world. These technologies have blurred state and non-state actor distinctions in cyber warfare, and it has become challenging for conventional legal norms to catch up. For example, AI and machine learning technologies can be applied to automate cyberattacks, thus accelerating the pace, scope and complexity of these operations. These technologies test the concept of 'attribution' because they complicate tracing the origin of an attack. When the infrastructure of a state is hit by an AI-powered cyberattack, it is challenging to attribute the attack to a given nation-state, making it difficult to apply conventional international law principles, including the law of armed conflict and the principles of sovereignty. Additionally, the mass production of IoT devices has raised alarms regarding data privacy and digital sovereignty. The connectivity of devices across personal, public and military domains has made them as likely targets for cyberattacks. The issues necessitate the creation of international standards and agreements to mitigate the application of such technologies under the umbrella of cyber warfare and ensure that states have control over their critical infrastructure. Therefore, the accelerated technological progress demands that sovereignty in the modern era be reassessed, challenging the international community to formulate new paradigms that can respond to the risks and challenges posed by such innovations. Legal academics and cybersecurity specialists must collaborate in offering recommendations that ensure sovereignty is protected as well as enhance international cooperation in cyberspace.

### *National Responses and Legal Frameworks*

As a reaction to the increasing danger of cyber warfare, states have begun to establish their own national legal frameworks for dealing with these issues, even though the success of these efforts is highly varied. For example, the USA has developed an all-encompassing cybersecurity framework through the Cybersecurity Act of 2015 and its amendments, which seek to safeguard critical national infrastructure, enable information sharing between the private sector and government and upgrade the country's cyber defence. Yet, while these measures are strong at a national level, they do not always take into account the global nature of cyber warfare and international cooperation. In the same way, China has adopted a strong approach to cybersecurity with its Cybersecurity Law, which came into effect in 2017, to defend its cyberspace sovereignty. Conversely, European nations have taken a more collaborative stance through measures such as the *General Data Protection Regulation (GDPR)*, which regulates data protection and privacy in the European Union. Although the *GDPR* is more concerned with data protection than cyber warfare, it demonstrates Europe's dedication to promoting digital sovereignty while safeguarding

individual rights and encouraging international cooperation on cybersecurity matters. The variation in national approaches underscores the difficulty of reconciling sovereignty with the necessity of international cooperation in confronting cyber threats. While each nation's legal system addresses its own national security issues, there is minimal consistency in the treatment of cyber warfare under international law. This fragmentation requires the development of more integrated international legal frameworks that not only harmonize domestic laws but also foster increased cooperation in preventing, countering and responding to cyberattacks. Additionally, certain countries have moved to strengthen cyber defence by setting up national cyber agencies, including the UK's National Cyber Security Centre and India's Computer Emergency Response Team (CERT-In). These agencies are of critical importance in tracking and dealing with cyber threats, but their usefulness is based on cross-border cooperation since cyber threats are transnational by their very nature. Thus, although national frameworks are important, they need to be integrated with international law so that there can be a more coordinated and consolidated response to cyber warfare. In summary, national legal structures are an essential component of tackling cyber threats but cannot be stand-alone.

## **Limitations**

This research analysis is primarily conceptual and qualitative in nature. It does not include quantitative data, state-level policy surveys or cybersecurity datasets. The focus has been on interpreting existing legal and ethical frameworks rather than measuring their practical outcomes. Future research could build upon this work by integrating empirical evidence, cross-regional comparisons and field-based policy studies to strengthen the link between theory and state practice. While this study aims to offer a holistic and interdisciplinary understanding of sovereignty in the age of cyber warfare, certain limitations remain. Moreover, the discussion focuses largely on global and state-level dynamics, leaving limited space for regional or non-state perspectives, such as the role of private corporations, tech industries and civil society. The rapid evolution of cyber technologies and shifting geopolitical alignments also means that some conclusions may require future reevaluation. These limitations do not weaken the study's contribution but rather highlight areas where further interdisciplinary research integrating law, ethics, computer science and international relations can offer more grounded and policy-relevant insights.

## **Ending Comments: A Call for Global Reform**

The swift growth of cyberspace and the advent of cyber warfare have radically questioned traditional concepts of state sovereignty and the application of international law. As states increasingly conduct cyber operations, the global community stands at a juncture where conventional legal structures are inadequate to meet the challenges and threats of the digital environment. Against this backdrop, the need

to rethink and redefine sovereignty in the cyber warfare age for the sake of global stability, security and human rights becomes paramount.

A key element of this redefinition is that a new, overall international legal framework addressing cyber warfare, state behaviour in cyberspace and digital infrastructure protection needs to be formulated. Existing legal tools, like the Tallinn Manual, offer some direction but are not legally binding and are not globally accepted. These new legal frameworks should place special emphasis on protecting civilians and civilian infrastructure from cyber aggression and hold responsible those who partake in aggressive cyber activities. International cooperation cannot be overemphasized. Cyber threats know no borders, and one country cannot adequately deal with these threats separately. Diplomatic discussion and multilateralism are necessary in establishing a joint environment whereby states exchange information, learn best practices and collaborate in joint cyber defence efforts. Only through global cooperation will the international community be able to create a cooperative system of dealing with cyber threats without infringing on national sovereignty. In addition, the changing nature of cyber warfare demands a harmonious balance between national security and human rights. As governments increase control over their digital systems, the international community must make sure that efforts undertaken in the name of cybersecurity do not compromise fundamental human rights. Cyber sovereignty, as important for national security as it is, must not be at the expense of personal freedoms. Looking to the future, it is important to recognize that the age of the computer has fundamentally changed the idea of sovereignty. Finally, the imperative for reform in international law to address the realities of cyber warfare is pressing. As the world of cyberspace becomes increasingly critical, the world community needs to move fast in establishing a cyber law that equilibrates national interests and international cooperation as well as guarantees the basic human rights of persons in cyberspace. Redefined sovereignty in cyber warfare is not only about catching up with advancing technology but also about guaranteeing that justice, peace and stability principles prevail in the information age.

Global governance in the future in the virtual world rests on states' willingness to work together, come up with innovations and build legal structures safeguarding both sovereignty and human dignity in an interdependent world.

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# Diplomatic Fault Lines: An Empirical Study of Anti-India Narratives and China's Rise in Nepal

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## Abstract

India and Nepal share a complex relationship rooted in deep historical and cultural ties, but recent years have witnessed significant turbulence. As a dominant power in South Asia, aspiring to become a *vishwa guru* [world leader], India continuously strategizes to maintain its influence in the Himalayan kingdom of Nepal. However, the growing presence of China, through initiatives like the Belt and Road Initiative, is reshaping the traditional sphere of influence that India has long held. Additionally, the involvement of other actors, such as the United States through the Millennium Challenge Corporation and other countries, further complicates Nepal's geopolitical landscape. This research article aims to examine the ground realities of Nepal's shifting geostrategic significance and critically assess whether the diplomatic changes highlighted in media and literature represent actual transformations or if Nepal's strategic dynamics have largely remained unchanged.

## Keywords

Indo-Nepal, Anti-India, BRI, Blockade, South Asia

## Introduction

The geostrategic position of Nepal has attracted the attention of not only India and China but also global superpowers. Historically, British India regarded Nepal as a vital buffer between India and Russia. The independent India continued to view

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Nepal as a principal buffer protecting its northern frontiers (Baral, 2023). However, the annexation of Tibet by the People's Republic of China in 1950 effectively dissolved this natural barrier, increasing India's vulnerability along its northern border (Muni, 2009). The India–China War of 1962 further complicated bilateral relations, exacerbating mistrust between the two nations (Maxwell, 2016). More recently, the Galwan Valley clash in June 2020, located in the far-western Ladakh region along the Line of Actual Control, has intensified tensions. Nepal's position as the “yam between two boulders,” as described by King Prithvi Narayan Shah, underscores its strategic significance (Whelpton, 2005). For India, Nepal's five bordering states provide natural linguistic and cultural linkages, strengthening the historical and people-to-people connections often referred to as *roti–beti ka rishta* [food and kinship ties]. The late President A. P. J. Abdul Kalam famously stated, “Any security threat to Nepal implies a security threat to India,” highlighting Nepal's critical role in Indian security calculations. Prime Minister Narendra Modi's “neighborhood-first” policy further emphasizes the strategic importance of neighboring countries like Nepal and Bhutan, which share borders with China and serve as natural buffers for India's national security. Despite these long-standing ties, a significant segment of Nepalese society remains wary of India's influence, often viewing Indian aid and diplomatic engagement as political interference in Nepal's internal affairs. This perception has shaped Nepal's foreign policy orientation toward greater diversification and assertion of autonomy. A notable example is King Mahendra's diversification policy in the 1960s, aimed at reducing overdependence on India. His initiatives included establishing diplomatic ties with China, the USA, and other countries and hosting the first International Buddhist Conference in Kathmandu in 1962, which projected Nepal as a sovereign voice in regional religious diplomacy. Nepal's independence in foreign policy was also evident in 1956 when it voted against the Soviet intervention in Hungary at the United Nations, distinguishing itself from Indian alignment during the Cold War (Baral, 2013).

More recently, the 2015 Indian economic blockade, imposed amid Nepal's adoption of a new constitution, had severe economic and humanitarian consequences, leading to fuel shortages, inflation, and a decline in public sentiment toward India. This event intensified Nepal's pursuit of a more balanced foreign policy. Former Indian External Affairs Minister Sushma Swaraj had earlier articulated the India–Nepal relationship as one between an “elder brother and younger brother,” emphasizing concern and responsibility rather than dominance, contrasting the notion of a “big brother,” which implies superiority and control. However, this framing is increasingly challenged within Nepal, as the country's constitution declares it a sovereign entity and the Panchsheel principles outline its diplomatic framework with other countries, based on mutual respect and equality, as is customary in international law and diplomacy. Recently, the rise of anti-India sentiments within Nepal's political discourse and public opinion has further complicated the country's bilateral relations with India. These sentiments are a culmination of the historical grievances and the alleged intervention in Nepal's Constitution, the drafting process, and its domestic affairs. The unofficial blockade (2015–2016), following Nepal's promulgation of its new constitution,

significantly distorted India's benign image among the Nepalese youth and reinforced suspicions of Indian coercion. Furthermore, the media portrayal and the remarks of Indian experts have also created a rift in the relations and led them to drift toward China, thus fueling mutual distrust. This shifting dynamic has been further intensified by China's proactive engagement in Nepal's economic and political landscape, particularly through projects under the Belt and Road Initiative (BRI), which Nepal joined in 2017. Furthermore, the increasing Chinese investments in infrastructure, hydropower, and digital connectivity have presented Nepal with viable alternatives to Indian dependency, thereby reshaping Nepal's foreign policy calculus, as was the case with earlier monarchs of Nepal and other political leaders, who often opted for pendulum diplomacy. Furthermore, the employment of nationalist rhetoric that portrays India as a hegemonic actor has been a viable option for its incumbent leaders to consolidate political legitimacy at home (Jha, 2020). In this context, this research seeks to explore the empirical foundations of anti-rhetoric and the xenophobic nationalism in Nepalese discourse, the media's role in constructing these narratives, and the influence of Chinese engagement on Indo-Nepal relations. It aims to assess whether India's traditional sphere of influence in Nepal has indeed eroded and how Nepalese perceptions of India have evolved in response to these regional shifts.

## **Methodology**

This study employs a qualitative, empirically grounded theoretical research method. It aims to identify the persistent gap and the theoretical and practical linkages in the relations between the increasing influence of China in India's backyard. The study will explore the perspectives of scholars well-versed in Indo-Nepal relations and the theoretical debates surrounding India–Nepal relations, especially concerning third-party concerns. The study seeks to examine the realities on the ground of the strong historical ties between two ancient civilizations, whose geographies have shaped their relationship and the complex interactions between them. The article mainly relies on primary sources gathered through field studies to understand the fault lines and China's role in Nepal's politics, along with secondary sources such as books, scholarly articles, newspaper reports, and other materials related to India–Nepal relations. Additionally, electronic sources like documentaries and speeches by relevant individuals have also been used in the research.

### *India–Nepal Relations: A Historical Context*

Diplomacy is a complex social process that involves the implementation of foreign policy interests, culminating in multiple aspects that form the foundation of effective diplomatic practices. Within this context, the regional diplomacy, a strategy opted by the neighboring countries to cooperate on the diverse issues, plays an integral role in a specific region and thus becomes significant for a country's foreign policy goals, especially for nations sharing deep-rooted historical,

cultural, and geographical linkages, such as India and Nepal. While globalization has compelled states to enhance international trade and connectivity, the unique case of India and Nepal, which have long shared an open-border framework, is a century-old practice that predates many modern regional agreements concluding in today's bilateral framework. As a result, the Indo-Nepal connection is unique, unheard of anywhere else in the world, and unique in South Asia, since it allows for the free flow of people and trade activities across borders, a benefit that is seldom encountered elsewhere. This open-border policy has nurtured deep people-to-people connections grounded in shared religious, linguistic, heritage, and cultural affinities.

Hinduism and Buddhism, two dominant religions in both countries, have significantly shaped their intertwined identities. The flow of religious philosophy and pilgrimage traditions across borders, such as the sacred sites of Lumbini (Nepal) and Bodh Gaya (India), has historically bonded the nations (Whelpton, 2005). Linguistically and ethnically, populations in India's Bihar, Uttar Pradesh, and Uttarakhand share familial and social ties with regions in Nepal, reinforcing the civilizational continuum.

The modern diplomatic trajectory began during the British colonial era, notably with the 1923 Treaty of Friendship between British India and Nepal, which formally recognized Nepal as an independent and sovereign state. This was followed by the India–Nepal Treaty of Peace and Friendship (1950), signed shortly after India's independence. The treaty allowed for reciprocal rights to residence, property, trade, and movement and emphasized close cooperation in defense and foreign affairs (Ministry of External Affairs, 2020). While India regards this treaty as the foundation of a special relationship, many in Nepal perceive it as an outdated agreement that reflects unequal power dynamics and compromises Nepalese sovereignty (Baral, 2013).

Calls for revision of the 1950 treaty have grown louder in Nepal in recent decades, especially as Nepal pursues a more assertive foreign policy. Critics argue that the treaty was signed under geopolitical pressure and that some clauses disproportionately favor India (Muni, 2016). Historical events have further contributed to shaping the anti-India narrative in Nepal, as India has consistently played a central role in Nepal's political transformations. Whether it was during the anti-Rana agitation when India supported King Tribhuvan, the facilitation of the agreement between the Ranas and political parties that culminated in the Delhi Pact of 1950, or the support extended to democratic forces during the *Jan Andolan* of 1980–1990 (which led to the dismantling of King Mahendra's Panchayat system), India has been a prominent actor in the Nepal's trajectory.

India's continued advocacy for democratic values in Nepal has often antagonized sections of Nepal's traditional elite, namely, the Ranas and royalists, who have repeatedly portrayed India's role as a threat to Nepal's sovereignty and territorial integrity. Similarly, India's mediation efforts during the 2008 negotiations between the Madhesi parties (who were agitating for a more inclusive and equitable political framework) and the Government of Nepal were also viewed with suspicion by certain political factions. With K. P. Sharma Oli's ascent to power, anti-Indian sentiments were further mobilized and politicized, particularly in the

aftermath of the 2015 border blockade, projecting himself as the tallest nationalist leader who could withstand India's bullying tactics, thus gaining a majority in the parliament, bypassing the core government mechanism of establishing a welfare state (Amatya, 2023). Further straining bilateral ties, border disputes have resurfaced as flashpoints, most notably the Kalapani–Limpiyadhura–Lipulekh trijunction dispute. In 2019, India released a new political map that included the disputed territories as part of its Uttarakhand state, following the inauguration of a road to Lipulekh. Nepal's political elites, disguising themselves as nationalists, denounced the purported unilateral action and demonstrated their opposition by staging protests in the country's streets. The disillusionment escalated into a protracted battle when Nepal published a new map in May 2020 that included the contested areas inside its borders. The Nepalese parliament then approved the revised map through a constitutional change, thereby blocking the possibility of border talks for its resolution. India opposed this move, stating that the issue should be resolved through diplomatic discussions, effectively putting the matter on the back burner for future deliberation (MEA, 2020).

With Prime Minister Narendra Modi's visits to Nepal, a symbolic act signifying the revival of ancient traditions, temple diplomacy, and promises of deeper engagement via renewed emphasis on the neighborhood, the era of new friendship as planned and predicted has not completely escaped historical inertia. Although Modi's "Neighborhood-first" strategy sought to restore relations, obstacles, including the unofficial embargo in 2015, Nepal's political upheaval, and the country's growing involvement with China through the BRI, have made this goal more difficult to achieve (Jha, 2020).

### *Anti-India Narrative in Nepal*

The anti-India sentiment in Nepal has long-standing historical and political origins, becoming especially prominent during times of political change and turmoil. Various Nepali leaders, such as Manmohan Adhikari, Pushpa Kamal Dahal "Prachanda," and K. P. Sharma Oli, have at different points encouraged these feelings to strengthen nationalist backing and challenge India's involvement in Nepal's domestic matters (Jha, 2020). India's long-standing role in Nepal's political trajectory, ranging from support during the abolition of the Rana regime to facilitating the 2006 Comprehensive Peace Agreement, has often been portrayed not as partnership but interference (Baral, 2012). The genesis of such sentiments lies deeply in the policy framework adopted by King Mahendra, when he abolished the multiparty democracy and put forth a facade of the Panchayat system in its place. The bitter blow to democracy received huge outrage from the Nepali Congress, which was witnessing efforts to transform Nepal on the lines of the democratic model established in India. Furthermore, the remark of Prime Minister Nehru on the autocratic move of the monarch built the foundation for anti-India nationalism, as Mahendra began encouraging leftist and communist forces of various hues in Nepal. The portrayal of India's criticism was not seen as opposition to the king's abolition of democracy, but as anti-Nepal, perceived as a threat by India to Nepal's sovereignty. This genesis of anti-Indian nationalism, which is

evident to this day in Nepal, saw the king's takeover, accompanied by communist and royalist forces adopting opposing views on various issues, united, however, on the plank of anti-Indian nationalism to "save" Nepal from India.

Furthermore, there was a strategic attempt to seek support from Hindu sentiment-based forces in opposition to the secular government of India (Rae, 2021). The development of stronger relationships between Hindu organizations in India and the palace and royalists, particularly the anointment of King Birendra as Vishwa Hindu Samrat by the Vishwa Hindu Mahasangha, an affiliate of the Vishwa Hindu Parishad, paved the way for Nepal's declaration as a Hindu state under the 1962 constitution given by King Mahendra. This marked how the monarchy became deeply intertwined with the concept of a Hindu Rashtra (Rae, 2021).

Later, the "China card" as initiated by King Mahendra still holds significance in the current dynamics of Nepal's political system, exemplified by the construction of the Friendship Highway and the settlement of the Nepal–China boundary in 1961, a step taken up by successive governments of Nepal (Chan & Bhatta, 2021). Another significant factor that remains embedded in the collective memory of India's inclination toward intervention is the merger of Sikkim into the Indian Union by Prime Minister Indira Gandhi, a move greeted in Nepal with fear and followed by the demand for an equidistant policy between India and China, later widely pronounced as the Zone of Peace.

Most recently, fears were raised during the 2015 economic blockade, following Nepal's adoption of a new constitution, an event that, in the shadow of Russia's annexation of Crimea, remains a significant turning point. There remains apprehension about India's intentions in the Terai (lowland region in parts of southern Nepal and northern India). While India denied any official embargo, the prolonged disruption of essential supplies generated intense public resentment, leading Nepal to perceive it as coercion that emphasized India's influence on Nepal's internal decisions and subsequently reinforced the image of India as a hegemonic and dominant power in the region (Jha, 2020). The long-drawn episode catalyzed a nationalistic discourse, reflected in campaigns such as #BackOffIndia, and is now embedded in the collective memory of Nepalese youth as a symbol of vulnerability. Territorial disputes have further aggravated these sentiments, creating a more complex situation. In 2020, Nepal released a new political map that included the contested areas of Kalapani, Lipulekh, and Limpiyadhura, regions that India also claims. This move, supported across political lines in Nepal, was seen as an assertion of sovereignty and a direct response to India's alleged encroachments. Additionally, cultural narratives, such as debates over the birthplace of Buddha and claims about Ayodhya being in Nepal, have been politicized to distinguish Nepalese identity from Indian influence (Amatya, 2023).

India's developmental aid and infrastructure projects, ranging from hydro-power agreements like Pancheshwar to road and rail connectivity, have frequently faced implementation delays. Nepali politicians often cite these delays as evidence of India's self-serving agenda (Muni, 2009). Similarly, Indian humanitarian assistance, such as during the 2015 earthquake, was criticized for prioritizing optics over genuine solidarity, further fueling resentment. China's growing footprint in Nepal, particularly through the BRI, has added another layer of

complexity to India–Nepal relations. China’s engagement is increasingly perceived as offering Nepal an alternative strategic partner, thereby emboldening Kathmandu to negotiate with India from a position of enhanced leverage. While India views Nepal’s tilt toward China as a geopolitical concern, many in Nepal see it as a necessary move to diversify foreign policy options and assert national autonomy (Baral, 2013).

Further straining ties, India’s Agnipath scheme, approved by the Union Cabinet on June 14, 2022, has sparked discontent in Nepal. Under this scheme, Indian youth, including Gorkhas from Nepal, are recruited into the Armed Forces for a short four-year term, after which they return without long-term pensions or benefits. This shift from the traditional 20-year service model has raised concerns among Nepalese communities reliant on military remittances and job security. Many view the scheme as diminishing the prestige and economic stability previously associated with service in the Indian Army, thereby affecting the traditional military–diplomatic bond between the two countries and diluting the loyalties of the Gorkha recruits.

Despite these tensions, the skepticism toward India’s influence, though vocally prominent, does not reflect the entire spectrum of Nepalese society. Deep-rooted historical, cultural, and religious ties, often described as the *roti–beti ka rishta* [a relationship of bread and daughters], continue to underpin strong people-to-people connections. However, unless key bilateral irritants such as the 1950 Treaty of Peace and Friendship, undelivered project commitments, and unresolved boundary disputes are meaningfully addressed, perceived resentment toward India is likely to persist, particularly during electoral cycles and periods of diplomatic strain, when political elites tend to invoke such issues to garner popular support.

### *Narrative Convergence: India-skeptic Rhetoric and China’s Rise*

China’s rise has been a gradual yet steady transformation from a regional player to an assertive global power with ambitions that extend well beyond its immediate neighborhood. While US scholars like John Mearsheimer and others have long discussed China’s potential to disrupt the existing world order, its regional dominance, particularly in South Asia, is increasingly evident through its strategic outreach and economic investments. In this context, India, historically considered the dominant power in South Asia, faces significant challenges to its influence, especially in neighboring countries like Nepal. China’s assertive foreign policy, often characterized as expansionist or employing “salami-slicing” tactics, has raised global concerns, and South Asia is no exception.

Within the India–Nepal relationship, a consistent theme has emerged: the perception of a declining Indian influence juxtaposed with the rise of Chinese engagement in the Himalayan region. However, respondents had a view that the notion of China as the emerging player in Nepal is not true in its entirety; rather, the Indian dominance is still intact in Nepal.

Respondents during the field study argued that the idea of India’s diminishing sphere of influence is misleading. They pointed out that until November 2013, India accounted for approximately 80% of foreign direct investment (FDI) in

Nepal. Although China has pledged large investments in recent years, especially following the BRI MoU signed in 2017, much of this remains in the form of proposed rather than realized investments. By contrast, India's actual investment footprint continues to dominate. According to the Survey Report on Foreign Direct Investment in Nepal (2023–2024) released by the Nepal Rastra Bank (NRB), India remains the largest source of FDI stock in Nepal, accounting for 32.3% of the total ₹333 billion in FY 2023–2024, followed by China (10.2%). India continues to dominate realized investments (Economic Research Development, 2025). Experts, including Prakash Kumar Shrestha, former executive director of NRB, attribute India's leading position to its long-standing investments since the 1990s, such as Unilever Nepal and Dabur Nepal, and recent large projects like the 900 MW Arun-3 Hydropower Project and the upcoming Lower Arun and Arun-4 projects by SJVN Limited. Similarly, Rajesh Kumar Agrawal, former President of the Confederation of Nepalese Industries, observed that while Chinese commitments have increased, their implementation remains limited, as FDI realization depends on factors such as investment climate, market access, and investor confidence (IANS, 2025).

Further, the Chinese businesses are not primarily investing to boost Nepal's economy but rather to use Nepal as a manufacturing hub for exports to India, which has prompted resistance from both Indian and Western policymakers. On the question of anti-India sentiment, they emphasize that Indian media and sections of Nepal's royalist elite have significantly contributed to shaping a negative narrative. They argue that Nepal lacks "diplomatic engineering" or a consistent and strategic diplomatic dialogue with Indian counterparts, which further reinforces public perceptions that "India does not engage," thereby exacerbating resentment. Additionally, media portrayals have often framed Nepal as an adversary rather than a close cultural neighbor. Indian media outlets have been widely criticized for their sensationalist and insensitive reporting, as well as for what is perceived as an attempt to glorify India's aid efforts rather than provide objective coverage of humanitarian crises. The recent Gen Z-led protests in Nepal, which culminated in a physical confrontation on September 11, 2025, underscore the growing tension in public perceptions shaped by cross-border media narratives. Findings from the field survey corroborate this pattern, revealing that many respondents perceive Indian media coverage as biased and reductive. Protesters argue that their movement has been narrowly framed as a reaction to the social media ban, while deeper structural issues, such as systemic corruption, unemployment, and elite political capture, have been largely ignored. This reflects a broader problem of media framing, where complex socio-political realities are simplified into easily consumable narratives. Concurrently, there are rising concerns within India itself over the declining credibility of news outlets and what critics describe as the "tabloidization" of media. Such trends have weakened the normative aspect of India's soft power, as sensationalist portrayals have inadvertently reinforced critical narratives about India in Nepal's public discourse, deepening media-induced mistrust and amplifying adversarial discourse vis-à-vis India in bilateral relations (Matters India, 2025).

Regarding China's influence, respondents were skeptical of its long-term sustainability in Nepal. He points out that China faces challenges at the local level due to contrasting values related to freedom, democracy, culture, and human rights. While Beijing is currently involved in managing intraparty dynamics such as facilitating rapprochement among Nepal's major communist parties, it may not be able to entrench itself deeply, given Nepal's strong democratic ethos and cultural affinity with India. Echoing the views of S. D. Muni underscores that Nepal is not necessarily tilting toward China; rather, China is expanding globally, and South Asia, including India, is one of the many regions where this influence is manifesting (Muni, 2016). Symbolically, Karki, executive director of the Centre for Nepal and Asian Studies at Tribhuvan University, Nepal, likens India–Nepal relations to the "*Saal (Shorea robusta)*" tree, deep-rooted and resilient, implying that despite temporary frictions, the foundational strength of the relationship remains intact.

The dynamics of Indo-Nepal relations underwent a notable shift with the advent of Prime Minister Narendra Modi in 2014. His visit to Nepal, marked by an address to the Constituent Assembly, an unprecedented opportunity for any Indian Prime Minister, was symbolic of a renewed enthusiasm to elevate bilateral ties. The speech addressed by the PM in the Constituent Assembly of Nepal has its distinct set of correlations with the Nepalese public, hinting at the new outlook of India–Nepal relations, thus an underlying exploration on part of India in generating goodwill at both the grassroots and elite levels, thereby fostering deeper people-to-people connections and cultural coherence. Geopolitically situated between two Asian giants, given its strategic position between two major powers, it is natural for Nepal to seek support from one when the other exhibits reluctance or indifference. It is also noteworthy that while India is China's largest trading partner, questions arise in Nepal regarding India's reluctance to extend similar economic openness or responsiveness to China. A prime example illustrating Nepal's contention is India's reluctance to purchase electricity from hydropower projects that include Chinese investors or EPC contractors, a stance that Kathmandu perceives as constraining its sovereign energy choices. This reluctance has made the overall process increasingly complex and challenging. Since India remains the primary buyer of Nepalese electricity, Nepal's efforts to negotiate a power trade agreement with China for a trans-Himalayan transmission line have been viewed with suspicion in New Delhi. Conversely, there is growing concern in Nepal that India seeks to dominate or "capture" the country's power generation market, thereby limiting Kathmandu's options for energy diversification (Rajan & Thakur, 2024). These dynamic underscores the intersection of energy diplomacy and strategic competition between India and China, where Nepal finds itself navigating a delicate balance between economic pragmatism and geopolitical sensitivity.

The 2015 economic blockade, widely perceived in Nepal as being orchestrated by India, significantly eroded the goodwill generated by Prime Minister Modi's earlier diplomatic overtures. The impact of the blockade was severe, with ordinary Nepali citizens facing acute shortages of essential goods. One of the most symbolic expressions of public frustration was the formation of a 27-km-long

human chain along the Ring Road in Kathmandu, led by thousands of students who united in protest against the embargo (The Kathmandu Post, 2015). This event, vividly illustrated by respondents, outlined the depth of discontent and the emotional toll the crisis took on the population. The blockade not only intensified Nepal's dependence on Chinese alternatives but also deepened public resentment and fueled critical perceptions of India.

The renowned scholar of India–Nepal relations, Lok Raj Baral, reinforces the argument that despite shifting geopolitical dynamics marked by the rise of China as a parallel strategic partner, India's influence in Nepal remains deeply entrenched. While developmental activities have expanded under the dual engagement of India and China, the extent of dependency on India persists. Baral emphasizes that, despite China's growing involvement through aid in political, educational, social, and tourism sectors, it cannot substitute India's historically embedded role. Geography continues to perpetuate India–Nepal linkages, and the deep-rooted people-to-people and cultural connections, which some term as "civilizational proximity," cannot be replicated or eroded by China.

Moreover, China's ambitions in Nepal, as Baral notes, are not necessarily aimed at displacing India, but are driven by its broader strategic priorities: safeguarding Tibet and countering Western influence, particularly in light of US initiatives such as the Millennium Challenge Corporation (MCC) compact. Signed in 2017 and ratified by Nepal's Parliament in 2022, the MCC agreement entails a \$500 million grant focused on electricity transmission and road development, representing the largest US grant assistance to Nepal. In parallel, other nations such as Japan, South Korea, Switzerland, and the United Kingdom have also played significant roles in Nepal's development journey. Beyond these nations, the multilateral forum, through investments in climate-resilient infrastructure and disaster risk management, the Asian Development Bank, the International Development Association, and the Swiss Agency for Development and Cooperation aim to support Nepal in strengthening its resilience to climate impacts and ensuring that development initiatives deliver lasting benefits to communities across the country. The partner agencies have also expressed their commitment to collaborate with the Government of Nepal in developing resilient infrastructure and advancing both planned and ongoing investments, particularly in the hydropower sector within the Dudh Koshi River Basin in Koshi Province. As is often the case in Nepal's diplomatic oscillation between long-standing partners and emerging allies, these multifaceted engagements involving various power players and stakeholders further complicate Nepal's delicate balancing act.

Scholars frequently argue that small state syndrome, as evident in Nepal, with its positioning between two dominant powers, often experiences acute insecurity. Within this context, Indian actions are sometimes perceived through a lens of suspicion. These perceptions are rooted in Nepal's historical concerns over its sovereignty, balancing its political domination, territorial integrity, and its precarious status as a buffer state between India and China. As a result, Nepal's foreign policy often oscillates between seeking autonomy and managing dependency, shaping a complex trilateral dynamic in the region.

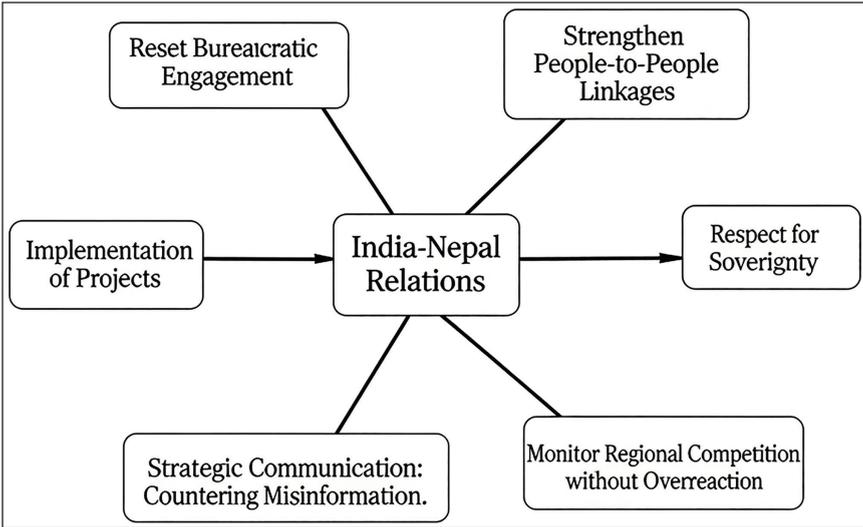
## Strategic and Diplomatic Recommendations

India and Nepal have persisted through various setbacks, which have further challenged Indo-Nepal dynamics. However, the pivotal role India has played in Nepal's political and socioeconomic aspirations, developmental projects, and even its constructive role in Nepal's political transitions, including its evolution into a multiparty democracy and conceptualizing the idea of a republic, should not be forgotten. Thus, although misperceptions and political misalignment have strengthened negative perceptions, India has remained Nepal's largest aid provider and shares a unique open border, enabling organic people-to-people ties unmatched elsewhere in South Asia.

Nepal, for its part, continues to express willingness to deepen relations with India. However, as observed by several scholars and stakeholders during field interviews, India's approach, often marked by bureaucratic rigidity and a perceived "big brother" attitude, remains a source of discomfort in Nepal. This colonial-era administrative mindset needs urgent reform to reflect a modern, respectful, and cooperative bilateral outlook. Moreover, the empirical observations gathered during fieldwork in Kathmandu indicate that anti-India sentiment is not widespread among the general public. Rather, it tends to be instrumentalized by political leaders to serve domestic agendas. Issues like the border dispute, the publication of Nepal's revised map, and narratives around sovereignty have been politically amplified, but they do not reflect a deep-rooted hostility among ordinary Nepalis.

While agreeing to the emergence and the rise of China, the respondents rejected the notion of China being able to replace India in Nepal's strategic calculus. While China's presence has grown globally, particularly through its BRI, the key infrastructure projects it has undertaken, such as the Bhairahawa and Pokhara airports, have not achieved the desired outcomes. These airports remain underutilized due to inadequate analysis of international traffic and allegations of corruption, which have hindered their ability to attract international flights, rendering them financially unviable and signaling limited strategic utility. Furthermore, as suggested, Nepal has become increasingly cautious about the potential pitfalls of debt dependency, especially in light of the Sri Lankan debt crisis. Consequently, the narrative of Nepal drifting irreversibly into China's orbit appears overstated and largely fueled by political rhetoric and media sensationalism, rather than grounded in realities. In light of these evolving dynamics, a recalibration and reformulation of the India–Nepal relationship spectrum is required, one that acknowledges Nepal's sovereign choices while reinforcing India's trusted role as a reliable partner (Figure 1).

The traditional area of influence of India, particularly throughout South Asia and notably in Nepal, remains robust. Sensitivity, respect for one another, and a move away from legacy attitudes, which have long been seen as a bureaucratic holdover, and toward future-focused diplomacy are necessary for its continued relevance. Many strategies have been proposed by academics and policy professionals to improve ties between India and Nepal. One of the main issues raised throughout the study was India's persistent colonial bureaucratic mentality, which



**Figure 1.** Suggestions to Strengthen Indo-Nepal Relations.

still influences its foreign policy strategy, particularly concerning its smaller neighbors. Apart from India's colonial past, which has shaped its administrative practices, the relationship between India and Nepal remains vulnerable due to its hierarchical communication style, delayed decision-making, limited local consultation, alleged unequal relationship, and centralized control. These characteristics contribute to perceptions of neglect or superiority in India's engagement with neighboring states, hence creating a sense of negative perception and harboring the same in the general public. Once a theoretical concept, the "small state syndrome" is now a reality in Nepali diplomacy, with its leadership vacillating between the desire to maintain sovereignty and the attraction of rival powers (Baral & Pyakurel, 2015). In this context, India's engagement must reflect equality and mutual respect to bolster the relations via mutual progress and development, rather than the dominating influence that guides the foreign policy, regardless of size, and thus must be treated with dignity and parity.

Furthermore, India's role in Nepal's development must evolve into that of a facilitator rather than a gatekeeper, especially in the context of energy cooperation and regional stability (Kochhar & Ajit, 2021). The perception that India is reluctant to purchase electricity from Nepal if Chinese firms are involved in generation projects has contributed to mistrust and policy hesitations in Kathmandu. This narrative is further strengthened by India's inconsistent engagement on the ground, which has inadvertently allowed China to expand its footprint through strategic infrastructure and energy investments (Rae, 2021). Nepal, despite possessing over 83,000 MW of untapped hydropower potential, remains severely underutilized, generating only about 2,500 MW, largely due to its financial limitations and status as a least-developed country (Rajan & Thakur, 2024). Scholars stress that such complex, multi-actor energy challenges demand mature and

consistent diplomatic engagement from India (Kochhar & Ajit, 2021). A supportive Indian stance, aligned with Nepal's developmental priorities, can prevent further divergence in bilateral ties and limit the strategic vacuum exploited by third parties like China. Leaving such issues unresolved only exacerbates geopolitical frictions and undermines India's traditional influence in the region (Kugiel, 2016; Sandhyarani, 2011). Proactive facilitation by India in hydropower and infrastructure partnerships would not only address Nepal's development goals but also reaffirm India's regional leadership through cooperative rather than competitive diplomacy.

A recurring concern raised during field discussions is the bureaucratic delay in the implementation of developmental projects. While India often wins the bidding or announces aid with enthusiasm, the actual execution on the ground is marred by administrative inefficiencies, lack of coordination, and slow decision-making processes. This delay not only affects public perception but also creates space for alternative actors, particularly China, to step in with faster, more visible outcomes (Muni, 2016). There is a pressing need for attitudinal change within the Indian bureaucratic and diplomatic machinery, which must become more responsive, culturally sensitive, and delivery-oriented. A new orientation has already begun in the relations, marked by rapid strides in infrastructure development, reflected in new roads, rail, and waterway connectivity; power grids; fuel and border-crossing facilities; power exchange agreements; and a petroleum pipeline, the first of its kind in South Asia.

Additionally, effective strategic communication is essential to counter misinformation and perception gaps that frequently arise in the bilateral space. The absence of consistent top-to-bottom dialogue exacerbates mistrust and allows media narratives, often politically motivated to shape public opinion. Regular engagements at the levels of parliament, civil society, media, and academia could help neutralize these distortions and restore a trust-based atmosphere.

On the Nepalese side, persistent political instability exacerbated by power struggles within and among parties such as the Maoists has often derailed long-term engagement with India (Baral, 2023). Foreign relations have frequently been used as tools for domestic political gain, which has impeded consistent diplomatic progress. Nonetheless, only a peaceful, democratic, and economically stable Nepal can become a true partner in regional development. India's support must therefore go beyond strategic interests and infrastructure to include capacity building, democratic strengthening, and youth-oriented programs.

Although there are vocal anti-India sentiments, personal communications during field research confirm that a large segment of the Nepali population still sees India as a culturally and economically vital partner, provided relations are based on equity and mutual dignity. However, the recurring issues of delays, lack of consultation, and perceived high-handedness fuel dissatisfaction. Therefore, a recalibrated policy approach from India should prioritize timely project completion, ensure equal diplomatic engagement, encourage people-to-people connections, and depoliticize legacy issues like the 1950 Treaty or boundary disputes. This shift, grounded in mutual respect and practical cooperation, can ensure the

relationship evolves from reactive diplomacy to a proactive and enduring partnership.

## Conclusion

With an emphasis on the emergence of anti-Indian narratives and China's growing influence in Nepal's political and developmental sphere, the study was intended to examine the fault lines in India–Nepal relations. Through field observations and a review of academic literature, it became evident that while anti-India sentiments are a real phenomenon in Nepalese discourse, these are often amplified during times of political instability or electoral mobilization, and hence do not represent a monolithic national outlook of Nepal. The general perception of the Nepalese section of society continues to value India's cultural closeness, the familial belongingness, the open-border system, and the long-standing historical relationship. Though the public and political actors have been dissatisfied due to the loopholes in the development projects in collaboration with India, implementation and persistent delays, as well as a perceived bureaucratic and hierarchical attitude. India's perceived relative inefficiency stems from these delays, which frequently contrast with China's rapid and obvious infrastructure engagement. However, as this study's analysis highlights, China's presence is primarily transactional and strategic, lacking the emotional and sociocultural depth that India and Nepal share.

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# Navigating Modern Political Turmoil: The Enduring Significance of Karl Popper's Open Society for Democratic Deliberation and Institutional Reform

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## Abstract

In an era defined by democratic backsliding, political polarization and rising authoritarianism, Karl Popper's concept of the open society emerges not only as a philosophical anchor but also as a practical blueprint for institutional renewal. This article explores the enduring relevance of Popper's ideals—critical rationalism, pluralism and transparency—in confronting today's political challenges, from populism and performative politics to youth disenfranchisement and digital misinformation. Through an engagement with contemporary scholarship, including the works of Gerson, Ingrams, Ani and Okoye, Esfeld and Scott-Phillips, the article traces how modern democratic crises mirror the totalitarian threats that initially prompted Popper's vision. Far from being a relic of mid-20th-century liberal thought, the open society offers a vital framework for democratic resilience in the face of institutional distrust and eroding civic engagement. The article argues that meaningful institutional reforms—such as participatory budgeting, citizens' assemblies and algorithmic transparency—must be rooted in Popperian critical discourse. It further emphasizes the transformative role of youth agency, civic education and digital literacy in shaping an informed and engaged polity. Ultimately, this study underscores the urgency of renewing democratic deliberation by internalizing the open society not just as a political aspiration but as a lived institutional practice that adapts to complex, pluralistic societies.

## Keywords

Open society, democratic deliberation, critical rationalism, populism, institutional reform, Popper

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## Introduction

The concept of Karl Popper of open society has become a prominent response to socio-political upheavals of the 20th century, in the face of totalitarian regimes. Basically, open society is characterized by a commitment to democratic governance, pluralism and critical discourse without hindrance. Popper argued that societies should be based on the principles of transparency, inclusiveness and protection of individual freedoms, emphasizing the need for a mechanism which allows the correction of errors by reasoned debate and constant revitalization of societal standards (Popper, 1945). The importance of open society lies not only in its philosophical foundations but also in its practical implications for political institutions and civic life (Shearmur, 2014).

To render Popper's normative claims empirically and policy-relevant, this essay narrows its empirical focus to selected subregions of Africa: West Africa (with illustrative reference to Nigeria and Ghana), East Africa (with particular attention to Kenya and Ethiopia) and Southern Africa (with reference to South Africa). These cases are chosen because each combines a large youth cohort, significant social media penetration and distinct institutional challenges—conditions that make them fertile sites for testing how Popperian prescriptions for openness, criticism and institutional fallibility play out in practice.

## Literature Review

The modern pertinence of Karl Popper's open society has provoked intense academic interest in political philosophy, democratic theory and institutional research. Much literature has challenged the resilience of Popper's principles—especially his promotion of critical rationalism, pluralism and institutional fallibility—against mounting populism, algorithmic politics and global democratic decline.

Gerson (2023, 2024) offers a balanced assessment of populism's double-edged contribution to modern democracies: simultaneously, both as a corrective to elite detachment and as a disruptor of deliberative norms. His writing extends Popperian assumptions by disclosing how populist rhetoric tends to degrade the sophisticated machinery of critical public discussion into analytical dualisms. Likewise, Esfeld (2022) recontextualizes Popper's epistemological commitments—particularly the dichotomy between natural and social science—to highlight the tension between open discourse and ideological closure in contemporary civic existence.

Within the African context, Ani and Okoye (2021) examine youth disenfranchisement and the potential for democratic revitalization through civic engagement. Their research takes a Popperian optic to demonstrate inclusive approaches that empower younger generations and reconstitute political agency by way of deliberative mechanisms. Scott-Phillips (2022), however, presents a biologically based justification of democratic engagement by interpreting Popper's open society in terms of people's cooperative inclinations. His theoretical contribution starts with emphasizing the importance of institutional adaptability and cultural change in public reasoning mechanisms.

A direct line can be drawn from Popper's critical rationalism to the growing literature on youth engagement. Popper's insistence that political orders must be organized

so that errors can be exposed, debated and corrected provides both a normative and a procedural template for how youth participation can be institutionalized rather than merely tolerated. Recent empirical studies of youth movements show that young activists often act as the social sensors that surface policy failures, demanding mechanisms by which their criticisms can be aggregated into institutional response (cf. Ani & Okoye, 2021). In Popperian language, youth mobilizations constitute tests of social hypotheses: they indicate where prevailing policies fail to explain or meet lived realities. Recognizing youth engagement in this way suggests institutional designs—such as youth representation on citizens’ assemblies, permanent youth advisory councils with access to legislative review and mandated policy impact assessments triggered by youth petitions—that translate Popper’s abstract procedural demands into durable channels for correction and reform.

The influence of technology on deliberative arrangements has also attracted the scholarly eye. Ingrams (2023) decries the transparency of algorithmic rule-making and infrastructural management of information and advocates for digital design incorporating Popper’s ideals of openness and falsifiability. Similarly, Draško and Krstić (2023) apply critical rationalism to empirical realms, proposing that the theory of deliberation can be a workable instantiation of Popper’s open society in the form of constructing policy spaces that prize disagreement and ongoing critique.

Taken cumulatively, these works present a fertile ground for reconsidering Popper’s writings in terms of contemporary political pathologies. This scholarship testifies to the enduring relevance of *The Open Society and Its Enemies*, not as a philosophical relic but as a normative guide to reconsidering democratic institutions and citizenship in the 21st century.

## **Methodology**

This article employs a conceptual and interpretive approach based on normative political theory. Instead of empirical testing or data gathering, the research performs a critical synthesis of current scholarly writings and Popper’s earliest works. It applies a deductive analytical approach where central ideas—like critical rationalism, institutional fallibility and democratic deliberation—are traced through their reinterpretations in contemporary political theory and governance literature. Drawing on interdisciplinary knowledge from democratic theory, digital governance, African political participation and epistemology, the article remakes the applicability of Popper’s model to contemporary challenges (Dewey, 1916). The methodology, therefore, foregrounds textual analysis, comparative interpretation and theoretical extrapolation, appropriate for investigating the perennial philosophical underpinnings of the open society in different institutional and discursive landscapes.

## **Discussion and Results**

### *Populism and Performative Politics: Threats to Democratic Deliberation*

In contemporary political landscapes increasingly marked by polarization and authoritarian trends, the relevance of the Open Society of Popper is clearly pronounced. The rise of populist movements, characterized by disillusionment with

established political institutions and performative policy, complicates the health of democratic discourse. According to Aman Jaswal's thesis, this feeling of disillusionment is rooted in the perception that the traditional mechanisms of deliberation and representation have not adequately responded to the concerns of various constituents (Jaswal, 2024). The performative policy, in which political figures engage in acts conceived for the public spectacle rather than for a substantial political discourse, still exacerbates the erosion of critical dialogue and the quality of democratic engagement. Consequently, invigorating the principles of an open society becomes essential to counter these contemporary diseases.

### *Critical Rationalism and Democratic Health*

The components of Popper's open society—critical rationalism, peaceful coexistence and dynamic interaction of ideas—inform the importance of civic engagement and interactive governance. Critical rationalism urges individuals to question hypotheses and to engage in a reasoned criticism, promoting a culture where dissent is not simply tolerated but adopted as a necessary component of political evolution (Popper, 1959). At a time when Echo Chambers and partisan stories dominate public discourse, embracing Popper's ideals can provide a framework to reconstruct confidence in deliberative processes and restore faith in democratic institutions.

In addition, the open society advocates institutional reforms that emphasize responsibility and responsiveness to the population. These reforms are particularly relevant in contemporary democratic contexts in which institutional confidence decreases. The exploration by Jaswal of the performative dimensions of modern policy reveals that when citizens perceive political discourse as have disengaged from their lived realities, they become sensitive to radical alternatives which promise simplicity on critical engagement. To combat this trend, Popper's vision calls for the creation of transparent decision-making processes, inclusive public forums and educational initiatives that promote critical thinking and civic responsibility.

The relevance of the concept of the open society of Karl Popper in contemporary political challenges cannot be overestimated. Its fundamental principles serve as a vital plan to promote democratic deliberation and critical discourse at a time when polarization and authoritarianism threaten to undermine the principles of democratic governance. By defending the institutional reforms which encourage active participation and reasoned discussion, society can aspire to revive the essence of an open society, thus confronted with dominant disillusionment with the political process and by nourishing a dynamic democratic culture. Contemporary political challenges considerably undermine the fabric of democratic deliberation, with the rise of populism and the erosion of confidence in institutions emerging as critical factors requiring in-depth examination. These challenges intersect in a way that resonates both with and complicates the ideals of Karl Popper of an open society, which defends rational discourse and critical investigation as essential components of democratic governance.

### *The Populist Paradox: Challenge and Opportunity*

The phenomenon of populism, analysed by Gerson (2023), illustrates a double-edged sword within contemporary politics. On the one hand, populism often occurs in response to perceived elite detachment and the failure of traditional political institutions to meet the needs of ordinary citizens. This can stimulate a greater commitment among the private groups to their rights, which has prompted political parties to reconsider their platforms and to integrate the votes of those who were previously marginalized. The populist movement, in this regard, serves as a correction to the inertia of established political frameworks, which can be complacent or insensitive.

However, the same populist increase is simultaneously a significant threat to democratic institutions. Gerson maintains that populist leaders often advance a dichotomy between ‘the people’ and ‘the elites’, which can sow distrust in the institutional processes essential to deliberation. This polarization undermines a fundamental aspect of the open society of Popper: the ability to engage in a critical discourse that embraces pluralism and encourages debate through different points of view. In a context where populism encourages simplistic binary and defamation of opposite perspectives, the potential for constructive dialogue decreases, making democratic deliberation vulnerable to manipulation and demagoguery.

### *Rebuilding Trust in Democratic Institutions*

The erosion of confidence in institutions further complicates these dynamics. The contemporary political landscape is marked by an omnipresent scepticism towards government entities, the media and civic organizations. As Gerson notes, this scepticism is exacerbated by the proliferation of disinformation and disinformation, in particular through digital platforms. In an environment where confidence has deteriorated, the shared standards necessary for productive deliberation become fragile. Citizens are less likely to engage in an open and critical dialogue when they perceive the landscape of information as biased or manipulated.

In this context, Popper’s vision of open society, which emphasizes the need for critical examination and empirical policy assessment, offers precious information to institutional reforms aimed at revitalizing democratic deliberation. To meet the challenges posed by populism and institutional distrust, reforms must prioritize the improvement of transparency, responsibility and inclusiveness in political processes. Given that populism thrives in an atmosphere of disillusionment, promoting environments where citizens can critically engage with policies, debate their implications and hold responsible leaders is essential.

Gerson’s analysis highlights the potential ways of institutional reforms that align with Popper’s ideals, such as the promotion of participatory budgeting, the implementation of deliberative surveys and the culture of civic education initiatives which emphasize the value of critical thinking. These reforms are used not only to improve democratic commitment but also to restore faith in institutions by demonstrating their responsiveness to the concerns and needs of the constituents.

The interaction between populism and confidence in institutions has a complex landscape for democratic societies which strive to respect the principles of an open society. By critically analysing these challenges through the objective of Popper's philosophy, decision-makers and academics can start to identify avenues for institutional transformation which promote real deliberations and maintain the integrity of democratic discourse. While the coming road is responsible for obstacles, the imperative to create resilient democratic institutions that embody the ideals of an open society remains pressing and essential.

### *Participatory Models and Adaptive Governance*

To effectively meet contemporary political challenges, it is imperative to consider institutional reforms that improve democratic processes. The concept of Karl Popper of open society emphasizes the importance of critical rationalism—a methodological approach which promotes debate, encourages the examination of the wisdom received and supports the adaptive governance structures. Institutional reforms based on Popper's ideals would not only promote democratic deliberations but also potentially cultivate a more resilient political framework in which various perspectives can be articulated and explored.

Scott-Phillips (2022) postulates that an understanding of human nature as an intrinsic collaborative and community aligns with the vision of Popper of open society. This perspective suggests that democratic institutions must be flexible, allowing continuous adaptation in response to public needs and preferences. By adopting Popperian principles that appreciate the provisional nature of knowledge, institutions can be designed to prioritize critical discourse, thus allowing citizens to make a constructive commitment even in the face of disagreement.

In practice, this requires institutional reforms that dismantle rigid hierarchies in governance structures. For example, the replacement of traditional and descending decision-making processes with more participative models could facilitate a richer commitment to democratic deliberation. These models would allow citizens to actively contribute to political discussions and decision-making processes. By promoting an environment of openness and inclusion, these reforms would not only improve the confidence of the public but also give policies to reflect collective will and well-being.

In addition, the implementation of regular public consultation mechanisms, citizen assemblies and deliberative surveys are institutional reforms that are based on the critical rationalism of Popper. These practices can be directly linked to the notions of Scott-Phillips on the fluid nature of human social commitment. By integrating discussions in the legislative process, these reforms guarantee that institutional responses reflect contemporary societal changes and that the various voices are heard. They also allow a systematic examination of policies over time, allowing adjustments based on empirical evidence and critical reflection—the principles of Popper's philosophy.

In addition, the institutionalization of feedback loops is essential for an adaptive system that aligns with Popper's ideas. Institutions should be encouraged to evolve through iterative assessments of their policies and practices. Transparency mechanisms—such as public reports of institutional efficiency

and regular audits—would not only hold responsible government organizations but also encourage a culture of openness which supports critical discourse. These processes would allow citizens to assess the robustness of the decisions taken and to stimulate a rooted dialogue in a rational criticism rather than in dogmatic adhesion.

Education plays a central role in this transformation. Fostering a critical rationalist approach begins with the cultivation of a citizen capable of engaging significantly in public discourse. Educational reforms that emphasize critical thinking, debate and civic responsibilities could create a more enlightened electorate capable of actively participating in democratic processes. Scott-Phillips's ideas on human cooperation support this notion, because a well-informed population is more likely to engage in collaboration in societal challenges rather than resorting to dividing rhetoric that undermines democratic discourse.

To summarize, the integration of Karl Popper's principles of open society in institutional reforms will be vital to advance democratic processes in the face of contemporary challenges. By adopting adaptability, by promoting critical discourse and by prioritizing the active participation of citizens, institutions can develop a more resilient and more reactive framework of governance, ultimately leading to the improvement of democratic deliberation in a rapidly evolving world.

### *Youth Participation and Democratic Renewal*

Youth participation should be conceived not only as a normative imperative but also as a crucial mechanism for institutional falsification and learning. Where Popper emphasizes that institutions must be structured to permit critical scrutiny, youth constituencies—by mobilizing around unmet needs, exposing policy blind spots and generating alternative knowledge—play the empirical role of falsifiers: they reveal hypotheses about governance that do not hold. Institutionalizing this role converts episodic protest into institutional feedback. Practically, this means creating permanent institutional interfaces (youth budgets, fast-track legislative review of youth petitions, formal youth seats on deliberative bodies) and curricular investments (civic pedagogy focusing on critical reasoning and deliberation) that ensure youth critiques lead to systematic investigation, public testing of policy alternatives and, where justified, policy revision.

Ani and Okoye (2021) shed light on the challenges and opportunities that young people face by contributing to democratic discourse within African societies. They argue that despite the historical and structural barriers such as ubiquitous socio-economic disparities, political instability and rooted authoritarianism, young people have a unique capacity to promote innovation and initiate a transformative change. This potential is aligned with the emphasis on Popper with critical rationalism, where ideas and points of view can be tested against societal realities in a democratic framework.

However, the obstacles to the participation of young people are multifaceted. Political systems in many African states often have a tendency to exclusion, put young voters out of the sidelines of governance and the development of

policies. Ani and Okoye (2021) note that young people often meet discrimination, marginalization and lack of access to platforms through which they could express their concerns and aspirations. This situation not only undermines the application of the principles of open society of Popper—which favour the importance of open dialogue and debate—but also highlights the concrete need for institutional reforms that cultivate spaces where young people can get involved significantly.

Recognition of young people as active agents in the political field can be cultivated through institutional reforms which prioritize inclusiveness. For example, policies designed to integrate young people's prospects into decision-making processes can improve the democratic fabric of societies. By involving younger generations in deliberative processes, governance can benefit from new ideas and critical prospects that question established standards. Ani and Okoye (2021) also claim that commitment through initiatives led by young people, basic movements and social media campaigns can mobilize public opinion and promote a culture of responsibility among political leaders.

Above all, the digital landscape provides a platform for an improved civic commitment, allowing young people to exercise their agency and defend democratic reforms. Social media, in particular, have become a powerful tool for collective action, allowing young people to address political problems and stimulate public discourse. In this regard, Popper's approval of critical discourse is resolved in contemporary movements arguing for transparency, social justice and responsibility.

The implications of these dynamics reveal the importance of promoting an open society which not only accepts but also actively encourages the participation of young people in political discourse. Institutional reforms should be guided by the principle according to which young people are not simply passive beneficiaries of the policies led by older generations, but vital contributors to the political narrative. This approach would align with Popper's vision of an open society, anchored in the ethics of questioning and continuous discourse, thus providing a critical means by which established institutions can evolve in tandem with societal requirements.

As such, by exploring the relevance of the open society of Popper to contemporary political challenges, in particular with regard to the participation of young people in Africa, it becomes obvious that the fulfilment of democratic ideals requires structural changes that adopt inclusiveness and facilitate civic engagement. By examining the intertwined relationship between the youth agency and democratic discourse, it is clear that the revitalization of the political landscape of developing countries requires a commitment to promote an environment conducive to critical debate and active participation.

### *Digital Technology, Algorithms and Open Discourse*

Popper's criterion for scientific progress—falsifiability—provides a suggestive lens for thinking about algorithmic governance. An algorithmic decision rule that cannot be tested against alternative hypotheses, that resists error detection or that cannot be subjected to public refutation functions like an unfalsifiable theory: It

becomes immune to critical scrutiny and therefore antithetical to an open society. Translating falsifiability into the digital domain requires that algorithmic systems be designed and governed so their outputs can be meaningfully tested, probed and contested. Operationally, this entails open specifications of algorithmic objectives, versioned datasets and synthetic counterfactual inputs for stress-testing and independent audit trails that render the chain of inferences inspectable. In short, algorithmic transparency in Popperian terms is not merely disclosure for its own sake but the creation of testable claims about algorithmic behaviour and mechanisms for public refutation and correction.

The advent of digital technologies and algorithmic governance has significantly restructured the panorama of public discourse and transparency within contemporary societies. In this context, the contributions of the Ingrams (2023) provide crucial ideas on how the dissemination of information and the mechanisms of responsibility can be reconfigured in an innovative way to align with the principles of the open society of Karl Popper. Popper emphasized the importance of critical discourse, the rational debate and the ability of social institutions undergo scrutiny and reform. However, the challenges raised by current technology environments require careful reexamination of these principles.

Ingrams (2023) critically argues that, although technology has the potential to improve democratic deliberation through greater accessibility and participation, it simultaneously raises concerns about the reliability of information and transparency of algorithmic processes. The risk of misinformation and polarization, exacerbated by social media platforms and algorithmically breaking content, can undermine the very deliberative practices that Popper imagined as fundamental for an open society. Ingrams emphasizes the importance of developing nuanced approaches to handle the double-edged digital communication sword, which can facilitate and hinder critical discourse.

Ingrams's analysis suggests that promoting an open society in the digital era requires a commitment to transparency, not only in the information government but also in algorithms that shape it. The principle of responsibility, central to the open society of Popper, must evolve to cover the mechanisms by which the information is filtered and prioritized. For example, Ingrams advocates the participation of various interested parties in the design and implementation of responsibility frameworks that monitor algorithmic biases and guarantee equitable access to information. Such reforms echo Popper's insistence on critical scrutiny but expand the landscape of this scrutiny to include technological infrastructure that influences public discourse.

In addition, Ingrams highlights the need for informational literacy within populations to counteract the adverse effects of algorithmic eco-chambers. This proposal resonates with the notion of Popper that a democratic society requires not only the means of discussion but also an informed citizenship capable of participating critically with the information presented. The ability of people to discern reliable sources from unreliable ones is essential to promote an environment conducive to informed debate. In this sense, educational reforms aimed at improving critical thinking and discernment skills arise as institutional imperatives aligned with Popperian thinking.

However, the implementation of these reforms presents challenges. Ingram's framework suggests that technological solutions, such as algorithmic transparency, must prioritize human agency in the navigation of information landscapes. The tendency of certain algorithms to optimize commitment to precision can raise significant risks for democratic deliberation, asking questions about whether technology can be completely aligned with Popper's principles. Therefore, although institutions can reform to promote transparency and responsibility, the inherent complexities of technological biases require a continuous critical examination of how these tools affect public discourse.

Ultimately, Ingrams (2023) demands an integrating approach that recognizes the limitations of technology and strives to improve democratic participation. This perspective defies a simplistic acceptance of technological development as inherently beneficial for public discourse and underlines the importance of active civic participation in the configuration of information dissemination. When placing the contemporary challenges of information and responsibility within the framework of Popper's open society, Ingrams reminds us that the dynamism of social institutions must adapt and reform continuously in response to evolving political landscapes. This adaptation capacity is essential to maintain the principles of an open society amid the complexities introduced by modern technology.

### *Deliberative Democracy and Countering Misinformation*

Karl Popper's defence for an open society emphasizes the meaning of open discourse and the collective pursuit of truth in democratic structures. Such principles serve as the basis for examining alternative engagement models that can improve democratic deliberation, especially in the context of contemporary political challenges marked by polarization and misinformation. By investigating participatory models such as deliberative democracy, citizens' assemblies and digital platforms for public involvement, we can see how these approaches can incorporate Popper's ideals as they sail into the complexities of modern political discourses.

Deliberative democracy, as characterized by its emphasis on the grounded debate, mutual respect and inclusion, is closely aligned with Popper's view of an open society (Habermas, 1984). In such a structure, citizens meet to discuss and deliberate on pressing issues, reflecting the various perspectives within a pluralistic society. However, the potential for misinformation represents a significant challenge for this ideal. Esfeld (2022) emphasizes the need for a critical rationalist approach to mediating between open debate tensions and the wrong information prevalent in contemporary discourse. He argues that while opening is essential for dynamic civic involvement, it must be associated with institutional mechanisms that actively promote critical scrutiny of sources of information and encourage a demanding audience.

Critically evaluating this balance, it is evident that while the open debate is vital to promoting an environment conducive to democratic deliberation, it can inadvertently facilitate the dissemination of false narratives. The rise of social media as a Janvachā Platform for public involvement has intensified this

phenomenon, where unqualified information can rapidly proliferate, undermining the quality of the speech. Under this light, the insistence of Esfeld (2022) in a critical rationalist structure is essential, advocating educational reforms that improve the public's ability to critically engage in information. This approach not only protects the integrity of democratic deliberation but also promotes a culture of critical discourse, essential for a healthy, open society.

In addition, we must recognize alternative engagement models such as citizens' assemblies that have shown promises to promote discussion that reflects Popper's principles. These sets create structured environments, in which several participants can be involved in deliberation on specific issues, directly addressing the challenges presented by misinformation. The processes employed in citizens' assemblies, which usually include facilitation of experts and access to reliable information, reinforce the importance of a critical rationalist approach. By enabling participants to critically evaluate the information and articulate their perspectives, these assemblies operationalize the concept of Popper's open society, endorsing the informed public deliberation.

In addition, digital engagement platforms that prioritize verification and transparency can mitigate the dangers of misinformation and facilitate open speech. However, as noted by Esfeld (2022), the design of such platforms should maintain an unshakeable commitment to critical rationalism. It is not enough for these platforms to just amplify voices; they also have the responsibility of contextualizing the speech, providing users the tools and resources needed to discern credible information. Thus, the challenge lies in the creation of an ecosystem that encourages open debate by strengthening the public's critical involvement with the speech.

In short, the investigation of alternative engagement models rooted in Popper's defence reveals the delicate interaction between promoting open discourse and combating misinformation. Through a critical rationalist lens, as articulated by Esfeld (2022), it is imperative to implement institutional reforms that cultivate an informed citizenship capable of navigating the complexities of contemporary political challenges, thus enriching democratic deliberation and reinforcing the essence of open society.

### *Reforming Institutions to Defend the Open Society*

By synthesizing the analysis of the concept of open society of Karl Popper and its relevance to meet contemporary political challenges, it becomes obvious that the principles underlying this framework are essential for the evolution of resilient and adaptable democratic structures. Popper's advocacy for an open society emphasizes the critical role of critical discourse and democratic deliberation as a fundamental attributor of a flourishing policy (López, 2024). In our current socio-political climate, characterized by the increase in polarization, disinformation and populism, these Popperian ideals are guided beacons for institutional reforms aimed at revitalizing democratic processes.

The commitment to improve critical discourse requires the creation of mechanisms that encourage various points of view, facilitating a richer and more

inclusive dialogue among citizens. As Gerson (2024) suggests, relying on a deep historical perspective, the dynamics of power and governance have often been disputed by authoritarian trends that seek to suppress dissent and alternative stories. An open company, as conceived by Popper, intrinsically resists such trends by promoting an environment where criticism is not only tolerated but encouraged. This environment requires institutional frameworks that protect freedom of expression and promote active civic engagement.

In addition, the need for reforms in the democratic deliberation processes cannot be overestimated. The dynamism of democracy depends on the ability of citizens to engage in significant discussions that influence decision-making. Institutional reforms could include the integration of deliberative democratic practices, such as citizen assemblies or participatory budgeting, which allow broader participation in political discourse. These mechanisms prioritize the collective reasoning of the population, thus improving the legitimacy and responsiveness of democratic institutions. Such reforms resonate with the Popper argument that societies should be structured to allow a critical examination and continuous learning of past errors.

The imperative of continuous commitment to the ideals of an open society is underlined in the light of the change of political landscapes, which often favours majority accounts on the votes of minorities. As Gerson (2024) pointed out, history has shown that the retirement of open discourse can lead to the erosion of democratic values, stressing the need for lasting commitment to institutional reforms that support democratic principles. In this context, the institutional guarantees designed to protect the rights of minorities and promote an open culture of debate are not simply complements but are essential for the resilience of democratic societies.

Consequently, the relevance of the concept of open society of Popper is not limited to theoretical discourse. It requires practical application through an institutional reform aimed at strengthening democratic deliberation and critical discourse. While companies are sailing in the complexities of modern governance, the principles associated with an open society provide a framework to meet the political challenges with multiple facets of our time. By prioritizing these reforms, societies not only honour Popper's inheritance but also create opportunities for more inclusive citizenship, enlightened and critically engaged, ultimately promoting resilience against threats posed by the anti-democratic forces. The sustainable pursuit of these ideals remains imperative for the health and sustainability of democratic institutions, urging an active commitment to Popperian philosophy as a guide and an appeal to action in contemporary political discourse.

## Conclusion

In an ever more fragmented world of populist demagoguery, technological obfuscation and civic disconnection, Karl Popper's vision of the open society is a compelling and illuminating normative ideal. This essay has mapped how fundamental Popperian values—pluralism, critical rationalism and institutional reconstruction—can be used to reverse the democratic shortcomings of our era. By drawing

upon a broad range of scholarship from around the world and across disciplines, the analysis illustrates that the open society is more than a mid-20th-century liberal conception but a dynamic system for adaptive governance and democratic vigour.

Such threats from algorithmic disinformation, youth exclusion and performative politics can be countered through redesigns of institutions focusing on participatory governance, educational reform and algorithmic transparency. Popper's open society remains essential not just for preventing authoritarian entrenchment but also for imagining a democratic future grounded in reasoned argument and inclusive practices.

## **Recommendations**

### *Deliberative Institutionalization and Participatory Mechanisms*

Building on Popper's insistence that societies must be organized to allow systematic criticism, states and civic actors should institutionalize deliberative venues that convert criticism into policy testing and revision. Citizens' assemblies with randomly selected youth quotas, participatory budgeting processes that require public justification and post-implementation evaluation and mandated legislative 'sunset' reviews that trigger empirical reassessment create structured environments in which hypotheses about policy effectiveness can be publicly tested. Implementation steps include piloting citizens' assemblies in selected municipalities, legislating mandatory impact reviews for major social programmes, and creating an independent secretariat to monitor and publish follow-up evaluations. Responsible actors include national legislatures, municipal governments and independent policy evaluation units in civil society or universities.

### *Civic Education Framed Around Critical Rationalism*

Education policy should emphasize critical reasoning, media literacy and procedural civic skills (how to deliberate, how to file evidence-based petitions, how to engage in structured deliberation). A Popperian civic curriculum would explicitly teach students how to formulate testable policy propositions, design simple community-level evaluations and interpret empirical evidence. Implementation steps include integrating a compulsory module on critical reasoning and information literacy into secondary school curricula, teacher training programmes focused on deliberative pedagogy and university outreach programmes that partner students with local deliberative councils. Responsible actors include ministries of education, teacher training institutes and university outreach centres.

### *Algorithmic Transparency and Auditability as Epistemic Safeguards*

Governments and platforms should require that algorithms affecting public discourse and civic decision-making be structured for falsification and public testing. Concretely, this involves (a) open documentation of algorithmic objectives

and evaluation metrics, (b) release of anonymized input datasets or synthetic equivalents for third-party stress-testing, (c) routine third-party algorithmic audits and public disclosure of audit findings and (d) legally mandated mechanisms to appeal algorithmic decisions and trigger independent review. Implementation steps include enacting transparency regulations for public sector algorithms, establishing independent algorithmic audit bodies (with civil society representation) and piloting audit protocols in key public services (social benefits, content moderation where public interest is high). Responsible actors include data protection authorities, ministries of digital governance, independent audit firms and civil society watchdogs.

### *Youth Institutional Access and Procedural Guarantees*

To avoid tokenism and ensure youth critiques translate into policy learning, create formal procedural guarantees: statutory youth advisory seats on policy review boards, fast-track consideration of youth petitions and youth representation on oversight committees for algorithmic audits. Implementation steps include passing framework legislation on youth participation in governance, creating a national youth petitions portal with legal timelines for official response and review and funding capacity-building programmes for youth organizations to participate effectively. Responsible actors include parliaments, youth ministries, national human rights institutions and donor agencies.

### *Support for Independent Media and Epistemic Infrastructure*

An open society depends on pluralistic, investigative media and public knowledge institutions that generate testable claims and evidence. Support for fact-checking organizations, funding for local research centres that perform independent policy evaluations, and legal protections for investigative journalism form the epistemic infrastructure necessary for Popperian criticism to function. Implementation steps include creating small grants for local investigative journalism, public–private partnerships funding community research fellowships and legal reforms to protect journalistic independence. Responsible actors include media councils, donor agencies, universities and legislatures.

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## Book Review

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### **Madhumitha Srinivasan, Ketaki Ghoge, Stuti Haldar, Amir Bazaz, and Aromar Revi, *Climate Finance in India 2023*, 2023, pp. 142, Indian Institute for Human Settlements, ISBN-13:978-81-9584733-4.**

Climate change has become the emerging challenge of the 21st century, with substantial impacts on growing economies like India. According to this framework, the Indian Institute for Human Settlements (IIHS) offers a timely and factually grounded contribution through its book, *Climate Finance in India 2023*. This book focuses on India's current climate finance flows, estimates the required investments, and examines enabling policy instruments and institutional pathways to ensure India meets its climate goals. More significantly, it links these financial dynamics to the broader question of sustainability—economic, environmental, and social—making it a critical read for policymakers, researchers, and financial actors engaged in climate transition planning.

This book comprises eight chapters, accompanied by a detailed executive summary. It is structured to gradually build the case for why India needs an extreme shift in investment priorities to meet its Nationally Determined Contributions (NDCs), while safeguarding economic resilience and inclusive development. The opening chapters (Chapters 1 and 2) explore the foundational relationships between climate change and financial systems, including domestic and international finance sources. Climate finance is positioned not only as a flow of money but also as a mechanism to alleviate long-term macroeconomic risks, including loss of GDP, employment dislocation, and ecological degradation.

This book's sustainability lens is evident, particularly in its presentation of low-carbon and climate-resilient development concepts. Drawing from both the Intergovernmental Panel on Climate Change (IPCC) and India-specific macroeconomic studies (e.g., RBI, 2023; Kompas et al., 2018), this book focuses on the fact that India could suffer a GDP loss of 3%–10% annually by 2100 if climate risks are not appropriately managed by the government and private enterprises. This links climate finance directly to the sustainability of economic growth itself, as it is not only a question of emissions but also of future livelihoods and institutional stability (pp. 11–13; Ch. 4).



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A key strength of the report lies in its quantification of investment needs. It estimates that India requires an annualized climate investment of \$167 billion from 2016 to 2030—about 8% of India's 2015 GDP—to meet its NDC targets. Achieving a 1.5°C pathway demands 7%–18% of GDP2019 annually until 2050 (pp. 42–45). These figures reflect ambition and expose the scale of the sustainability finance gap. Moreover, climate finance in India remains one-sided, with 90% focused on mitigation and only 10% directed toward adaptation of climate finance (pp. 20–25). The report rightly notes that such an imbalance undermines long-term resilience, especially for vulnerable populations in agriculture, water-stressed regions, and informal settlements.

This book's deep dive into macroeconomic impacts is another vital contribution (Ch. 4). It links physical and transforming risks to inflation, trade deficits, and sectoral shifts. It discusses the difference in GDP between business-as-usual and low-carbon scenarios, estimating a 0.7% loss in GDP by 2050 in a low-carbon path—a doable trade-off if social and regional inequalities are appropriately addressed. This also connects to the broader sustainability point of view: A just transition must balance emission reductions with social protection, livelihood continuity, and careful management and allocation of resources.

Perhaps the policy-relevant and sustainability-linked discussion comes mostly from Chapter 7 on transition risks and abandoned assets. Over 40 GW of coal power capacity is already stressed in 34 coal power plants, with \$25 million in outstanding loans (Standing Committee on Energy, 2018), and public sector banks are heavily exposed (pp. 91–93). This book also argues persuasively that continued investment in fossil fuels—including the \$90 billion invested in coal plants from 2006 to 2014—risks establishing carbon lock-ins and undermining financial stability. The sustainability theme is ecological (reducing carbon intensity) and economic (preventing financial shocks from stuck public investments).

However, this book clearly maps these risks but does not fully develop the macroeconomic modeling dimension. For example, it references GDP loss projections and cost-benefit gaps, but there is no imitation of fiscal scenarios under delayed versus accelerated climate investments. A deeper analysis of inter-temporal trade-offs, for example, upfront fiscal stimulus for green infrastructure versus long-run gains in productivity and employment, would improve the sustainability finance argument. Similarly, while it recognizes that India's cumulative adaptation costs should reach ₹86 trillion by 2030 (p. 113), as per Climate Policy Initiative 2020, it is short of the required price.

The report admirably addresses governance and institutional capacity gaps impacting sustainable finance flows. Many state governments lack the skills necessary for climate budgeting, while private sector work in adaptation finance remains negligible. The report recommends the creation of a public facility to de-risk private finance and crowd-in investment—a recommendation with substantial macroeconomic relevance—although details on design and accountability mechanisms remain sparse (pp. 117–118).

This study differs from many other climate finance reports since it consistently links climate action to the Sustainable Development Goals (SDGs). It also

proclaims that adaptation finance should be harmonized with SDG-aligned development investments, particularly in health, education, urban resilience, and agriculture. This inter-relation is essential to ensure climate finance is not stagnant or limited to scientific knowledge; it should support holistic development pathways.

In conclusion, *Climate Finance in India 2023* offers an in-depth and accessible analysis of India's climate finance landscape. Its importance extends beyond the financial sector to anyone concerned with sustainable development, fiscal stability, and ecological justice. Its factual strength and normative clarity make it ideal for policy advisors, state climate planners, financial regulators, and sustainability researchers. While it could be nourished by integrating dynamic macroeconomic models or scenario-based investment trade-offs, it nevertheless succeeds in making the case that climate finance is not a circumstantial issue, but the foundation of India's long-term sustainability strategy.

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## Book Review

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**Tord Kjellstrom, Nicolas Maître, Catherine Saget, Matthias Otto and Tahmina Karimova, Trang Luu, Adam Elsheikhi, Guillermo Montt, Bruno Lemke, Antoine Bonnet, Marek Harsdorff, Chris Freyberg, David Briggs and Angela Giannini, *Working on a Warmer Planet: The Impact of Heat Stress on Labour Productivity and Decent Work*, 2019, pp. 103, International Labor Office, ISBN: 978-92-2-132967-1 (print).**

The book *Working on a Warmer Planet* has a mainstream focus on heat stress on labor productivity and decent work. The ILO's 2019 publication is very important to climate change advocacy and socioeconomic analysis. Heat stress is both an environmental and occupational hazard with major implications for global labor markets, according to the report. Climate science, occupational safety, and labor economics are integrated into a comprehensive framework that emphasizes the problem's urgency and solutions. The importance of the above content and the required basic understanding of climate change make it difficult for the common reader to follow the context in this book. Although the book has followed common words and is easy to understand, it makes a sincere attempt to bring this topic up for discussion. The book will definitely expand the boundaries of the readership of heat stress on labor productivity and decent work in various streams of science and humanities.

According to the introductory sections, if global warming is kept to 1.5°C, it is expected to increase the frequency and severity of heat stress, depriving people of 80 million full-time jobs by 2030, or 2.2% of all working hours worldwide (p. 13). Heat stress is also positioned in the introduction as a critical issue for the Sustainable Development Goals (SDGs) of the UN, particularly those on health, poverty alleviation, and decent work. Chapter 1 focuses on "Heat Stress and Decent Work". The heat stress, which can result in heat exhaustion, diminished physical capacity, and potentially fatal heatstroke, is defined in the first chapter as heat received in excess of the body's ability to maintain thermal equilibrium (p. 17). Temperature, humidity,



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radiant heat, wind speed, and other physiological and environmental factors that increase risk are explained in detail. This chapter highlights how vulnerable workers, especially those in construction and agriculture, as well as women, older workers, and migrant laborers, are disproportionately affected. By pointing out that most impacted people reside in low-income tropical nations, it also links these effects to more general social justice issues (p. 19).

Chapter 2 is based on the “Global Overview”. This chapter estimates heat exposure quantitatively using the wet bulb globe temperature index (p. 21). Productivity losses are estimated by the ILO using labor market data and climate projections from the IPCC Representative Concentration Pathways. By 2030, it is anticipated that the 1.4% of working hours lost to heat stress in 1995 will increase to 2.2% under the assumption of shaded work or 3.8% if work is done in direct sunlight. According to the report, the impacts will be unevenly distributed, with high-latitude regions experiencing negligible losses and Southern Asia and Western Africa expected to lose over 5% of total working hours (p. 27). Chapters 3–7 follow the theme of regional analyses, while the regional chapters analyze the incidence, forecasts, and sectoral breakdowns for the Americas, Asia and the Pacific, Africa, the Arab States, and Europe and Central Asia. According to Chapter 3 (p. 39), heat stress is expected to result in GDP losses of up to 4% in the worst-affected countries in Africa, where agriculture is the primary source of employment. Heat stress is linked to chronic kidney disease in the Americas, according to case studies that show serious health effects among Central American sugarcane workers (p. 45). Due to their reliance on construction, which frequently uses migrant labor, the Arab States are extremely vulnerable (p. 53). High population densities and reliance on agriculture will cause the biggest productivity losses in Asia and the Pacific, particularly in Southern Asia (p. 59). Despite having overall less impact, Europe and Central Asia are increasingly at risk from extreme heat events (p. 70).

The adaptation through government regulation, employer practices, international labor standards, and worker engagement is covered in Chapter 8 (p. 73), which follows “Adapting to Heat-Related Hazards”. The Occupational Safety and Health Convention, 1981 (No. 155) of the ILO is mentioned as a crucial tool for directing national reactions. It is emphasized that the collaboration between employers, workers, and governments is a crucial instrument for customizing workplace adaptation plans. The steps include investing in cooling technologies, modifying work schedules, and creating areas with shade. Chapter 9 focuses on the mitigation efforts. The long-term decreases in heat stress are linked to mitigating climate change in the last thematic chapter (p. 83). In addition to stopping additional temperature increases, mitigation generates jobs in environmentally friendly industries. According to the report, if aggressive mitigation is not implemented, the economic losses resulting from heat stress will continue to increase after 2030, potentially jeopardizing the stability of the global GDP.

The advantages and contributions of this book are the interdisciplinary approach, which blends economic analysis, occupational health science, and climate modelling, which is its strongest point. It makes the topic relatable to both policymakers and the public by striking a balance between macroeconomic

forecasts and case studies at the micro level. It places heat stress in the context of the larger development agenda by relating its findings to the SDGs. While the restrictions are the use of more gender-specific data to more accurately evaluate the disparate effects. The risks in poorly ventilated indoor workplaces are somewhat understated by the emphasis on outdoor sectors. Furthermore, the report's 2030 time horizon examines the longer-term post-2050 implications, even though it is realistic for policy planning.

All things considered, *Working on a Warmer Planet* is a well-researched and pertinent work for policy. It recasts climate change as a major threat to decent work and economic stability rather than just an environmental problem. The report is a vital resource for governments, labor unions, and researchers dedicated to protecting workers in a warming world because of its data-driven analysis and useful suggestions. Its message is clear: In the face of rising global temperatures, proactive adaptation and mitigation are crucial to safeguarding worker rights, productivity, and health.

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