Feasibility and Accessibility of e-Governance in the District Judiciaries of Northeast India

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ABSTRACT

E-governance in India has progressively emphasized the use of digital systems to strengthen transparency, administrative efficiency, and public access to government services, with judicial administration becoming a key area of reform. Within this broader agenda, the e-Courts Mission Mode Project (MMP), especially its Phase III rollout, aims to advance judicial digitalization and promote inclusive access to justice. This study examines both the feasibility covering infrastructural readiness, policy support, and institutional capacity and the accessibility of e-Courts in the North-Eastern Region (NER) of India, including Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura. Factors such as literacy levels, linguistic diversity, socio-economic conditions, and cultural contexts are considered. Using evidence from Parliamentary committee reports, Government of India Phase III planning documents, High Court ICT status reports, and an evaluation conducted by the National Council of Applied Economic Research (NCAER), the study identifies key challenges, evolving practices, and region-specific approaches. The findings highlight that effective digital justice requires more than technological infrastructure; it depends on assisted service delivery, multilingual platforms, and sustainable implementation models to ensure meaningful access for remote and local populations.

Keywords: e-Governance, e-Courts, District Judiciaries, Northeast India, ICT

1. Introduction

The rapid advancement of Information and Communication Technology (ICT) has transformed the functioning of public institutions across the globe, including the judiciary. In India, this digital revolution has been formalized through the e-Courts Mission Mode Project (MMP) a flagship initiative aimed at enhancing transparency, efficiency, and accessibility in judicial processes. The project seeks to digitize case management, improve citizen services, and reduce pendency through the integration of technology into court administration (Verma, 2018). As India's judiciary continues to modernize, understanding the implementation and outcomes of e-governance initiatives at the grassroots level particularly in district courts is critical for assessing their long-term effectiveness.

The Indian judicial system has historically been burdened with massive case backlogs, procedural delays, and accessibility barriers. The adoption of e-Courts is therefore seen as a transformative reform to promote efficiency and ensure speedy justice delivery. Dahiya and Banerjee (2024) argue that the introduction of electronic case management systems and paperless documentation has streamlined procedural workflows, reduced manual bottlenecks and improved case monitoring. Similarly, Basu and Jha (2024) emphasize

that ICT adoption across various High Courts and district courts has led to better transparency and citizen satisfaction, though disparities remain in infrastructure and user adaptation.

The Northeast region of India presents a unique context for studying e-governance implementation due to its geographical diversity, infrastructural challenges, and varying levels of digital literacy. Bhagawati (2020) highlights that while Northeast India has witnessed significant strides in digital governance, uneven technological penetration and capacity gaps continue to affect the consistency of implementation. These challenges resonate strongly within Assam's district judiciary, where rural–urban disparities and limited technical manpower often hinder uniform adoption of digital platforms. Despite these constraints, e-Courts have begun to reshape the interface between citizens and the justice system by enabling e-filing, virtual hearings, and real-time access to case status.

E-governance in the judiciary also contributes to greater accountability and public trust. Ragupathi and Raman (2025) observe that the e-Court system has improved transparency by minimizing physical interference, allowing litigants and lawyers to access case information directly through online portals. Jethva (2025) further notes that innovations such as virtual courts and e-filing systems have proven indispensable

during and after the COVID-19 pandemic, ensuring the continuity of judicial processes while enhancing access to justice, particularly for marginalized communities. This demonstrates how technology can strengthen institutional resilience and inclusiveness within the judicial system.

Technological intervention in the judiciary has also paved the way for emerging tools such as Artificial Intelligence (AI) to enhance efficiency in case management. Khimjibhai and Joshi (2025) suggest that AI can assist in document classification, legal research, and predicting case outcomes, potentially transforming trial processes and reducing human workload. Meanwhile, Shrivastava (2023) contextualizes this transformation as part of a broader historical evolution of the Indian judicial system from colonial legal institutions to a digitally empowered judiciary reflecting India's commitment to modernization and reform.

Despite these achievements, several studies point out persistent structural and operational challenges. Mundhra (2021) identifies the slow adoption of digital summons and notifications, emphasizing the need for procedural and legislative updates to align with technological capabilities. Likewise, Gopal (2024) argues that while judicial reforms have improved efficiency, disparities in digital readiness between metropolitan and rural area courts still limit equitable access. These findings underscore that e-Governance, though progressive, remains an evolving process that requires continuous institutional support, capacity building, and monitoring.

Furthermore, empirical analyses of judicial data indicate that technology can play a significant role in predicting and managing case pendency. Verma et al. (2023) demonstrate through statistical modeling that digital case management systems can help forecast timelines and resource requirements, thereby aiding judicial planning and decision-making. This integration of data-driven insights marks an important step toward a more proactive and transparent judicial administration.

Overall, the digital transformation of India's judiciary represents a paradigm shift toward efficiency, inclusivity, and accountability. However, for regions like Assam, realizing the full potential of e-Governance in district courts necessitates addressing contextual challenges such as infrastructure gaps, digital literacy, and capacity development. Building upon the literature, this study explores how e-Governance initiatives under the e-Courts Mission Mode Project have been implemented in Assam's district judiciary and examines their impact on accessibility, efficiency, and public satisfaction. The findings aim to contribute to the broader discourse on digital justice in India by identifying practical measures to strengthen the judiciary's technological backbone while ensuring equitable access for all.

2. Policy Background & Rationale

India launched the e-Courts MMP in 2007 under the National e-Governance Plan to modernize court administration and reduce pendency. Phase I focused on computerization and connectivity; Phase II expanded citizen-facing services (e-Filing pilots, case status search, NJDG integration); Phase III (2023–2027) sanctioned at ₹7,210 crore aims to deliver *"digital courts as a service"* through paperless workflows, cloud infrastructure, AI-assisted tools, and scaled Virtual Courts and e-Sewa Kendras. (DoJ, 2025; PRS Legislative Research, 2020.)

The NER's mountainous terrain, dispersed habitations, border security contexts, and deep linguistic diversity produce high justice access costs and administrative asymmetries. Digital court services could offset travel burdens and enhance transparency, but weak power and broadband supply, low digital literacy, and multilingual requirements complicate adoption. (NCAER, 2015; e-Committee, Supreme Court of India, 2024.)

3. Conceptual Framework: Feasibility vs. Accessibility Dimensions

This research adopts a dual-lens conceptual framework distinguishing system-side feasibility from user-side accessibility. Feasibility addresses whether judicial institutions can reliably deploy and sustain digital platforms, focusing on infrastructure, institutional capacity, and funding stability. It asks: Do courts possess the technical and organizational readiness to implement and maintain e-Court systems?

In contrast, accessibility examines whether litigants and local communities can meaningfully use these services. It asks: Are citizens equipped technologically, linguistically, and financially to participate in digital justice?

These dimensions are not independent; they interact dynamically. For instance, an unreliable power supply or weak internet connectivity (feasibility constraint) can degrade video-conferencing quality, discourage users and erode trust in virtual hearings. Conversely, limited digital literacy and low uptake by citizens (accessibility gap) reduced demand, weakening institutional incentives and funding allocations for further technological upgrades. Thus, progress requires simultaneous attention to both axes technical infrastructure and social inclusion forming the foundation of sustainable e-Governance in judiciary systems (Fig 1).
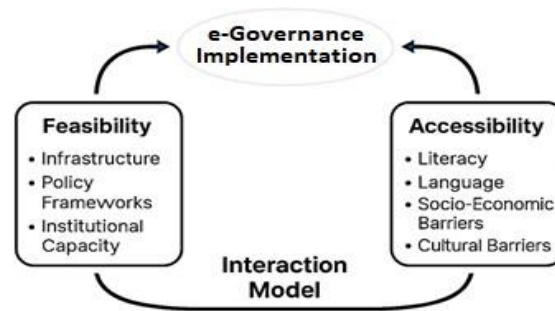
Fig 1. Feasibility and accessibility interaction model

4. Regional Implementation Overview

The NER falls under multiple High Court jurisdictions: Gauhati High Court (Assam, Nagaland, Mizoram, Arunachal Pradesh), High Court of Meghalaya, High Court of Manipur, High Court of Tripura, and High Court of Sikkim. Core national e-Court services case status, cause lists, judgments, NJDG sync, VC links, e-Payments, and e-Sewa Kendras are available but unevenly adopted. Urban centers show higher portal traffic; remote districts report intermittent access. (Gauhati High Court, 2025; High Court of Meghalaya, 2024; NCAER, 2015.)

5. Evidence Review: Feasibility Factors

5.1 Infrastructure Readiness

A Standing Committee review flagged connectivity deficits as a binding constraint for virtual courts nationally; NER hill districts exemplify this gap. DoJ Phase III guidance calls for hybrid (fiber + 4G/5G/satellite) architectures and solar backup to stabilize court ICT environments. NCAER's evaluation found that while hardware provisioning exceeded 90% in many sites, effective utilization lagged in locations with unstable power or bandwidth conditions common in the Gauhati High Court's far-flung subordinate courts. (PRS Legislative Research, 2020; DoJ, 2025; NCAER, 2015.)

5.2 Institutional Capacity

Digital courts require more than devices: registry staff must scan, index, and validate filings; judges must adopt electronic case bundles; and the bar must shift to structured e-Filing. NCAER survey data showed uneven staff awareness across High Courts, with the Guwahati region behind better digitized metros. Practitioner reporting indicates that file formats, e-signatures, and scanning burdens deter smaller practices, leading to "dual track" (paper + digital) filings that dilute gains. Phase III mandates structured training across cadres. (NCAER, 2015; Bar & Bench, 2024; DoJ, 2025.)

5.3 Policy & Funding Sustainability

Phase III central funds cover core capital outlays, but OPEX gaps maintenance, connectivity subscriptions, local language translation, archival storage fall to states and High Courts. The Parliamentary Committee recommended pooled procurement, phased rollout, and cost-recovery models (traffic challan VC fine collection) to bridge sustainability gaps. DoJ Virtual Court data show that digital petty-case disposal can reduce footfall and administrative cost, partially offsetting OPEX. (PRS Legislative Research, 2020; DoJ, 2025.)

6. Evidence Review: Accessibility Factors

6.1 Digital Literacy & Assisted Access

Litigants in Guwahati sample districts reported low direct use of e-Court portals, relying on officials for printouts an indicator of constrained digital capacity. Committee recommendations include compulsory ICT orientation for the bar and expansion of e-Sewa / Judicial Service Centres as assisted access hubs. DoJ Phase III incorporates assisted filing counters, VC facilitation, and prison video links to reach digitally excluded users. (NCAER, 2015; PRS Legislative Research, 2020; DoJ, 2025.)

6.2 Language Diversity & Interface Design

The NER's linguistic complexity (ethnic languages, state official bilingualism, local dialects) makes English-only portals exclusionary. The Gauhati High Court ICT profile documents outreach through kiosks and messaging channels designed for multilingual user bases; Meghalaya's e-Filing Rules and mobile app were framed to support broader accessibility in geographically remote areas of the state. NIC's launch note confirms citizen-facing design goals for Meghalaya's app. A multilingual SMS/IVR layer is a priority accessibility intervention. (e-Committee, Supreme Court of India, 2024a; High Court of Meghalaya, 2024; NIC, 2021.)

6.3 Economic & Cultural Barriers

Remote litigants face high travel and lodging costs to attend hearings. DoJ reports show that Virtual Courts for traffic and petty offences significantly reduce in-person appearances and speed fine realization, demonstrating direct cost relief. Yet legal scholarship from the pandemic cautions that digital poverty lack of devices, low data affordability and cultural unfamiliarity with remote testimony can undermine fairness. Hybrid formats with court-facilitated VC are recommended for socio-economically vulnerable

groups. (DoJ, 2025; Live Law, 2020; NUALS Law Journal, 2020.)

7. Regional Case Evidence

7.1 Gauhati High Court Multi-State Cluster

ICT initiatives include the first Virtual Court in the NER (Assam), extensive CIS rollouts, mass digitization (hundreds of millions of pages), solar backup deployments, NSTEP mobile process service, and e-Sewa Kendras across Assam & Mizoram. Replication constraints remain in sub-divisional courts lacking reliable internet for NJDG sync evidence of infrastructure-driven feasibility ceilings. (e-Committee, Supreme Court of India, 2024.)

7.2 Meghalaya High Court: Mobile-First + e-Filing Governance

The Court issued Online Electronic (e-Filing) Rules, 2024, codifying digital submission formats. A NIC-supported mobile app extends cause list, filing status, judgments, and certified copy tracking to mobile devices critically in a state with scattered hill communities. e-Committee documentation records the continuity of video-conferencing–enabled judicial services during the COVID-19 period, alongside outreach to local bar associations in remote court complexes. (High Court of Meghalaya, 2024; NIC, 2021; e-Committee, Supreme Court of India, 2024.)

7.3 Virtual Courts at Scale – What They Mean for the NER

National Virtual Court statistics demonstrate high-volume online disposal of traffic challans an adaptable model for NER hill travel burdens. Pandemic-era critiques recommend calibrated usage: low-complexity matters online; evidence-heavy matters hybrid; state support for tech access. (DoJ, 2025; PRS Legislative Research, 2020; Live Law, 2020.)

8. Strategic Pathways for the Northeast Judiciary

I. **Connectivity Clusters:** Establish strong connectivity hubs at district courts and extend digital infrastructure to sub-divisions. This cluster approach ensures that even remote hill blocks remain linked to the judicial network (DoJ, 2025; PRS Legislative Research, 2020).

II. **Power Resilience:** Adopt solar-powered microgrids with battery storage to address frequent outages in hill regions. Gauhati High Court's pilot projects demonstrate the viability of renewable power for maintaining uptime in ICT systems (e-Committee, Supreme Court of India, 2024).

III. **Capacity Build Cycles:** Institutionalize quarterly ICT certification for court registry staff complemented by remote refresher training through online modules. This ensures sustained skill development rather than one-off training sessions (Bar & Bench, 2024; DoJ, 2025).

IV. **Expand e-Sewa & Mobile Legal Vans:** Scale e-Sewa Kendras and introduce mobile legal vans equipped for e-Filing and video conferencing. These services bridge access gaps for litigants in rural areas where personal devices and connectivity remain scarce (NCAER, 2015; PRS Legislative Research, 2020).

V. **Multilingual SMS/IVR Stack:** Deploy low-bandwidth communication tools such as SMS and IVR in regional languages like Assamese, Khasi, Garo, Mizo, and Nagamese. This multilingual approach addresses language barriers and increases trust among diverse user groups (High Court of Meghalaya, 2024; NIC, 2021).

VI. **Hybrid Hearing Protocol Matrix:** Adopt a structured triage model to assign hearing modes physical, hybrid, or virtual based on case complexity and connectivity readiness. This balances efficiency with procedural fairness (DoJ, 2025; NUALS Law Journal, 2020).
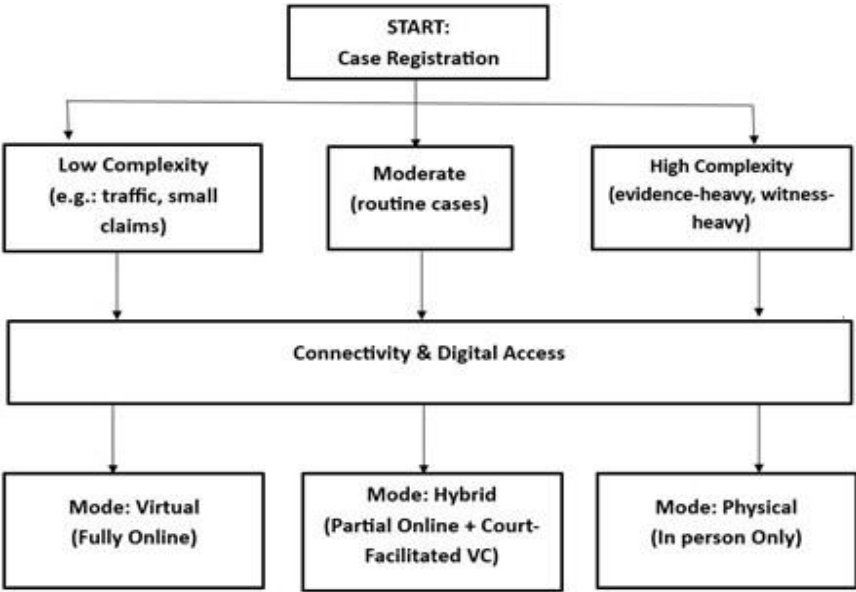

Fig 2. Hybrid Hearing Triage Model

VII. **Metrics-Linked Funding:** Tie the release of Phase III funds to measurable outcomes such as NJDG data quality, adoption rates of e-Filing, and usage of video conferencing systems. Linking finance to performance promotes accountability (Gauhati High Court, 2025; DoJ, 2025).

VIII. **Community Digital Justice Camps:** Conduct regular outreach camps in rural areas for live demonstrations of e-Filing, registration, and assisted services. These camps build awareness, encourage adoption, and reduce reliance on middlemen (PRS Legislative Research, 2020; NCAER, 2015).

9. Conclusion

The e-Courts program is a transformational opportunity for India's frontier justice regions. In the Northeast, where distance, fragile infrastructure, and linguistic plurality have long obstructed timely adjudication, digital enablement can reduce travel burdens, surface real-time data, and increase transparency. But deployment without design for use risks creating under-utilized systems. Evidence across official reviews and evaluation studies converges: the NER needs infrastructure reinforcement + assisted multilingual access + sustained training to reach an inclusive digital justice equilibrium. If Phase III investments are strategically localized, the region can move from pilot-scale success to a durable model of feasible and accessible e-Justice. (DoJ, 2025; e-Committee, Supreme Court of India, 2024; NCAER, 2015.)

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