DURWANKUR AI LAB PVT. LTD. | WHITE PAPER

AI in Indian Courts: A Framework for Responsible Deployment in Quasi-Judicial Proceedings

A policy and technology guidance paper for courts, tribunals, and government legal bodies

INTENDED AUDIENCE: High Court administrators, District Court judges, Government ministries, e-Courts project officials

> ***"AI can accelerate Indian judicial proceedings — but only when deployed with the right governance, data sovereignty safeguards, and human-oversight frameworks built in from day one."***

Published by Durwankur AI Lab Pvt. Ltd. | Mumbai, Maharashtra, India | www.durwankur.ai

Executive Summary

India's judiciary faces a crisis of scale that no amount of judicial appointments alone can resolve. As of 2024, 45.3 million cases are pending across India's courts — 34.3 million criminal and 10.9 million civil — according to data presented in the Rajya Sabha. While 2024 saw an encouraging milestone (disposals exceeded fresh filings for the first time per NJDG), the structural backlog accumulated over decades cannot be cleared through incremental improvements alone.

Artificial intelligence offers a genuine, proven path to judicial efficiency — not by replacing judges, but by automating the administrative and documentary work that surrounds judicial decision-making. Drafting routine orders, summarising lengthy case records, identifying applicable precedents, processing evidence documents, and managing court scheduling: all of these are tasks that AI systems can perform at high speed and low cost, freeing judicial officers to focus on the core function of adjudication.

This white paper presents a framework for responsible AI deployment in Indian quasi-judicial proceedings. It draws on international experience from the UK, EU, China, and Singapore; India's own e-Courts initiative experience; and the authors' experience deploying JudexVault — India's own legal AI model — in government quasi-judicial settings.

1. The Scale of the Challenge

The numbers are stark. India has 45.3 million pending cases across all courts as of 2024. With approximately 19,195 judges serving in lower courts and 5,254 judicial vacancies unfilled (Rajya Sabha data, 2024), each serving judge carries a caseload that makes timely disposal statistically impossible without process innovation.

> ***45.3 million pending cases | 19,195 serving judges | 5,254 judicial vacancies | One judge per ~2,360 pending matters***

The 2024 improvement — disposals finally exceeding new filings — is genuinely encouraging, but it addresses the flow problem, not the stock problem. At 2024 disposal rates, clearing the existing backlog would take 3.4 years even if no new cases were filed. New filings have not stopped. The structural gap between judicial capacity and case volume requires a systemic solution.

Quasi-judicial bodies — Consumer Forums, Revenue Tribunals, Debt Recovery Tribunals, Family Courts, and Labour Courts — face an analogous but less-reported challenge. These bodies collectively handle tens of millions of matters annually with even less administrative infrastructure than the formal court system.

2. What AI Can — and Cannot — Do

2.1 Appropriate AI Functions in Judicial Proceedings

- Document processing: Automatically digitising, classifying, and organising case documents from mixed physical and digital sources
- Case summarisation: Generating structured summaries of lengthy case records to brief judicial officers before hearings
- Precedent identification: Surfacing relevant Supreme Court and High Court judgements for judicial consideration
- Draft order preparation: Generating first-draft orders for routine, non-contested matters (tax assessments, default decrees) for judicial review and approval
- Scheduling optimisation: Analysing case complexity, resource availability, and precedence to optimise hearing schedules
- Translation: Converting regional-language documents to English and vice versa to reduce cross-linguistic delay

2.2 Functions That Must Remain Human

- Judicial determination: All findings of fact, applications of law to fact, and final orders must be made by a human judicial officer. AI may assist but never decide.
- Assessment of credibility: Evaluating witness testimony, assessing intent, and making findings on contested facts require human judgment that AI cannot replicate or replace.
- Constitutional interpretation: Questions involving fundamental rights, constitutional validity, or novel legal questions require human judicial reasoning.

> ***'AI in courts is not about replacing judges — it is about giving every judge the support of an infinitely patient, perfectly informed judicial assistant.' — Durwankur AI Lab***

3. The JudexVault Model — What Deployed Government AI Looks Like

JudexVault is Durwankur AI Lab's government-focused legal AI platform, already deployed in quasi-judicial proceedings in India. It demonstrates what responsible AI deployment in judicial contexts looks like in practice: India-hosted infrastructure, role-based access controls, immutable audit logs, DPDP Act 2023 compliant data processing, and a design that places AI outputs squarely under human review before any effect on proceedings.

JudexVault is trained on India's most comprehensive legal corpus: 5,000+ Central and State Acts including all amendments, 75 years of Supreme Court judgements, and 10,000+ real cases

contributed by practicing lawyers. This grounding in Indian law distinguishes it from general-purpose AI tools that produce plausible but India-specific-inaccurate outputs.

4. Governance Framework for AI in Courts

4.1 The Three-Layer Oversight Model

We recommend a three-layer governance model for AI deployment in Indian judicial institutions:

- Layer 1 — Technical Controls: AI outputs are labelled, source-attributed, and confidence-scored. No AI output reaches a judicial officer without a human review step. All AI interactions are logged in immutable audit records.
- Layer 2 — Institutional Policies: Each court or tribunal deploying AI adopts written policies specifying permitted use cases, review requirements, escalation procedures, and annual performance audits.
- Layer 3 — Regulatory Framework: The Supreme Court e-Committee, in consultation with the Law Commission and MeitY, should develop national AI standards for judicial AI systems covering training data quality, accuracy thresholds, data sovereignty, and grievance redress.

4.2 Data Sovereignty Requirements

All AI systems deployed in Indian judicial institutions must process data exclusively on Indian infrastructure. Case records, party details, witness statements, and judicial deliberations constitute among the most sensitive personal and institutional data in the country. The DPDP Act 2023 (fully effective May 2027) explicitly requires India-hosted processing for personal data. AI providers serving Indian courts must demonstrate India-based infrastructure as a non-negotiable compliance requirement.

5. Implementation Roadmap

Phase	Timeline	Scope	Key Milestone
Pilot	0–6 months	3 quasi-judicial bodies	AI document processing deployed
Scale	6–18 months	25 District Courts	Case summarisation live
Standardise	18–36 months	All 25 High Courts	National AI policy issued
Expand	36+ months	Full judicial hierarchy	AI-assisted scheduling nationwide

6. Key Recommendations

- The Supreme Court e-Committee should develop national AI deployment standards for Indian courts within 12 months

• All judicial AI systems must be India-hosted, audited annually, and subject to mandatory human review before any output affects proceedings

• Quasi-judicial bodies (Consumer Forums, Revenue Tribunals) should be prioritised for AI deployment pilots given their high volume of routine, formulaic matters

• The Government of India should establish a dedicated Legal AI Sandbox under MeitY to enable controlled testing of AI tools in judicial settings

• AI-assisted document processing and case summarisation should be the first use cases deployed — lowest risk, highest throughput impact

About Durwankur AI Lab & AdvokAI

Durwankur AI Lab Pvt. Ltd. is India's only technology company built exclusively around Indian Legal AI. We develop three products: AdvokAI (AI drafting assistant for advocates), JudexVault (institutional legal AI for government and courts), and DurwankurLLM (India's own legal large language model trained on 5,000+ Indian statutes, 75 years of Supreme Court judgements, and 10,000+ real cases from practitioners).

We are a Government-first company with active B2G deployments. Our team combines practicing advocates, AI/ML engineers, cybersecurity specialists, and legal researchers — all focused on making Indian legal practice smarter, faster, and more just.

To learn how JudexVault is supporting government legal proceedings today, contact our Government Solutions team. Request a demonstration: www.durwankur.ai/government

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