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## **TECHNOLOGY-DRIVEN LEGAL AID AND ITS POTENTIAL TO REFORM CRIMINAL JUSTICE**

Pushkar Singh<sup>1</sup> & Shivani Verma<sup>2</sup>

### **INTRODUCTION**

The Constitution of India, through its Article 39A imposes a duty upon the State to provide Free Legal Aid, so as not to deny any person an opportunity for justice due to lack of financial means or other disability<sup>3</sup>. The Supreme Court has reaffirmed that legal aid should commence at the earliest possible stages and has strongly suggested that technology should be used to improve accessibility and equity in the Justice System<sup>4</sup>. Although the Constitution provides for Free Legal Aid, the implementation of the Legal Aid Scheme in India is challenging. Studies indicate that only an estimated 8% of the undertrial prisoners who are entitled to Free Legal Aid actually receive it<sup>5</sup>. The combination of poverty, illiteracy, and institutional deficiencies has created a crisis in the enforcement of law and, thereby, a violation of the rule of law<sup>6</sup>. The emergence of digital platforms and Online services provides an unparalleled opportunity to improve the Criminal Justice System<sup>7</sup>.

### **LEGAL AID AND TECHNOLOGY IN THE INDIAN CONTEXT**

The legal assistance infrastructure in India has definite legislative and constitutional underpinnings. To ensure this, the Indian Parliament passed the Legal Services Authorities Act, 1987, which established a three-tiered structure of National, State, and District Legal Services Authorities (NALSA/SLSAs/DLSAs)<sup>8</sup>. There are specific types of individuals identified in Section 12 of the Act that qualify for legal aid. Additionally, individuals accused of a crime who cannot pay for legal counsel are to have a public defender appointed to

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<sup>1</sup> The author is a LLM student at Himachal Pradesh National Law University, Shimla.

<sup>2</sup> The co-author is a LLM student at National Law University Jodhpur, Rajasthan

<sup>3</sup> INDIA CONST. art. 39A (inserted by the Constitution (Forty-Second Amendment) Act, 1976).

<sup>4</sup> *Hussainara Khatoon (I) v. State of Bihar*, (1980) 1 SCC 81 (India); *State of Maharashtra v. Manubhai Pragaji Vashi*, (1995) 5 SCC 730 (India); *In re: Policy Strategy for Grant of Bail*, (2021) 3 SCC 451 (India).

<sup>5</sup> NAT'L LEGAL SERVS. AUTH., *Status of Legal Aid in India* (2019); see also *Prison Statistics India 2021*, NAT'L CRIME RECORDS BUREAU, Ministry of Home Affairs, Government of India.

<sup>6</sup> *Manubhai Ratilal Patel v. State of Gujarat*, (2013) 1 SCC 314 (India); *Zahira Habibullah Sheikh v. State of Gujarat*, (2004) 4 SCC 158 (India).

<sup>7</sup> *In re: Access to Justice for All*, Suo Motu Writ Petition (C) No. 3 of 2020 (India); VIDHI CTR. FOR LEGAL POL'Y, *Technology and the Future of Justice Delivery in India* (2020).

<sup>8</sup> Legal Services Authorities Act, No. 39 of 1987, §§ 3–11A, INDIA CODE (establishing NALSA, SLSAs, and DLSAs).

represent them by the court, and every police station is required to inform arrested persons of their right to counsel<sup>9</sup>.

Over the years, NALSA and its associated bodies have set up some digital programmes to help in implementing the guarantees provided by the Constitution of India<sup>10</sup>. In February 2016, NALSA launched a new bilingual Online Legal Services Management System (LSMS) which allows people to apply for legal aid online, upload required documents, monitor their case status and communicate with the Legal Services Authority. Technology has been utilized in other ways to create new service delivery schemes, principally the Nyaya Mitra programme, which was launched in 2017 and places retired magistrates at Common Service Centres (CSCs) in rural areas to assist people facing delayed cases. Nyaya Sampark has set up kiosks in district headquarters that provide toll free helpline services and video conferencing facilities, where undertrial prisoners are able to consult lawyers while in custody<sup>11</sup>. Other online resources include the web portal for prison legal services, which provides information on whether inmates have access to a lawyer, and the new Legal Aid Defence Counsel System (LADCS) scheme which provides for the appointment of full-time defence counsels in every district to improve access to legal representation for those accused of crimes<sup>12</sup>.

### **HOW TECHNOLOGY IS REFORMING CRIMINAL JUSTICE SYSTEM**

- **Virtual Courts and Video Conferencing:** The COVID-19 pandemic provided a new direction to online hearings. The Supreme Court itself recorded about 1.05 million hearings *via* video by April 2025. To institutionalize this, the Supreme Court in April 2020 validated all VC hearings, and High Courts adopted uniform video-conferencing rules. India is even trying an indigenously developed VC platform (Bharat VC) to improve reliability. By linking 3,240 court complexes with 1,272 jails, video-conferencing now allows undertrial prisoners to appear for hearings without transport, greatly cutting costs and delay.
- **E-filing and Case Information Systems:** Building on the Supreme Court's E-Committee and the 2013 e-Courts project, India now has nationwide case management tools. Citizens

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<sup>9</sup>*D.K. Basu v. State of West Bengal*, (1997) 1 SCC 416 (India); CODE CRIM. PROC., 1973, § 41D, No. 2, Acts of Parliament, 1974 (India).

<sup>10</sup>*Ibid* 5.

<sup>11</sup>NAT'L LEGAL SERVS. AUTH., *Nyaya Sampark: Legal Aid Outreach Programme*, Government of India.

<sup>12</sup>*Ibid* 2.

can e-file certain petitions and check case status online. Public portals provide daily cause lists and case details, improving transparency. During the pandemic, fully online e-filing systems were rapidly expanded, and even AI tools for flagging case defects were piloted. This means litigants – including legal aid clients – can initiate or follow cases online, reducing bureaucratic hurdles.

- **AI-Powered Tools and Chatbots:** AI chatbots have started offering laypersons free legal guidance in Indian law. Private platforms like *Nyaya Guru* and *Nyaya AI* provide 24×7 “virtual advocates” to answer basic queries. Likewise, new transcription AIs listen to hearings in real-time, generate written transcripts and translations, and have reported reducing case processing times by 30–50%. These AI innovations promise to relieve overburdened courts and provide richer information to defendants.
- **Legal Aid Helplines and Tele-Law:** It connects villagers with panel lawyers via CSC-enabled video or telephone. By 2023 Tele-Law had provided advice to over 50 lakh citizens. Crucially, it targets “*disadvantaged, marginalized, vulnerable, and unreached*” populations, using the vast CSC network at the Panchayat level to bridge the rural gap. In 2021 the government launched a mobile Tele-Law app so individuals can directly seek free legal advice from their phone.
- **Data Analytics and Case Monitoring:** Judicial Data Grids provide an avenue for tracking the level of case backlog by judicial authorities and identifying indigent defendants. Similarly, prisons now upload inmate information into the Legal Services Portal. This allows the courts to flag inmates who do not have an attorney for representation and assign attorneys to represent them. Together, these technological advances help court administrators better manage caseloads and ensure that eligible defendants receive and are provided with assistance in a timely manner.

### **IMPACT ON MARGINALIZED GROUPS**

Legal aid provided through tools such as telephones and computers have been particularly useful for those most in need of help in India<sup>13</sup>. In India, over 70% of prison inmates are under trial and the majority of these people come from the economically disadvantaged and marginalised classes in society<sup>14</sup>. In fact, State Government's own reports indicate that in the years between 2016-19, only 7.9% of eligible undertrials received legal aid when they were

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<sup>13</sup>*Ibid* 5.

<sup>14</sup>*Ibid* 3.

arrested and held in jail prior to being tried. The digitalization of Legal Aid aims to address this gap. The Tele-Law/CSC network provides access to Legal Aid to rural areas of India<sup>15</sup>. An analysis of this project indicates that the use of Tele-Law is higher in areas where there are high concentrations of marginalised populations, and that the majority of the users are women and from a lower economic class<sup>16</sup>.

Tech Has Expanded Access to Legal Assistance to Women, Children and those benefitting from Legal Services Act. Toll-free helplines, teleconsulting and e-discovery have allowed women experiencing domestic violence or trafficking to confidentially and quickly access legal assistance. AI-enhanced translation technology enables many women, especially those who are illiterate and/or belong to minority speaking groups, to overcome language barriers<sup>17</sup>. Additionally, legal assistance delivery programmes such as Nyaya Mitra's District Kiosks provide special outreach to women, including awareness and education about the legal system via television and radio, and targeting places where women congregate.

Other vulnerable groups – SC/ST, minorities, disabled – similarly benefit. For instance, hearing-impaired litigants can get AI-assisted real-time transcription and translation in their proceedings<sup>18</sup>. The fact that India's e-justice apps are being made available in Hindi and all regional languages means non-English speakers can access legal information<sup>19</sup>. Even the infrastructural reach implies that far-flung tribal areas are less cut off from lawyers than before.

### **CHALLENGES AND CONCERNS**

While technology has the potential to provide improved access to legal assistance, there are many obstacles in this electronic-based legal aid model. The biggest hurdles to the expansion of this service are the major disparities in internet usage across India. Rural areas in India account for millions of new users being added to this growing base, however, the availability of connectivity is very limited in many of these villages. Consequently, e-courts or online

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<sup>15</sup>DEP'T OF JUST., Ministry of Law & Justice, Government of India, *Tele-Law: Reaching the Unreached* (2017).

<sup>16</sup>NITI AAYOG, *Evaluation of Tele-Law Programme* (2020); DEP'T OF JUST., Ministry of Law & Justice, Government of India, *Tele-Law Dashboard & Annual Reports*.

<sup>17</sup>NITI AAYOG, *Responsible AI for All* (2021); VIDHI CTR. FOR LEGAL POL'Y, *AI and Access to Justice in India* (2020).

<sup>18</sup>*In re: Access to Justice for Persons with Disabilities*, (2018) 10 SCC 1 (India); DEP'T OF JUST., Ministry of Law & Justice, Government of India, *Accessibility Standards for Courts* (2020).

<sup>19</sup>*Ibid* 5

access to legal aid will not be available to the majority of the population. Additionally, even where the necessary infrastructure is available to users in rural areas, most rural poor people lack the knowledge and the training to access these programs<sup>20</sup>. For those who do not have access to a smartphone or do not have electricity to charge their devices, the technology-based models of assistance may inadvertently exclude them.

In addition to the challenges mentioned, there are two other components: systemic and ethical challenges. First, algorithmic bias and reliability with the quality of AI are genuine concerns for everyone involved. AI assistants that use historical training data may also implicitly encode caste and class biases, which can disadvantage some litigants<sup>21</sup>. Second, practitioners in India see problems with the privacy of their data and the overall quality of the output as significant obstacles to adopting AI<sup>22</sup>. Third, the fact that many pieces of sensitive legal information are stored and processed using digital technology creates issues regarding confidentiality; although the Personal Data Protection Act (2023) is a positive step, there remains a need for greater protection for many types of legal data, including, but not limited to, the need for legal professional privileges and encryption standards for e-filing<sup>23</sup>.

Addressing privacy and consent issues must also be considered when using Virtual Platforms, such as a defendant in jail speaking to their attorney *via* Video, where there needs to be secure and confidential channels of Communications<sup>24</sup>. In the same way, Remote Courts must implement procedures to prevent unauthorized Audio/Video recordings and protect against potential Data Breaches. Technology must be designed to be accessible to all users, which means providing Training on the use of Technology to Judges, Attorneys, and Clients alike. As of now, many Judges and Attorneys do not have experience with Digital technologies and struggle with Technical Glitches or reluctance to use Digital tools.

In conclusion, there are still many instances where a lack of basic infrastructure continues to limit court services<sup>25</sup>. There are many lower courts that do not have access to adequate technology and there is a vast investment from the Government into Virtual Courtrooms and

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<sup>20</sup>NITI AAYOG, *Strategy for New India @ 75* (2018).

<sup>21</sup>NITI AAYOG, *Responsible AI for All* (2021); UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (2021).

<sup>22</sup>BAR COUNCIL OF INDIA, *Consultation Paper on Technology and Legal Practice* (2020).

<sup>23</sup>Digital Personal Data Protection Act, No. 22 of 2023, INDIA CODE; see also *Justice K.S. Puttaswamy (Retd.) v. Union of India*, (2017) 10 SCC 1 (India).

<sup>24</sup>*State of Maharashtra v. Praful B. Desai*, (2003) 4 SCC 601 (India).

<sup>25</sup>LAW COMM'N OF INDIA, Report No. 288, *Digitalisation of Courts in India* (2018).

Broadband however, these resources are still not available for everyone. In order for the more advanced applications of Digital Justice to succeed, the underlying foundations of stability must first be addressed<sup>26</sup>. In summary, the concept of Digital Justice is still not a reality for all people; to bridge the gaps that exist in terms of access, skills, and ethical guidelines between people, it is essential that these gaps do not continue to widen as technology advances<sup>27</sup>.

### **WAY FORWARD: BUILDING A HYBRID, RIGHTS-BASED SYSTEM**

- **Improve Infrastructure:** Invest in reliable internet and electricity for all courts and prisons. The Department of Justice has begun supplying VC equipment to thousands of courts; this must continue until every court, even at the village or taluk level, can video-link and e-file. Mobile legal clinics and CSCs should be equipped with computers and internet so that remote citizens can meet lawyers virtually.
- **Strengthen Legal Literacy and Support:** Keep in mind that tech does not always replace personal assistance when you are low income and in need of assistance. Legal aid authorities should have an option for in-person kiosks and help lines in addition to their online options.
- **Embed Ethical Safeguards:** As the new criminal laws i.e., *Bharatiya Nyaya Sanhita (BNS)*, *Bhartiya Nagrik Suraksha Sanhita (BNSS)* and *Bharatiya Sakshya Adhinyam (BSA)* come into force, they explicitly envisage digital processes. BNSS requires witness testimony and confession to be recorded using “audio-video electronic communication” while the BSA describes broadly acceptable forms of electronic evidence.
- **Promote Ethical AI and Oversight:** Courts and legislatures should develop guidelines for AI in legal aid. Much as “human in the loop” protocols are urged, NALSA and legal bodies can set standards: e.g., clearly label AI-generated legal advice as informational, and maintain human oversight. Algorithmic audits should check for bias in any AI used in justice.

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<sup>26</sup>*In re: Guidelines for Court Functioning Through Video Conferencing*, (2020) 4 SCC 782 (India).

<sup>27</sup>INDIA CONST. arts. 14, 21 & 39A; *Justice K.S. Puttaswamy (Retd.) v. Union of India*, (2017) 10 SCC 1 (India).

**CONCLUSION**

The Constitution of India mandates that all its citizens, regardless of their economic status or geographic location, are guaranteed equal access to justice. The onset of new technology over the past decade has started eroding century-old obstacles in the criminal justice system. Technology must be incorporated into a rights-based standard that emphasizes privacy, protection from bias and human involvement in decision-making. When technology and related services are implemented correctly through training, resource allocation and ethical review, Indian society will be transformed by technology in its criminal justice system. In essence, by harnessing technology to complement the rule of law, Indian society will be moving closer to its ideal of being able to provide legal assistance to all defendants without being limited by financial means, educational level or geographic location. Criminal justice system reform will be predicated on how effectively we deploy technology to achieve the rights defined in the Constitution of India, ushering in the 21st century.