

ICT AND ACCESS TO JUSTICE: THE ROLE OF TELE-LAW IN EMPOWERING VULNERABLE POPULATIONS

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ABSTRACT

Ensuring equitable access to legal services is a core component of safeguarding human rights, enabling individuals to defend their rights, settle disputes, and prevent mistreatment. In India, rural and disadvantaged populations encounter persistent obstacles in accessing the legal system. To address this challenge, the government introduced the Tele-Law initiative. This program integrates Information and Communication Technology (ICT) to offer legal consultations and pre-litigation support via Common Service Centers (CSCs), targeting underserved and remote communities. This study critically evaluates the Tele-Law initiative, focusing on its outreach and impact on marginalized groups such as women, Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Classes (OBC), and rural citizens.

The study draws on data from the Tele-Law Monthly Progress Reports and the population statistics of various Indian states to analyze the correlation between population size and the number of legal cases filed under the scheme. Using multiple regression analysis, the study investigates three key research issues: the influence of sub-population sizes on the number of cases filed, the role of legal infrastructure such as CSCs and Para Legal Volunteers (PLVs), and the effectiveness of the Tele-Law scheme in bridging the justice gap.

The analysis highlights significant disparities in access to justice across various sub-populations and regions. While the Tele-Law scheme has made notable progress in reaching SC and ST populations, engagement from women and OBC communities remains below expectations. This paper identifies the potential factors contributing to these trends, particularly the role of rural demographics and the availability of legal resources. The analysis reveals that enhancing legal infrastructure and tackling unique challenges faced by women, particularly in rural regions, would significantly boost the effectiveness of the Tele-Law initiative.

Despite the success of the Tele-Law scheme in meeting its objectives, this paper identifies areas for improvement, including enhancing digital literacy, expanding legal infrastructure, and addressing systemic challenges faced by female lawyers. The paper concludes with recommendations for targeted interventions to increase the scheme's reach and effectiveness, particularly for underrepresented groups. By improving access to justice for all citizens, the Tele-Law initiative can serve as a model for other nations seeking to use ICT to bridge the justice gap.

INTRODUCTION

The Tele-Law scheme was initiated to bridge the gap in access to justice for rural and marginalized communities in India. United Nations Sustainable Development Goal 16 states that “equal access to justice is essential for protecting the rights of individuals, resolving disputes, and ensuring that vulnerable populations are not marginalized or mistreated” (Rule of Law SDG 16, 2024). Access to justice is a critical component of democratic governance and poverty reduction, as emphasized by the United Nations Development Program (UNDP) and the Millennium Declaration (Rule of Law the three pillars, 2024). The inability to access justice prevents individuals from exercising their rights, challenging discrimination, and holding decision-makers accountable. As noted by the E-Committee report, Information and Communication Technology (ICT) holds significant potential to enhance the efficiency and equity of judicial systems (E-Committee Supreme Court 2005). The Tele-Law scheme seeks to provide legal assistance to citizens at their doorsteps through Common Services Centers (CSCs), leveraging information and communication technology to deliver legal advice and aid to underserved populations.

Since its inception, the Tele-Law scheme has shown significant progress by providing pre-litigation advice to over 79 million people in 250,000 Gram Panchayats as of March 2024 (Annual Report 2024). According to the same report, the Tele-Law scheme faces several challenges ranging from poor internet connectivity in rural areas to increasing number of new districts. Further, the report suggests that the availability of panel lawyers needs to be optimized to reduce the number of unattended cases and building rapport with community members, especially in backward areas, to facilitate the provision of legal services.

The present research attempts to examine the extent to which the Tele-Law scheme succeeded in fulfilling its objective of providing legal services to the vulnerable sections of the Indian population. While the official reports indicate a 100% fulfillment of program goals (Annual Report 2024), we take a look beneath the number presented. This research seeks to identify the factors that explain the program metrics such as cases filed by various sections of the vulnerable population. The insights gained through the analysis form the basis for the recommendations made here to further enhance the effectiveness of the program.

The plan for the rest of the paper is as follows. First, a review of the literature focusing on access to justice (A2J) and ICT is presented, followed by the objectives of the Tele-Law scheme. Next, the specific aims of the study and methodology are described. Results are presented and discussed. Finally, we follow up with recommendations and discuss avenues of future research.

REVIEW OF LITERATURE

Concept of Justice and Access to Justice System

The concept of justice encompasses various theories and principles aimed at ensuring fairness, equality, and the protection of rights within a society. Rawls' theory of justice emphasizes that "all social primary goods – liberty and opportunity, income and wealth, and the

social bases of self-respect – are to be distributed equally unless an unequal distribution of any, or all, of these goods is to the advantage of the least favored" (Rawls 1971). Sen's capabilities approach underscores the importance of tailoring justice services to the specific needs of different communities (1992).

Legal aid has evolved significantly over the years, with various countries implementing different models to ensure access to justice for all. The establishment of the Legal Aid Scheme in 1949 aimed to ensure "equality before the law by eliminating personal wealth in determining access to legal advice and representation" (Mayo et al. 2014). This stream of literature highlights the long-standing recognition of the need for accessible legal services. The Five Waves Theory of Macdonald (2005) describes the evolution of legal aid and access to justice initiatives, focusing on different phases of development and reform. These waves include access to lawyers and courts, institutional redesign, demystification of law, preventative law and proactive access to justice. Noting that each wave is associated with a set of barriers, Macdonald proposed a comprehensive strategy with a 'pluralistic approach to the institutions of law and justice' to achieve access to justice (Bailey, Burkell and Reynolds 2013). The Tele-Law scheme adopts this approach.

Access to justice remains a persistent issue in the United States, with a significant gap between those needing legal assistance and those receiving it. Sandefur (2015) identifies the "justice gap," noting that many people experience justice problems but do not receive assistance from attorneys. Surveys indicate that a substantial number of Americans face justiciable events without seeking legal help (Sandefur, 2015). This gap is particularly pronounced among vulnerable and disadvantaged populations, who report higher rates of civil justice issues and more severe negative consequences (Sandefur, 2016). For instance, "poor people were about 30% more likely to report civil justice problems than were people with incomes in the top quintile" (Sandefur, 2016).

Access to justice for rural and marginalized populations is a critical issue worldwide. Studies have shown that these groups often face significant barriers, including economic constraints, lack of awareness, and social discrimination. In India, rural and marginalized communities face unique challenges in accessing justice. Prema, Sundar and Rajvenkatesan (2021) identify economic barriers, social discrimination, and geographical isolation as major hurdles. The Indian Constitution provides special protections to Dalits, including the right to free legal assistance and a speedy trial under Article 21, and the guarantee of free legal aid to the poor and weaker sections of society under Article 39A. However, these provisions are often not effectively implemented according to Prema, Sundar and Venkatesan (2021), who emphasize the persistent caste-based discrimination and the necessity of addressing these issues to achieve SDG 16. The Tele-Law Program aims to mitigate these issues by providing legal services through technology, making it easier for these populations to access legal aid.

Bhupatiraju et al. (2021) conducted a study focusing on the courts in the Bihar state of India, and found significant underrepresentation of Muslims, women, and scheduled castes among lawyers, judges, and petitioners. The study also highlighted the persistent inequality based on caste, gender, and religion, which affects the justice processes and outcomes. Their

research touches on the broader issues of social stratification and discrimination within the judicial system.

The concept of access to justice revolves around the ability of individuals to seek and obtain a remedy through formal or informal institutions of justice for grievances in compliance with human rights standards. Access to justice is a fundamental principle of the rule of law and is essential for the protection of human rights. According to Chapman et al. (2021), approximately 1.4 billion people globally have unmet civil and administrative justice needs. This indicates a substantial justice gap that necessitates innovative solutions to make justice systems more accessible and responsive to the needs of marginalized populations.

Empirical Studies on Access to Justice

The literature indicates that justice policies are often disconnected from the needs and capabilities of those facing justice problems. Chapman et al. (2021) argue that data partnerships across the justice ecosystem can maximize efficiencies and better inform strategies for delivering information and aid to vulnerable populations. This involves using administrative data from various institutions to identify service delivery gaps and allocate resources effectively. Furthermore, justice indices, such as the World Justice Project's Rule of Law Index, are being increasingly used to measure good practices and stimulate reform in civil and criminal justice systems globally.

A consistent theme across the literature is the significant data deficit in the civil justice system. Sandefur (2017) highlights the absence of systematic data collection, which hinders the ability to understand and address civil justice issues. Basic information, such as the number of civil cases filed annually and the outcomes of these cases, is not systematically collected (Sandefur, 2017). This lack of data makes it challenging for policymakers, civil society groups, and the public to address the justice gap effectively.

Sandefur (2016) underscores the need for more rigorous, large-scale empirical studies to understand the full scope of civil justice needs and the impact of legal interventions. She notes that existing studies often rely on outdated data and lack the comprehensive data infrastructure seen in other social institutions like education and health (Sandefur, 2016). "In the arena of civil justice, we face a severe data deficit. The kinds of fundamental data infrastructure that exist in our country today for major social institutions... simply do not exist for civil justice" (Sandefur, 2016).

Emerging research in this area includes several empirical studies that provide insights into the effectiveness of legal interventions and the potential of ICT in the justice system. Sela's (2018) study on Online Dispute Resolution (ODR) systems finds that disputants generally have higher satisfaction and perceive greater fairness when interacting with principal ODR systems, particularly when the technology is seen as neutral and unbiased. However, there are concerns about AI's ability to manage complex human interactions, highlighting the need for careful design and implementation of ODR systems (Sela, 2018).

Greiner and Pattanayak (2012) conducted a randomized evaluation of legal assistance programs, finding that offers of representation from a high-quality law school clinic did not

significantly affect the probability of prevailing in unemployment appeals. On the other hand, the representation contributed to a delay in the proceedings. This study highlights the complexities in measuring the effectiveness of legal representation and suggests that many existing studies may overstate the impact due to methodological issues. Greiner and Pattanayak (2012) caution against “overgeneralization and undergeneralization of the unexpected results of their study.

Empirical studies, such as the World Justice Project's Global Insights on Access to Justice (2019), highlight the significant barriers individuals face in accessing justice. For instance, in India, 32% of respondents experienced a legal problem in the past two years, but only 17% were able to access help. Furthermore, 35% found it difficult or nearly impossible to afford the necessary costs to resolve their legal issues. This data underscores the financial and systemic obstacles that impede access to justice for many individuals.

ICT in Judicial Systems

Geographical factors, institutional limitations, racial, class, and gender biases, cultural differences, and economic barriers place hurdles in the access to justice. One of the solutions to this problem is the use of technology in the judicial system (Hughes 2013). Starting from the 1990s, with a goal of modernization, U.K. government has integrated telephone and internet-based technology into the provision of legal services (Balmer et al. 2012). From their empirical research, these authors conclude that face-to-face and telephone modes are nearly equal in terms of substantive benefits delivered to citizens. Evaluating the effectiveness of Audio/Visual Conference Systems (AVS) in Malaysian courts, Munirah et al. (2020) conclude that in addition to enhancing access to justice for people from rural areas, these systems show a potential to ‘save time, money and resources.’ While the COVID-19 pandemic pushed courts at various levels to adopt remote technologies (Bannon and Keith 2021), bringing benefits such as time savings and convenience, the benefits have accrued to those who are technologically capable, whereas those on the other side of the technological divide faced hurdles. When utilizing video-links and other technological solutions to reduce costs and improve efficiencies, it is important to ensure that these technologies are accessible to those with low literacy and limited technological skills. (Hughes, 2013).

ICT has the potential to transform access to justice by making legal processes more efficient and accessible. Sela (2018) explores the role of Online Dispute Resolution systems, both automated and human-powered, in enhancing procedural justice. The study finds that principal ODR systems, which use AI to perform mediation or arbitration tasks, generally lead to higher satisfaction and perceived fairness among disputants. Digital tools can democratize access to legal information, allowing individuals to understand and exercise their rights without necessarily engaging with legal professionals (Sandefur, 2021).

The National Policy and Action Plan for ICT Implementation in the Indian Judiciary (E-Committee Supreme Court 2005) outlined the potential of ICT to transform the judicial system by enhancing efficiency, transparency, and access to justice, which in time, led to the launching of the Tele-Law scheme.

Tele-Law Scheme

The primary purpose of the Tele-Law scheme is to enhance legal empowerment by providing legal advice and aid to marginalized sections of society. The scheme aims to:

- *Provide free or low-cost legal aid to ensure inclusion and reduce the time and expense associated with accessing legal services.*
- *Utilize CSCs as the infrastructure for delivering legal aid, ensuring that even the most remote and rural households can receive legal assistance.*
- *Leverage video conferencing and telephone services to connect rural citizens with a panel of lawyers stationed at various locations across India.*

Since its inception in 2007, the Tele-Law scheme has shown significant progress and fully met its objectives (Annual Report 2024):

- *The service has provided pre-litigation advice to over 79 million people in 250,000 Gram Panchayats as of March 2024.*
- *In the financial year 2023-24, the scheme provided legal advice to 4.35 million beneficiaries, exceeding the target of 2.9 million cases.*
- *The scheme has onboarded 796 panel lawyers from the National Legal Services Authority (NALSA) and CSC Special Purpose Vehicle (SPV) offices.*

Evaluation of Civil Justice System in India:

There is a lack of systematic research on the measurement and evaluation of access to justice in various countries (Chambliss et al. 2016). As traditional measures of access to justice, such as the number of lawyers per capita, are inadequate in rural contexts, Page and Ferrell (2023) propose alternative metrics that account for the specific needs and conditions of rural communities, such as legal vulnerability and access to legal infrastructure. World Justice Project is one of the few attempts at quantifying access to justice. The World Justice Project (WJP) defines the rule of law as a durable system of laws, institutions, norms, and community commitment that delivers four universal principles: accountability, just law, open government, and accessible and impartial justice (WJP 2023). The WJP's research and data, primarily grounded in the Rule of Law Index, measure how the rule of law is experienced and perceived globally. The Index is based on household and expert surveys conducted in numerous countries and jurisdictions, providing current and reliable information to policy makers. The 2023 WJP Rule of Law Index evaluates 142 countries and jurisdictions worldwide. Notably, the rule of law has declined in most countries for the sixth consecutive year. One of the critical components of this index is Civil Justice, defined under Factor 7. This factor measures whether ordinary people can resolve their grievances peacefully and effectively through the civil justice system. It assesses the accessibility, affordability, and fairness of civil justice systems, ensuring they are free from discrimination, corruption, and improper influence by public officials.

Sub-factor 7.1 of the Rule of Law Index measures whether people are aware of available remedies, can access and afford legal advice and representation, and can navigate the court system without incurring unreasonable fees, encountering unreasonable procedural hurdles, or experiencing physical or linguistic barriers. In 2023, India was ranked 131st out of 142 countries in terms of accessibility and affordability of civil justice. This low rank highlights significant challenges in making civil justice accessible and affordable to the general population.

The reviewed literature consistently calls for more rigorous empirical research to address the data deficits and provide a robust evidence base for policymaking. Sandefur (2021) suggests leveraging existing national surveys, such as the National Crime Victimization Survey (NCVS) and the Current Population Survey (CPS), to include questions about civil justice problems. This approach could significantly contribute to understanding and addressing civil justice issues.

Further studies should explore the long-term impacts of ICT on judicial efficiency and the overall effectiveness of digital interventions in reducing barriers to justice. By developing a coherent access to justice research agenda that incorporates empirical evidence and theoretical engagement, the justice system can become more accessible and equitable, ultimately improving outcomes for all individuals (Sandefur, 2021).

The literature highlights the potential of ICT to enhance access to justice and the significant data deficits that hinder a comprehensive understanding of civil justice needs. Empirical studies provide valuable insights but also underscore the need for more rigorous research to inform effective policies and practices. Addressing these gaps through systematic data collection and leveraging technology can help bridge the justice gap and improve access to justice for all.

The existing body of literature on access to justice (A2J) and the role of Information and Communication Technology (ICT) reveals a multifaceted landscape where legal frameworks, social inequities, and technological advancements intersect. Scholars like Rawls (1971) and Sen (1992) lay the philosophical groundwork for justice, emphasizing the need for fairness and the customization of services to meet diverse community needs. These theoretical foundations are echoed in practical assessments, such as Macdonald's Five Waves Theory (2005), which outlines the evolution of legal aid and the persistent barriers faced by marginalized populations. Empirical studies by Sandefur (2015, 2016) further highlight the justice gap, particularly for economically disadvantaged and socially marginalized groups, underscoring the disparity between those who need legal assistance and those who receive it. This gap is exacerbated in rural and isolated regions, as noted by Prema Sundar and Rajvenkatesan (2021), where systemic barriers like economic constraints, social discrimination, and geographical isolation limit access to justice. ICT has emerged as a potential solution, with studies by Balmer et al. (2012) and Sela (2018) demonstrating the benefits of telephone and online dispute resolution systems. However, these technological interventions are not without challenges; issues of accessibility and digital literacy persist, as highlighted by Hughes (2013) and Bannon and Keith (2021). The Tele-Law scheme in India, designed to leverage ICT for legal aid delivery, embodies the confluence of these theories and empirical findings, offering a unique case study in the ongoing effort to bridge the justice gap.

STUDY

The present study aims to contribute to the emerging literature on the measurement and assessment of access to justice. Based on its objective of making cost-free “legal aid accessible to the marginalized communities and citizens residing in rural areas,” the Tele-Law scheme provides an appropriate context for the assessment of access to justice (Annual Report 2024). Tele-Law scheme was introduced in the Northeastern states and the Union Territory of Jammu and Kashmir as a pilot project in 2017 and by 2023, expanded to 33 states and territories in India. The states/territories are diverse and with varying proportion of vulnerable groups including women, and those belonging to Scheduled Caste (SC), Scheduled Tribe (ST), Other Backward Caste (OBC) populations. Tele-Law scheme has met or exceeded all of its objectives during the last year (Annual Report 2024) and enhanced access to justice by helping the target populations file 6,574,265 cases. This study evaluates the extent to which the Tele-Law scheme served the different populations by analyzing the number of cases by the various target populations. The following research issues are explored in the study.

Research Issue 1: Does the size of the sub-population affect the number of cases filed by the group?

Research Issue 2: Do population and sub-population sizes influence the number of cases filed by each sub-population?

Research Issue 3: Does the number of lawyers and Para Legal Volunteers (PLVs) increase the number of cases filed by the various sub-populations?

Methodology:

Data for this study were drawn from the Tele-Law Monthly Progress Reports, focusing on the volume of cases submitted by various sub-populations across India. Additional demographic information, including figures for women, Scheduled Castes (SC), Scheduled Tribes (ST), Other Backward Classes (OBC), and the general population was sourced from official Indian government reports. The database consists of data for the 33 states and union territories identified in the Tele-Law reports. Data were analyzed using the SPSS software. To explore the research issues identified earlier, we computed ratios that reveal the cases filed to population size relationships and multiple regression analyses.

The use of ratios and multiple regression analysis in this study is strategically chosen to provide a comprehensive and nuanced understanding of the effectiveness of the Tele-Law scheme in India. The ratio of cases filed to population size is employed as a key metric because it allows for a normalized comparison across different states and sub-populations, accounting for the inherent differences in population sizes. This method is particularly useful in highlighting the proportional engagement of various demographic groups with the legal system, offering insights

into whether certain populations are over- or under-represented in terms of access to legal services. Multiple regression analysis, on the other hand, is utilized to explore the complex relationships between the number of cases filed and a range of predictor variables including population demographics and the availability of legal infrastructure. This statistical technique is well-suited for assessing the combined effect of multiple factors, allowing the study to isolate the impact of each variable while controlling for others. By employing regression analysis, the research is able to quantify the extent to which factors like rural population size, the number of Community Service Centers (CSCs), and the availability of lawyers influence the accessibility of legal services. Together, these methods provide a robust analytical framework that not only answers the research questions, but also offers actionable insights for enhancing the Tele-Law scheme's effectiveness.

The results of the analyses are described below.

Results:

To examine research issue 1, whether the size of the sub-population affects the number of cases filed by the vulnerable groups, ratios of cases filed by the various sub-populations were computed. First, out of all cases filed in 2023 through the Tele-Law scheme, the percentage of cases filed by a sub-group, for instance women, was computed. Then, the percentage of women in the population was calculated. By taking a ratio of these two numbers, we created an index termed here as the "ratio of cases filed to population size." Table 1 shows the ratios for the cases filed by women, as well as the SC, ST, OBC and General caste groups. If the ratio is 1.0, it is inferred that the number of cases filed by a sub-group is proportionate to the size of the sub-population. Numbers above 1 indicate that the sub-group is over-represented whereas numbers below 1.0 indicate the under-representation of the group in terms of the number of cases filed.

State	Ratio of Cases Filed to Population Size				
	Female	General	OBC	SC	ST
Andaman and Nicobar	0.87	0.15	0.62	62.74	0.27
Andhra Pradesh	0.93	1.36	0.66	1.17	2.22
Arunachal Pradesh	1.26	2.3	3.47	6.04	0.22
Assam	0.72	1.36	0.67	0.88	0.44
Bihar	0.94	0.64	0.78	1.66	1.79
Chadigarh	1.36	0.23	0.89	2.74	15.15
Chattisgarh	0.71	0.83	0.82	1.4	1.09
Dadra and	0.73	2.87	0.39	1.41	0.16
Delhi	0.97	0.28	2.54	1.37	1.4
Goa	0.82	0.78	0.62	6.63	0.56
Gujarat	0.61	0.52	0.56	1.26	2.85

State	Ratio of Cases Filed to Population Size				
	Female	General	OBC	SC	ST
Haryana	0.58	0.45	1.52	1.11	5.12
Himachal Pradesh	0.68	0.57	1.24	1.56	2.31
Jammu & Kashmir	0.62	0.71	1.53	2.03	1.62
Jharkhand	0.8	0.89	1.2	1.13	0.66
Karnataka	0.91	2.39	0.64	1.2	0.64
Kerala	1.12	0.83	1.00	1.39	2.22
Ladakh	0.89	0.81	5.53	10.73	0.63
Lakshadweep	0.92	1.2	2.72	27.52	0
Madhya Pradesh	0.62	0.66	0.81	2.03	0.83
Maharashtra	0.64	0.4	0.6	2.42	2.22
Manipur	0.8	0.35	1.89	1.47	1.34
Meghalaya	0.89	1.33	1.66	1.55	0.95
Mizoram	1.01	4.96	25.98	2.96	0.61
Nagaland	0.94	0.96	2.03	0.81	1
Odisha	0.67	0.74	0.72	1.75	1.02
Puducherry	0.7	3.69	0.61	1.71	7.98
Punjab	0.78	0.58	0.52	1.4	11.89
Rajasthan	0.64	1.19	0.62	1.37	0.87
Sikkim	0.9	2.18	0.54	6.28	0.52
Tamil Nadu	1.04	12.53	0.51	0.92	2.76
Telangana	0.68	1.48	0.77	1.09	1.64
Tripura	0.85	0.62	1.45	1.28	0.87
Uttar Pradesh	0.82	0.89	0.71	1.51	3.04
Uttarakhand	0.6	0.41	1.1	2.5	1.65
West Bengal	0.81	0.86	1.72	1.04	0.62
Total	0.74	0.82	0.74	1.47	1.57

Multiple regression analysis was employed to examine research issue 2, which asks whether the number of cases filed by the different sub-populations as well as the total number of cases filed through the Tele-Law scheme are influenced by the total population size as well as the sub-population sizes. The set of predictor variables included size of state/UT population as well as the size of rural, women, and caste group sub-populations. The dependent variables include the total number of cases filed through the Tele-Law scheme, the number of cases filed by women and the various caste categories. Stepwise regression was used to evaluate the influence of population size and sub-population size as predictors of the number of cases filed. The results of the regression analyses are provided in the table below.

Table 2			
Regression: Influence of population size on the Number of Cases Filed			
Dependent Variable	Independent Variables	Adjusted R-Square	Statistically Significant* Variables and Beta Values
Female Cases	Total Population Female Population Rural Population SC Population ST Population OBC Population General Population	0.856	Rural Population (0.927)
SC Cases	Total Population Female Population Rural Population SC Population ST Population OBC Population General Population	0.789	Rural Population (0.892)
ST Cases	Total Population Female Population Rural Population SC Population ST Population OBC Population General Population	0.772	ST Population (0.882)
OBC Cases	Total Population Female Population Rural Population SC Population ST Population OBC Population General Population	0.830	Rural Population (1.052) General Population (-0.367) ST Population (0.224)
General Cases	Total Population Female Population Rural Population SC Population ST Population OBC Population General Population	0.504	Rural Population (0.720)
Total Cases	Total Population Female Population Rural Population SC Population ST Population OBC Population General Population CSCs	0.826	Rural Population (0.762) ST Population (0.256)

*Significant at the 0.01 level

Community Service Centers (CSCs), lawyers and Para Legal Volunteers (PLVs) constitute the infrastructure through which the Tele-Law scheme provides access to justice for the poor and vulnerable sections of the population. Research issue 3 raises a question regarding the influence of these variables on the number of cases filed, in combination with population and sub-population sizes. Table 3 shows the results of stepwise regression analyses.

Dependent Variable	Independent Variables	Adjusted R-Square	Statistically Significant* Variables and Beta Values
Female Cases	Total Population Female Population Rural Population SC Population ST Population OBC Population General Population CSCs All Lawyers Female Lawyers PLVs	0.927	Rural Population (0.377) CSCs (0.378) PLVs (0.265)
SC Cases	Total Population Female Population Rural Population SC Population ST Population OBC Population General Population CSCs All Lawyers Female Lawyers PLVs	0.918	CSCs (0.546) PLVs (0.456)
ST Cases	Total Population Female Population Rural Population SC Population ST Population OBC Population General Population CSCs All Lawyers Female Lawyers PLVs	0.865	ST Population (0.737) CSCs (0.648) SC Population (-0.444)
OBC Cases	Total Population Female Population Rural Population SC Population	0.884	Rural Population (0.574) General Population (-0.314) All Lawyers (1.051) Female Lawyers (-0.503)

Dependent Variable	Independent Variables	Adjusted R-Square	Statistically Significant* Variables and Beta Values
	ST Population OBC Population General Population CSCs All Lawyers Female Lawyers PLVs		
General Cases	Total Population Female Population Rural Population SC Population ST Population OBC Population General Population CSCs All Lawyers Female Lawyers PLVs	0.548	All Lawyers (0.751)
Total Cases	Total Population Female Population Rural Population SC Population ST Population OBC Population General Population CSCs All Lawyers Female Lawyers PLVs	0.927	All Lawyers (1.137) Female Lawyers (-0.462) PLVs (0.259)

*Significant at the 0.01 level

DISCUSSION

The Tele-Law scheme has met all of its goals (Annual Report 2024) and enhanced access to justice for the rural and other vulnerable populations with 6,574,265 cases filed through the scheme in 2023 alone. Results from the analyses of cases filed provide insights into the effectiveness of the Tele-Law scheme. At the national level, the cases filed to the sub-population size ratios show greater engagement of SC and ST populations (ratios of 1.47 and 1.57 respectively) and a lower participation of the female (0.74), OBC (0.74) and General population groups. When we examine cases filed by sub-groups, the performance of States and Union Territories shows interesting differences. For instance, Chandigarh shows the highest ratio of cases filed by females (1.36) and ST sub-group (15.15), but the shows the lowest ratio (0.23) for the General caste group. As many of the extreme (high and low) ratios are associated with the

smaller states and UTs, it is reasonable to characterize them as outliers. Tele-Law administrators need to focus on areas associated with small ratios to ensure effectiveness of the scheme.

Results from the regression analyses, with number of cases being explained by the population sizes of the various groups, show the influence of the size of various populations. Adjusted R-Square values indicate that 82.60% of the variation in the number of cases is explained by these variables. The influence of the population size variables is at the highest (85.60% of variance explained) in the number of cases filed by females and lowest (50.40%) in the case of general caste category.

Among the explanatory variables, size of the rural population emerges as the strongest influence. For Female, SC, OBC, and Total Cases in Table 2, the Beta values are high (ranging from 0.720 to 1.052), indicating that an increase in the rural population is strongly associated with an increase in the number of cases filed. Further, it is the only statistically significant predictor of cases filed by female, SC and general groups. ST population emerged as a strong predictor with a statistically significant influence on the total cases filed as well as those filed by ST and OBC groups.

When the legal infrastructure-related variables were added to the previous predictors, the explanatory power of the regression models in explaining the variance in the number of cases filed increased in each category. The biggest improvement in R-Square is seen in the SC (12.90%) category and in the total number of cases (10.10%) filed through the Tele-Law scheme. At 92.70%, our model explains a whopping amount of the variance in cases filed by females. The least amount of variance is explained in the number of cases filed by the general category group.

The influence of the rural population is reduced when additional variables (CSCs, lawyers, and PLVs) are included, suggesting that the presence of these resources mitigates the influence of rural population density. In fact, the three new variables, namely CSCs, total lawyers and PLVs, emerged as the strongest influences in explaining the number of cases filed by each sub-group as well as the total number of cases filed. CSCs are a statistically significant predictor for the cases filed by SC, ST and female citizens. Number of Lawyers emerges as a significant predictor in explaining the total number of cases filed as well as the cases filed by the OBC and general groups, whereas the role of PLVs is significant for explaining the variation in total cases and the cases filed by the female and SC groups.

Standardized coefficient (Beta) values indicate that CSCs play a critical role in facilitating access to legal services for the SC (0.546), ST (0.648) and female (0.378) groups. PLVs have a positive Beta in Female Cases (0.265), SC Cases (0.456), and Total Cases (0.259), highlighting the importance of paralegal volunteers in supporting legal processes. For OBC Cases (1.051), General Cases (0.751), and Total Cases (1.137) in Table 3, the Beta values are substantial, indicating that the availability of lawyers significantly boosts the number of cases filed. The negative Beta values for Female Lawyers in OBC Cases (-0.503) and Total Cases (-0.462) suggest potential systemic issues or barriers that female lawyers face, affecting their effectiveness in increasing case filings.

While the literature provides a robust understanding of the barriers to justice and the potential of ICT to mitigate these challenges, there remains a significant gap in empirical

evaluations that assess the effectiveness of these interventions in diverse socio-cultural contexts, particularly in rural and marginalized communities. Most studies have focused on either the theoretical underpinnings of access to justice or the broad outcomes of ICT implementations without delving into the nuanced impacts on specific vulnerable populations. The present study addresses this gap by offering a granular analysis of the Tele-Law scheme's effectiveness across different sub-populations in India. By examining the relationship between population demographics, legal infrastructure, and the number of cases filed, this research provides a detailed evaluation of how well the program meets its goals of inclusivity and accessibility. Moreover, this study expands on the existing literature by introducing metrics like the "ratio of cases filed to population size", which offers a more precise measure of the program's reach and equity. Through this approach, the research not only contributes to a deeper understanding of the Tele-Law scheme's impact but also sets the stage for future studies that can build on these findings to further refine and enhance access to justice initiatives worldwide.

RECOMMENDATIONS

Our data on the ratio of cases filed to population size provides valuable insights into the engagement of different sub-population groups with the legal system across various states in India. By understanding these patterns, Tele-Law administrators can implement targeted interventions to enhance access to justice for all sub-populations, ensuring the scheme's effectiveness and equity. Targeted interventions include women-specific support services and legal aid clinics in low-ratio states to address social and economic barriers, strengthening the presence of legal aid centers and streamlining of processes to make legal services more accessible to the general population, working with community leaders and organizations to build trust and ensure OBC populations are aware of and can access legal services, providing legal education and empowerment programs to increase SC population's engagement with the legal system and investments in legal infrastructure in geographically isolated areas to improve access for ST populations.

In regard to the legal infrastructure, appropriate actions include an increase in the number and operational efficiency of CSCs, particularly in rural and underserved areas, to improve access to legal services. Expanding the number of lawyers and PLVs to ensure sufficient legal support across all population groups, with a focus on marginalized communities, and addressing systemic challenges faced by female lawyers through targeted training, support programs, and initiatives aimed at enhancing their effectiveness within the legal system are crucial to the effectiveness of the scheme. Another effective action would be to intensify outreach efforts in rural areas to ensure populations are aware of and can utilize available legal services.

Enhancing digital infrastructure is crucial for improving the effectiveness and reach of the Tele-Law scheme, especially in low-ratio and underserved states. Digital infrastructure can be enhanced through investments in equipment (computers, scanners and other equipment) as well as bandwidth and wi-fi services used to connect the CSCs. In the next phase, emphasis should be placed on the installation of high-quality video conferencing systems and training to

facilitate remote legal consultations and hearings. Development of mobile apps will enhance access to justice and make the process more efficient.

Enhancing the digital literacy of targeted populations is critical to the success of the Tele-Law program. The training should also target CSC staff and include basic knowledge of legal processes. Successful implementation of the program also requires continuous monitoring and evaluation of the system to track key metrics with a focus on the identification of areas for improvement.

FUTURE RESEARCH

One avenue for future research would be to evaluate the effectiveness of the Tele-Law scheme, is to look beyond access to justice and calculate the ratio of cases that have been resolved out of the cases filed. Access to CSC-level data in contrast to the state-level data used in the present study will lead to more fine-grained analysis and provide information on the effectiveness of the CSCs. This will allow states to increase the effectiveness of the Tele-Law scheme by making necessary changes to training and processes at the CSC level. Management of cases by PLVs and lawyers and the efficiency of the judicial system in resolving cases filed through the Tele-Law scheme should be evaluated to develop strategies to strengthen the scheme. Future research should also explore the financial efficiency of the services rendered, by calculating the average cost incurred by the CSCs to resolve a case and the amount of money beneficiaries save by using CSC services compared to traditional legal services.

CONCLUSION

The comparison of WJP data from 2020 to 2023 reveals a decline in the performance of India's civil justice system, despite efforts to expand access through the Tele-Law scheme. Addressing the identified issues through targeted interventions and improvements can help enhance the effectiveness of legal aid services, improve access to justice, and ensure that the civil justice system is equitable and efficient.

Our analysis indicates that several states, particularly those with lower ratios of cases filed to population size, need enhanced CSC infrastructure. By focusing on these states and implementing targeted CSC services, the Tele-Law scheme can improve access to justice for all sub-populations, ensuring that marginalized groups receive the legal support they need. PLVs are vital in bridging the gap between marginalized communities and the legal system, ensuring that the objectives of the Tele-Law scheme are met. By continuing to support and expand the role of PLVs, the Tele-Law scheme can further enhance access to justice and ensure that legal aid reaches those who need it most.

Measuring the impact of the Tele-Law scheme requires a comprehensive approach that includes both quantitative and qualitative metrics. By tracking key performance indicators and gathering feedback from beneficiaries and stakeholders, the scheme's effectiveness can be assessed and continuously improved to ensure that it provides meaningful access to justice for marginalized communities in India.

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