

Optimising AI and Digital Technologies for Advancing Public Awareness and Legal Literacy in Women's Rights: A Gender Liberation Perspective in Nepal

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Abstract—In today's era of rapid technological evolution, Artificial Intelligence (AI) and digital technologies offer transformative opportunities to address entrenched societal inequalities and gendered practices. Gendered practices and the perpetuation of ignorance in gendered consequences are interconnected phenomenally and contribute to the persistence of systemic inequalities and gender injustices. Addressing gendered practices and challenging embodiments of ignorance through AI and digital technologies involves promoting gender equality, upholding human correct principles, dismantling discriminatory norms and stereotypes, and pursuing gender justice and substantive equality. Nepal, with its diverse cultural dynamics and historical gender disparities, stands at a pivotal moment to utilise digital tools to advance public awareness and legal literacy in women's rights. This paper examines how AI and digital tools can be harnessed to advance gender liberation in Nepal by bridging knowledge gaps, empowering women, and promoting social transformation. It further delves into the intersections of technology, legal frameworks, and gender advocacy, offering actionable strategies while addressing the implementation challenges in Nepal's diverse socio-political context.

Key Words: Artificial Intelligence (AI), Digital Technologies, Women's Rights, Gender Liberation, Gender Equality, Nepal, Legal Literacy, Public Awareness.

I. INTRODUCTION

Women's rights refer to the fundamental human rights that are entitled to women and girls, ensuring their equality, dignity, and autonomy in all domains of life. These rights encompass legal, social, economic, cultural, and political dimensions aimed at eliminating gender discrimination, fostering gender equality, and affirming women's full participation and empowerment. Nepal, an inherently beautiful nation in Asia, situated on the southern foothills of the Himalayan region, being landlocked but currently in a developing stage, is an independent, indivisible, sovereign, secular, inclusive, socialism-oriented, federal democratic republican state.¹ Nepal has made significant strides in promoting gender justice and securing women's rights, especially after adopting the Constitution of Nepal in 2072.² Despite constitutional provisions and legal mechanisms advocating gender equality and women's rights, Nepali women are compelled to experience and contend with systemic obstructions to achieving their rights and exercising their entitlements. Persistent challenges, patriarchal gendered practices, socio-cultural norms, limited access to legal resources and inadequate legal awareness, widespread illiteracy, social fear and ignorance continue to undermine women's empowerment. Gendered practices in Nepal are deeply rooted in cultural, societal, and historical contexts. Nepal, a diverse country with various ethnicities, languages, and traditions, has a complex tapestry of gender norms and practices. Women and girls in Nepal are disadvantaged by traditional gender practices like the dowry system, early marriage, son preference, stigmatisation of widows, seclusion of women (purdah), family violence, polygamy, and the segregation of women and girls during menstruation (chhaupadi).³ These practices reflect and perpetuate societal norms and stereotypes about masculine and

¹ The Constitution of Nepal 2072, Article 4.

² The Constitution of Nepal, The publication date in the Nepal Gazette is September 20, 2015 (2072-6-3).

³ Nepal Gender and Protection in Brief, CARE International, 2015, available at <https://reliefweb.int/report/nepal/nepal-gender-and-protection-brief>.

feminine traits, contributing to the reinforcement of gender inequality, gender differentiation and gender system.⁴ Ignorance in/ while gendered practices is unenlightenment and refers to a lack of awareness, understanding, comprehension, consciousness or recognition of the diverse experiences and rights of individuals, particularly concerning gender. Ignorance, toxic guilt, and fear are complex psychological and emotional states that can profoundly impact an individual's well-being, realisation of substantive rights, and accomplishment of integrity and dignified living. Ignorance and ignorance can contribute to misunderstandings, perpetuate stereotypes, and hinder progress, leading to biased beliefs and discriminatory treatment.⁵

Artificial Intelligence (AI) is the branch of Computer Science that focuses on the theory and practice of creating "smart" devices mimicking human reasoning and behaviour (Mitchel, 2019; Kastranis, 2019). Artificial Intelligence (AI) enables computers and machines to simulate human learning, comprehension, problem-solving, decision-making, creativity and autonomy (Stryker, 2024). Digital technology means electronic tools, devices, systems, and resources organisations utilise as they process or store data and complete many other functions, increasing productivity and efficiency⁶, enabling innovation and communication in various domains, and driving the digital age and digital necessity. Legal literacy and public awareness are pivotal in unveiling the issues of ignorance, enabling women to properly understand and meaningfully exercise their rights, and empowering all community members to uphold and safeguard the rights of every woman. This paper posits that AI and digital systems with technological initiatives can be instrumental in addressing literacy, inaccessibility, resource availability, public awareness and knowledge dissemination challenges. By examining Nepal's socio-legal context, the paper sets the stage for understanding how technological advancements can catalyse gender liberation.

II. CONTEXT: WOMEN'S RIGHTS AND LEGAL LITERACY IN NEPAL

Like many societies worldwide, Nepal has historically been a patriarchal society, where men predominantly wield authority and power within the household and in broader societal structures. This patriarchal framework has fostered systemic gender inequalities and discrimination against women and girls. Deeply rooted traditional gender roles and societal norms in Nepal position men as providers and decision-makers, while women are primarily tasked with domestic responsibilities and caregiving. These entrenched roles often restrict women's access to education, employment, and active participation in public life. Historically, Nepal has faced a pronounced gender disparity in education, with boys achieving higher enrollment and literacy rates than girls. Although recent efforts have significantly improved girls' access to education, gaps persist, especially in rural and marginalised communities. In 2024, literacy rates in Nepal increased to 77.4%, where the literacy rate for females stood at 70.1%, which is lower than the male population of 85.8%.⁷

In response to increasing inequalities, violence and discrimination against women, Nepal's government formulated free legal aid accessible by the enactment of the relevant law.⁸ However, the majority of the intended beneficiaries, such as women, minors, and disadvantaged and marginalised communities, are still deprived of these aids and services. Women's rights began to receive serious attention and acknowledgement only after Nepal's transition towards democratic rule in 1990 when a constitution established gender equality as a fundamental right. During this period, the then government adopted a series of legislative developments while also ratifying international laws focused on women's issues, with the Treaty Act⁹ establishing that international laws would supersede national laws in any inconsistencies. Since then, Public Interest Litigation (PIL) has emerged as a human rights jurisprudential mechanism for women to raise women's issues and advocate for mainstreaming women's integrity. This decade also allowed substantial changes in Nepal's legal landscape, fostering the growth of non-governmental institutions, and marked the beginning of women's empowerment initiatives and gender mobilisation efforts. With both national

⁴ Pratibha Roka, Lifting the veil of Ignorance: Gendered Practices, Constitutionalism and implementation of women's human rights, Nyayadoot, Nepal Bar Association, 55(227), pg.509.

⁵ Ibid, pg.511.

⁶ What is Digital Technology? Digital Adoption Team, 2024, available at <https://www.digital-adoption.com/what-is-digital-technology/#:~:text=Digital%20technology%20means%20electronic%20tools,increasing%20employee%20productivity%20and%20efficiency..>

⁷ Pratyencha Koirala, Nepal's literacy rate reaches 77.4 percent, My Republica, 2024.

⁸ Legal Aid Act, 1997.

⁹ The Nepal Treaty Act, 1990.

anticipation and international collaborative efforts, Nepal sought to strengthen the execution of legislative developments aimed at bridging gender divides and fostering sustainability with gender liberation.

The 2015 Constitution of Nepal enshrines women's empowerment and gender justice as fundamental rights. Despite these constitutional mandates and provisions, challenges remain in effectively implementing and enforcing laws and policies regarding women's human rights in Nepal. Abundant women are unaware of their legal entitlements, leading to underutilisation of existing frameworks and face significant challenges in accessing legal literacy and justice due to compounded barriers. Nepal's demographics and geographical and socio-economic barriers make information dissemination difficult. Limited access to digital tools and literacy in rural areas restricts women's participation in digital platforms. Women in rural Nepal often rely on customary dispute resolution mechanisms, which reinforce patriarchal norms, while women in urban Nepal face challenges in accessing technology-driven literacy programs. In both scenarios, women face significant challenges, compounded by a considerable lack of awareness about legal rights and provisions.

Nepal has made significant progress in recognising and safeguarding women's human rights through constitutionalism, legal reforms, and international commitments. The country's legal and policy structures show the commitment to constitutionalism and the protection of these rights. However, bridging the gap between legal provisions and their practical implementation remains crucial, specifically in combating discriminatory and gendered practices. Enhancing awareness, fostering consciousness, and applying practical reasoning is a step towards achieving gender liberation and substantive equality, advancing women's human rights, and progressing towards the 'Critical Reconstitution model of Equality'. The quintessential measure is establishing and enhancing initiatives to raise legal awareness among women, girls, and marginalised communities, focusing on their rights and access to justice. These efforts should focus on building a fair and inclusive society by strengthening these groups' legal, social, political, and economic empowerment. This can be achieved by promoting legal rights awareness, providing legal assistance, and engaging in robust policy advocacy. Ensuring equitable and meaningful access to human rights is essential to advancing legal empowerment and equal opportunities, utilising digital tools and implementing comprehensive strategies to protect and substantively actualise women's human rights in Nepal.

III. INTERDEPENDENCY: WOMEN'S RIGHTS AND DIGITAL TECHNOLOGIES

Digitalisation is a central feature of modern societies and a functional tool for sustainable development. Access to digital tools and technologies unlocks opportunities for social interaction. It is also key to the "future of work" and, more broadly, development.¹⁰ The Accomplished framework of Sustainable Development by the year 2030 underscores the pivotal role of digital innovations in driving sustainable progress and expediting advancements in human development. These technologies are critical enablers for fostering innovation, improving access to education and healthcare, reducing inequalities, and promoting economic growth. By integrating digital solutions into global strategies, there is an opportunity to drive forward the achievement of sustainable development goals while addressing systemic challenges and empowering communities worldwide. Envisioned as a key component of digital progress is setting out a strong, ambitious, and credible direction for a country's digital transformation journey, grounded in the population's needs, realities, and aspirations and aligned with development goals. This vision should propel the creation of digital products and services that are accessible, inclusive, rights-based, gender-responsive, secure and relevant. It should be comprehensive and founded on collaboration since that is critical in shaping, scaling, and strengthening local digital ecosystems and driving the digital transformation as a mechanism of positive change.¹¹

Digital advancements create transformative possibilities for empowering and liberating women and girls. Women's rights and digital technologies are interconnected in several transformative ways, impacting advocacy, empowerment, education, and access to justice. Technologies and digital platforms inform women about their rights, legal frameworks, and support systems. For example, mobile apps and websites dedicated to women's rights can bridge knowledge gaps, especially in disadvantaged areas. Social media and awareness campaigns raise awareness about gender issues and gendered practices, such as violence against women, workplace discrimination and any forms of gender-based restrictions. Digital technologies and E-learning platforms offer accessible education on women's rights, enabling them to understand legal protections and advocate for equality. AI and

¹⁰ Gender Equality in Digitalization, Key issues for Programming, United Nations Development Programme, 2021, available at https://www.undp.org/sites/g/files/zskgke326/files/migration/kg/gender_equality_in_digitalization.pdf.

¹¹ SDG Digital Acceleration Agenda, 2030.

digital technologies offer an unprecedented opportunity to revolutionise the dissemination and accession of information. AI-powered digital assistants provide legal advice to mobile applications, bridging literacy gaps, and technology can amplify efforts to achieve gender justice. Digital technologies are powerful tools for advocacy, fostering activism and networking, grassroots engagement and mobilisation, and driving global movements. Platforms like Twitter and Websites facilitate global advocacy movements, e.g., Me Too¹², amplifying women's voices and advocating for policy changes. Local organisations more feasibly use digital tools for organising protests, campaigns, and petitions supporting women's rights. Women can access legal services through apps and online forums, reducing procedural complications and systemic barriers to justice. Court Digitalization (e-courts) and digital filing systems simplify legal processes, making them more accessible to women, especially in rural areas and disadvantaged communities.

Digital literacy and skills empower women to participate in technology-driven economies and create avenues for e-commerce growth and opportunities, enhancing gender equality and economic empowerment. Digital platforms enable pathways and provide opportunities for women entrepreneurs to access markets without geographical limitations, while Mobile banking and microfinance apps help women gain financial independence and feasibility. Digital technologies contribute to data gathering, policy formulation, and monitoring through digital analytics and abuse tracking. Technologies and platforms help collect gender-disaggregated data, informing policies on gender equality. Apps like safe-city¹³ crowdsource data on harassment and violence, providing actionable insights for creating safer environments. Digital inclusion and literacy are critical factors for the well-being and success of women and girls, opening new avenues for learning, earning and leading while giving rise to profound new challenges and compounding gender inequalities.¹⁴ The digital revolution brings immense potential to improve social and economic outcomes for women. Yet, it also poses the risk of perpetuating existing patterns of gender inequality. Despite several important initiatives, a significant digital gender gap remains, limiting the equitable realisation of the benefits of digital transformation across high, low, and middle-income countries.¹⁵ Gender participation in the digital economy includes gaps in digital literacy and skills, gaps in affordable access to devices and services, and increased risks of misinformation and online violence. These challenges and barriers mean that women do not fully benefit from digital opportunities, limiting their ability to utilise technology for inclusive and resilient development. South Asian countries, including Nepal, have the opportunity to embrace gender inclusivity in digitisation by creating enablers and safeguards that will drive digital inclusion while also protecting against exclusion, cyber threats and risks of misinformation.¹⁶ Challenges like unequal digital access (digital divide, digital inequalities) and cybersecurity vulnerabilities require strong protective measures and strategic management. The effective application of digital technologies and the creation of safer, open, affordable, accessible, inclusive and secure digital platforms can be instrumental in advancing women's rights and strengthening global efforts toward justice and gender equality.

IV. AI AND DIGITAL ADVANCEMENTS: FOUNDATIONS FOR TRANSFORMATION

¹² The #Me Too movement aims to empower survivors of sexual assault and harassment. It creates a safe space for them to share their experiences and break the silence surrounding these issues. It seeks to expose the pervasiveness of sexual violence and challenge the power dynamics that enable it to persist. By amplifying the voices of survivors, the movement aims to foster a cultural shift that prioritizes consent, respect, and accountability. Cited source: Mee Too Movement: Origin, Purpose, Impacts & More, 2024, available at <https://testbook.com/ias-preparation/mee-too-movement#:~:text=The%20Mee%20Too%20movement%20started,of%20women%20in%20the%20workplace..>

¹³ Safecity is a platform that crowdsources personal stories of sexual harassment and abuse in public spaces. This data which may be anonymous gets aggregated as hot spots on a map indicating trends at a local level. The idea is to make this data useful for individuals, local communities and local administration to identify factors that cause behavior that leads to violence and work on strategies for solutions. Cited source: Crowd Source Safety Audit, 2021, available at <https://womenfriendlycitieschallenge.org/wise-practices/crowd-source-safety-audit/>.

¹⁴ Op-ed: Digital rights are women's rights, UN Women, 2023, available at <https://www.unwomen.org/en/news-stories/op-ed/2023/05/op-ed-digital-rights-are-womens-rights#:~:text=Digital%20inclusion%20and%20literacy%20are,men%20than%20women%20were%20online..>

¹⁵ The digital revolution: Implications for gender equality and women's rights 25 years after Beijing, United Nations Entity for Gender Equality and the Empowerment of Women, 2020, available at <https://www.unwomen.org/en/digital-library/publications/2020/08/discussion-paper-the-digital-revolution-implications-for-gender-equality-and-womens-rights>.

¹⁶ Accelerating Gender Equality: Towards a #DigitALL Maldives, Nepal & Sri Lanka, 2023, available at <https://www.worldbank.org/en/events/2023/03/02/accelerating-gender-equality-towards-a-digitall-maldives-nepal-sri-lanka>.

AI tools and digital advancements are at the forefront of a transformative shift, reshaping industries, societies, and how individuals interact with the world. These technologies serve as foundational means for innovation, enabling automation, empowering, enhancing decision-making, and fostering connectivity on a global forum. AI and digital solutions empower unprecedented efficiency and accessibility. As catalysts for progress and pathways for sustainable development, AI and digital advancements are redefining human potential and laying the groundwork for a future where technology and humanity align for the common good and societal advancement.

AI-Powered Legal Education Platforms can catalyse public awareness, legal literacy, human rights and gender advocacy, digital inclusion, social mobilisation, grassroots movements, digital advocacy strategies, policy development and advancement, tech-enabled legal reforms and resourceful solutions for gender equity. AI-based tools, such as virtual assistants and interactive apps, platforms like 'AI for Justice'¹⁷ can be localised to disseminate legal information in local languages, providing accessible, context-specific resources to women in rural areas, also providing instant legal advice and connecting women with pro bono lawyers, counsellors, and support groups through digital platforms. AI can analyse gender-disaggregated data to identify legal literacy gaps, monitor rights violations, and guide policy reforms. Predictive analytics can preempt discriminatory and unlawful issues, such as domestic violence hotspots, enabling proactive interventions. Mobile Applications designed for low-literacy users can deliver interactive content on women's rights and legal processes. Digital campaigns and Social Media Activism through platforms like Facebook, TikTok, and Instagram can amplify women's rights campaigns. AI-driven algorithms can target marginalised groups with tailored educational content, promoting legal awareness among disadvantaged communities. The figure below illustrates how technologies and initiatives advance public awareness and legal literacy while ensuring access to justice and accomplishing substantive rights, particularly for women and marginalised groups.

Technology/ Initiatives	Description/ Function	Impact on Public Awareness and Legal Literacy	Advantageous outcome
AI-powered Legal Chatbots	Provides instant responses to legal enquiries.	Enhancing accessibility to legal information (especially in remote areas)	Legal Literacy- Accelerates access to legal content, empowers users with knowledge, and reduces barriers to understanding legal rights.
Digital Platforms for Legal Education	Online portals offering webinars, courses, workshops, and resources.	Enhancing Legal Education and Outreach Advocacy.	Egalitarian Access- Ensures that legal knowledge and resources are available to all without constraints, promoting widespread understanding of rights and equality.
Mobile Apps for Legal Aid and Services	Connecting users through mobile devices for feasible access to legal assistance, support services, pro bono legal aid, and counsel programs.	Implementing legal support schemes that correspond with constitutional principles, ensuring that women and marginalised communities receive necessary legal support.	Constitutional mandate for free legal aid- Facilitates access to justice for marginalised women, upholding the constitutional commitment to free legal aid. Constitutionalism and Rights Relating to Justice- Reinforces the Principles of justice by integrating them with

¹⁷ These types of AI in the judicial system come with benefits to open government values. Clarifying and simplifying the paths of legal processes increases transparency, a necessary step to strengthening the ability to resolve legal disputes. In some contexts, decisions and administrative tasks done by AI may be more accountable than human decisions, which may be influenced by bias or corruption. These types of tools also speed up legal processes and reduce case backlogs, which can make justice more accessible if the resources saved on routine cases are turned into more capacity and people-centered approaches for complex situations. By Sarah Kennedy, Justice and AI: Promises and Perils, 2024, available at <https://medium.com/ogp-horizons/justice-and-ai-promises-and-perils-ea709d182909>.

			technological advancements to provide equitable access to legal resources.
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The intersections of technology, legal frameworks, and gender advocacy offer transformative opportunities to advance equality and empower marginalised groups, particularly women. Technology is a powerful tool for amplifying voices, spreading awareness, and bridging gaps in access to information and resources. It can facilitate rights enforcement, ensure accountability, and streamline access to justice for women and other vulnerable groups when integrated with robust legal frameworks. Gender advocacy further complements this synergy by addressing systemic biases, challenging discriminatory norms, and promoting inclusivity in technological innovation and legal reform. Collectively, these three domains create a dynamic ecosystem where equitable legal structures and gender-responsive policies guide technological advancements. This alignment can help dismantle barriers such as digital illiteracy, economic inequality, and legal inaccessibility, fostering a more inclusive society where gender equality is an aspiration and a lived reality.

V. ADVANCING DIGITAL INCLUSION: STRATEGIC FRAMEWORKS FOR BRIDGING THE GAP

The digital disparity, interchangeably used as digital inequity or tech accessibility divide, refers to the gap between users, persons or groups of persons/ entities who adhere to digital technologies and those without the same accessibility. This gap includes differences in technological infrastructure, internet connectivity, and levels of digital literacy. The divide manifests across multiple dimensions, such as within nations, between urban and rural regions, and among various socio-economic groups. In Nepal's context, the digital divide is particularly evident. While urban centres and privileged populations benefit from digital advancements, rural and marginalised groups encounter considerable barriers to accessing technology and online services. Women and girls in Nepal frequently encounter heightened obstacles in accessing and effectively using digital platforms. Inequalities in education, entrenched social norms, and restricted access to resources exacerbate the digital gender gap. Gender disparities significantly shape the digital divide in Nepal, and the impact of gendered access to technology in Nepal remains a pressing concern. Bridging this divide through focused programs and initiatives is essential for promoting gender equity in digital access and literacy. For women to actively engage in the rapidly evolving digital advancement, it is essential to enhance their access to technology, equip them with foundational and advanced digital skills, and ensure their inclusion in digital feasibility.

Ensuring equitable access to technology is critical to optimising AI for public awareness and inclusive education. To effectively address the digital divide in Nepal, a comprehensive approach involving multiple strategies is necessary as: **Infrastructure Development** (Prioritizing the investment in infrastructure, particularly in rural and remote areas, which includes ensuring reliable electricity supply, expanding broadband networks and enhancing technologies like satellite internet to reach marginalized regions), **Collaborative Partnerships** (Fostering Collaborations between government, private sectors and non-profit organizations to fund, to expand digital access and deploy gender-focused digital initiatives), **Mobile Technology Utilization** (Capitalizing on the widespread use of mobile devices to provide digital services, expanding mobile network coverage and promoting apps that offer educational resources, legal literacy and empowering projects), **Community-Led Digital Literacy Programs** (Implementing targeted digital literacy initiatives, training local women to properly use and accessing of AI tools, creating a multiplier effect in raising awareness to maximize outreach), **Affordability- Availability Access** (Introducing measures to reduce the costs of device, internet connectivity, and electricity through subsidies, affordable internet packages, and tax incentives for local device manufacturing), **Localizing Digital Tools** (Developing AI models trained on local dialects, cultural contexts, and legal frameworks to ensure relevance, accessibility and inclusivity for diverse communities), **Gender Inclusivity and Liberated Frameworks** (Bridging the digital gender gap by introducing tailored digital literacy programs for women and girls, empowering and creating safe spaces for engaging with technology), **Cybersecurity Awareness** (Strengthening cybersecurity infrastructure and launching awareness campaigns about online risks and safety practices, collaborating with law enforcement agencies, academia, activism and industry experts to combat cyber threats), **Community Involvement** (Empowering local communities to take ownership of digital initiatives through active participation in planning, implementation, maintenance and ensure the sustainability of projects), **Integration with Traditional Media** (Combining digital campaigns with traditional media such as radio and community theater to reach non-digital audiences), **Policy and Regulatory**

Reforms (Updating policies and regulations to encourage digital inclusion, incentivizing private investments, streamlining and embedding digital right as a core national priority. By implementing these strategies in an integrated and inclusive manner, Nepal can address the digital divide, empower its citizens and drive socio-economic development.

VI. CHALLENGES AND ETHICAL CONSIDERATIONS

AI and Digital technologies are advancing extraordinarily, sparking significant ethical considerations around application, ownership, accountability, and future impact on society. In conjunction with moral considerations, challenges must be addressed. The key challenge lies in addressing the digital divide, where rural and marginalised women often lack access to the necessary technological infrastructure and digital literacy skills. This creates a barrier to their practical engagement with AI-driven tools and platforms. Ethical concerns emerge when ensuring that AI systems are free from biases that may reinforce gender stereotypes or exclude diverse groups of women. Nepal lacks robust data protection laws, raising concerns about the misuse of personal information collected through digital platforms. Digital initiatives must ensure women's data privacy, given the risks of cyberstalking, online harassment and issues of confidentiality. Comprehensive cybersecurity measures are critical; diverse datasets and inclusive development teams incorporating gender-sensitive data are essential. Furthermore, contextualising legal content in local languages and cultural settings while maintaining accuracy and accessibility requires thoughtful adaptation. Transparency and accountability in AI applications must also be prioritised to build trust and ensure fairness. Grassroots awareness campaigns are crucial to fostering societal alignment. Efforts must ensure inclusivity by addressing the unique challenges faced by rural women, indigenous groups, and other marginalised populations. These challenges necessitate a collaborative, inclusive, and rights-based approach to harnessing AI and digital technologies to promote women's rights and gender liberation in Nepal.

VII. ADVANCING POLICY FRAMEWORKS AND FURTHERANCE

Nepal's journey toward digital inclusion and achieving digital empowerment requires a multifaceted approach and policy frameworks to address the persisting digital divide. Strategic frameworks must prioritise accessible and equitable use of technological advancements with impartial reach to digital solutions, enhanced digital literacy programs, and infrastructure development in rural and disadvantaged areas. By developing an AI Literacy policy and launching programs to educate women, women must be empowered to safely and proficiently utilise AI technologies. Legislative development and strategic Reforms are crucial in integrating laws to safeguard data privacy and ensure algorithmic transparency. Policies should emphasise integrating gender-responsive initiatives to affirm that every woman, including girls, is afforded equitable chances to engage and have egalitarian reach in the digital economy and platforms. Integration of efforts from governmental bodies, private industry, non-profit organisations and humanitarian institutions is fundamental to implementing effective programs that bridge digital gaps and foster the implementation of gender-sensitive technologies. Integrating AI into public awareness and legal literacy campaigns requires a multidisciplinary approach across law, technology and advocacy. Technological use to develop culturally sensitive AI models to simplify legal ambiguities and complex legal language into user-friendly, easier formats helps ensure and address the barriers. UN Women's advancements in using AI for gender-focused data collection have influenced international policies, presenting opportunities for effective application in Nepal. Similarly, Global practices can be contextualised in Nepal. AI-powered mobile apps like 'Nyaya Bandhu' India's legal literacy initiative, are intended to meet the Justice Department's critical task of facilitating legal empowerment for vulnerable populations and adhering to the Constitutional requirement of providing 'free legal support' to every individual.

Nevertheless, Nepal has begun employing AI and digital technologies for women's empowerment in several sectors. In collaborating with FruitPunch AI, a global initiative committed to AI education and application, Heifer International projected the 'AI for Women Farmers Challenge' to create AI platforms that assist rural women farmers in Nepal through data-driven improvements for their well-being and economic sustainability. This includes applying Optical Character Recognition (OCR) models to digitise and analyse their data using AI tools and transform handwritten data into actionable digital insights. The project is designed to assist women-operated agricultural cooperatives in analysing and translating their data on financial, business, and relevant activities, enhancing their accessibility in markets, financing, product traceability platforms and additional

resources.¹⁸ The CREW (Co-producing a shock-resilient business ecosystem for women-led enterprises in Nepal) project, led by the South Asia Institute for Advanced Studies (SIAS), initiated the technology training program to educate communities, especially women, on the use of mobile apps for farming, to shed light on how communities, policymakers and digital innovators can best use Digi-tech to enhance agriculture.¹⁹ Similarly, Action for Change through Technology (ACT Nepal)²⁰ is an organisation that equips women with digital skills through literacy initiatives, technical mentorships, and e-commerce accessibility. These efforts aim to strengthen women's financial independence and digi-tech proficiency, enabling active community participation. These projects demonstrate a growing focus on utilising technology to mitigate gender gaps in economic opportunities and digital access. However, scaling such initiatives and bridging the broader digital divide remains challenging. Likewise, the World Bank-financed Digital Acceleration Project facilitates digital literacy for women and other vulnerable groups, focusing on emerging topics such as online safety and cybersecurity. Such initiatives and nationwide digital accessibility, coupled with legal literacy, are essential and contextual in Nepal. With a focus on inclusion, equity, and sustainability, Nepal can build a digitally inclusive society that enhances economic empowerment, social development, and gender equality.

VIII. PATHWAYS FOR FUTURE RESEARCH AND POLICY IMPERATIVES

This study illustrates a range of promising avenues for future research and policy development that require deeper exploration and a critical lens. A key area of inquiry involves assessing the long-term policy implications of integrating AI into gender advocacy, distinguishing the Nepalese context, where socio-cultural norms significantly influence technology adoption and usage. Future research must investigate how AI-driven tools can promote women's rights and address systemic biases and inequalities embedded within existing digital infrastructures. This includes critically examining the ethical and legal challenges of deploying AI in gender advocacy to ensure digital platforms do not inadvertently reinforce discriminatory practices or widen the digital divide. Another crucial focus is designing and deploying AI algorithms sensitive to Nepal's rich cultural and linguistic diversity. Developing such technologies necessitates localised datasets and a nuanced understanding of Nepal's multi-ethnic and multilingual diverse society. Further research can explore how these algorithms can be tailored to respect cultural norms while challenging gender stereotypes, thus striking a balance between inclusivity and progressiveness. Incorporating indigenous knowledge systems and community-driven insights into AI development processes could prove empirically transformative in fostering equitable access to technology. Furthermore, there is an urgent need to evaluate the tangible impact of digital literacy programs on women's awareness of their rights and their ability to advocate for themselves. Future studies should adopt a longitudinal approach to assess how these programs influence behaviour change, policy engagement, and socio-economic empowerment. Policymakers must consider the intersectionality of challenges faced by women in rural areas, economically disadvantaged groups, and minority communities to design truly inclusive and effective programs. In addition, a comprehensive critique of existing policy frameworks governing AI and digital literacy in Nepal is paramount. Such evaluations could identify gaps and inconsistencies in current strategies while proposing evidence-based reforms to align these policies with the broader goals of gender equality and sustainable development. Collaboration among academia, civil society, technology developers, and government bodies is essential to ensure that policy interventions are grounded in both theoretical insights and practical realities. By addressing these critical areas, future research and policy efforts can contribute to a more equitable digital landscape where women are empowered as technology users and active participants in shaping its development and governance.

IX. CONCLUSION

The right to life, dignity, personal liberty, integrity, reproductive freedom, sexual autonomy, privacy, and equality are fundamental components of substantive rights that underpin justice and human rights. The rights of women are inherent rights

¹⁸ Heifer International and FruitPunch AI Launch Next Phase of Artificial Intelligence Challenge to Improve Data Access for Women Farmers, Heifer International, 2024, available at <https://www.heifer.org/about-us/media-center/press-releases/heifer-international-and-fruitpunch-ai-launch-next-phase-of-artificial-intelligence-challenge-to-improve-data-a>.

¹⁹ Bridging the Digi-Tech gap for female farmers in rural Nepal, Gender Equality in a Low Carbon World (GLOW), 2024, available at <https://glowprogramme.org/news-blogs/bridging-digi-tech-gap-female-farmers-rural-nepal>.

²⁰ ACT Nepal is a profit not sharing company, committed to transforming lives through the power of technology. By focusing on sustainable development in key areas such as education, health, environment conservation and women's empowerment, is aimed to build a future where every individual in Nepal has access to opportunities, resources, and the skills needed to thrive.

of humans, leaving no justification for perpetuating a culture of sexism and misogyny. However, the effective realisation of women's rights in Nepal continues to face significant challenges due to entrenched gendered practices stemming from traditional gender roles, patriarchal structures, cultural norms, legal and institutional barriers, economic inequalities, resistance to change, insufficient awareness and limited digital literacy. Understanding the interplay between these gendered practices, legal frameworks, and women's rights is crucial for informed dialogue and formulating strategic approaches to promote gender equality. Overcoming these barriers necessitates lifting the veil of ignorance through multifaceted measures, including education, counselling, legal reform, empowerment initiatives, cultural shifts, digital inclusivity and mindfulness practices. To advance women's human rights, there is a need for continued advocacy, awareness campaigns, institutional strengthening, and inclusive policies, coupled with empowering women to actively claim their rights and participate fully in all aspects of society.

Every woman is a liberated individual. All women should be empowered across all domains, from traditional avenues to digital advancements. Digital rights are integral to women's rights. No women should be distinguished, excluded or restricted from any human rights, including digital rights. Achieving gender equality and fostering sustainable economic development requires prioritising efforts to bridge the gender digital divide. AI and digital technologies hold immense potential to advance legal literacy and public awareness, empowering women to challenge systemic inequalities and gendered disparities. Bridging the digital-tech adoption gap in Nepal demands a comprehensive strategy that includes awareness campaigns, targeted training, outreach advocacy, building trust and confidence in technology, and affordability and availability of digital platforms. The successful implementation of these technologies requires addressing barriers to access, ensuring cultural sensitivity, adopting a multidisciplinary approach and ensuring that these technologies are inclusive, ethical, impactful, and justice-oriented. By utilising the power of technology, Nepal can make significant strides toward digital empowerment and gender liberation by fostering a more equitable and informed society by realising women's rights by every woman.

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