Role of Digital Learning for Women in Tribal Societies of Jharkhand

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Abstract

Digital literacy has become an essential skill in the 21st century, shaping the way individuals access, understand, and utilize information in an increasingly digitalized world. Digital learning has emerged as a transformative force in the contemporary educational landscape, especially for underserved and marginalized populations. In the context of Jharkhand—a state with a significant tribal population—digital education holds immense potential for addressing deep-rooted gender disparities and fostering socio-economic inclusion. This paper critically examines the role of digital learning in the empowerment of women in tribal societies of Jharkhand. For women in these communities, digital literacy is not only a tool for personal empowerment but also a gateway to improved educational outcomes, enhanced livelihood opportunities, and increased participation in civic life. It explores the intersection of gender, technology, and education by analysing the impact of various government-led and non-governmental digital initiatives aimed at improving access to quality education for tribal women. The study draws on field observations, secondary data, and case studies to evaluate the extent to which digital tools have influenced women's educational attainment, digital literacy, skill development, and economic participation. It also addresses persistent challenges such as infrastructural limitations, socio-cultural barriers, digital illiteracy, and lack of localized content. The findings underscore the importance of culturally sensitive, community-driven approaches in the design and implementation of digital learning platforms. The paper concludes with the enhancement of digital inclusion and promote gender-equitable development in tribal regions.

Keywords: Digital learning, Tribal women, Jharkhand, Educational empowerment, Gender equality, Digital divide, Socio-economic development, E-learning, ICT in education, Tribal education policies

1. Introduction

The evolution of human being results in the creation of society consisting different communities of mankind globally. Amongst which the Tribal are disseminated in every part of the world. India alone holds the 705 ethnic groups who are recognized as Scheduled Tribes who are the 8.6% of the total population of the country according to the Census of 2011.Among the all states Jharkhand holds the 26.21% of the State's population. Jharkhand, as the name itself portrays, that it is the "Land of Forests" and is the 28th states of the Indian Union which was brought into existence on November 15, 2000 marking the birth anniversary of the legendary Bhagwan Birsa Munda. Jharkhand is home to a significant tribal population with a unique socio-cultural structure. The scientific study of tribal communities and the tribes are one of the integral part of the Indian studies. Without this the development of India as a society is incomplete. Tribal people since the beginning especially during British invasion had detoriated in all aspects and after

freedom, Government is facing challenges in uprising the tribal community. It has been observed that tribal holds the lower position in the Indian social hierarchy and had been subjected to a variety of disabilities, deprivations, oppressions and exploitations by the other communities of Indian society.

The term 'Tribe' has been considered differently by different people like folk living in hilly areas or group of people holding one common clan, tradition, rituals, kinship and so on. According to **D.N.Majumdar**," **A Tribe is a collection of families or group of families, bearing a common name, members of which occupy the same territory, speak the same language and observe the certain taboos regarding marriage, profession or occupation and have developed a well assessed system of reciprocity and mutuality of obligations. A tribe is ordinarily an endogamous unit. Several clans constitute a tribe."** (Majumdar. D. N.1961:367).

According to **Gillin and Gillin**, **"Any pre-literate local group may be termed as tribe, whose members reside in a common area, speak a common language and have a common culture."** (Singh, Prof. Gurnam.2020)

Among all the societies of India, women holds a special position which is the other half of society. Tribal also have the same condition where Women in these communities often face multiple barriers to education, including economic constraints, gender norms, and limited access to educational resources. The advent of digital learning presents an opportunity to address these challenges by providing flexible, cost-effective, and scalable education solutions. This paper examines the role of digital learning in improving educational and economic prospects for tribal women in Jharkhand. (Ministry of Education (2021))

2. Digital Learning and Its Importance

Education plays an important role in the development of any community or society which points towards the education of each member of the community. Women being an important part of the society needs the empowerment to run the family and society smoothly. Now a days, the place of traditional education has taken place by digital literacy which is covering the whole education system. **(Ministry of Electronics and IT, 2023)**. For the development of women in tribal community, it is necessary to incorporate digital mode of learning for the women. Digital learning is an educational approach which takes the help of technology to improve the teaching-learning process through online courses, blended learning, virtual classrooms, and the use of digital tools and resources. For the tribal women, digital learning is the boon which will help them in number of ways like Access to Information and Education, development of skills, connect to the world, and help them in increasing autonomy in different fields. Digital learning encompasses various modes, including e-learning platforms, mobile-based education, and government-led digital literacy initiatives. **(SWAYAM Portal, 2023)**. Some key digital education programs in India include:

- **Digital India Initiative**: The "Digital India" initiative, a flagship program of the Indian government, aims to transform India into a digitally empowered society and knowledge economy by promoting digital literacy, improving internet access, and digitizing government services. It aims to increase internet penetration and digital literacy. Its core objectives is to empower citizen digitally, providing digital infrastructure thus providing high-access to internet connectivity across the country, transforming government services digitally to help people including rural areas, promoting jobs and also developing skills for the women of tribal community. **(Ministry of Electronics and IT, 2023)**.
- **E-Pathshala & SWAYAM**: Online platforms offering free courses which can be avail by the tribal women also thus, improvising their personality and education for better living. **(NCERT 2022)**.

- **Diksha Portal**: Focuses on teacher training and e-content in regional languages. This portal not only help the tribal students to understand the courses better through their mother tongue but also provide different and important e-content for the tribal students especially for the women of tribal community. **(DIKSHA Portal 2023)**.
- **NGO-led Programs**: Several NGOs are working towards digital education for tribal women, enabling them to acquire skills and knowledge from remote locations. **(World Bank 2021)**.
  The several government schemes provide the women of tribal community with a lot of opportunities but also brings some challenges with them. **(Singh & Singh 2020)**.

3. Challenges in Digital Learning for Tribal Women

Despite the potential benefits, several challenges hinder the adoption of digital learning among tribal women in Jharkhand:

- **Infrastructure Issues**: Poor internet connectivity, lack of electricity, and limited access to digital devices are the another issues which become the barrier to digital learning. **(TRAI 2022)**.
- **Economic Barriers**: High costs of smartphones and data packages make digital learning unaffordable for many families. Financial instability is one of the major issue which create hindrances in affording various resources related to digital learning. The community had been exploited so far that they face problem in sustaining in their own places and thus, moving towards the urban areas. **(ILO 2019)**.
- **Cultural Constraints**: Traditional gender roles often restrict women's access to education and technology as women in tribal community are like all other society where there roles are constrained to specific areas like collecting of woods, cooking assist with water fetching, cleaning, meal preparation, livestock rearing, and caregiving. They also participate in agricultural activities and forest product collection and medicinal herbs. **(Rao, R. 2018)**.
- **Language Barriers**: Limited availability of online content in tribal languages becomes one of the major issues. Teachers with tribal languages are also missing in the educational institutions. Language and culture are the issues which create barrier for the students to cope up with the situations thus lacking behind in digital learning. **(Ministry of Education 2021)**.
- **Digital Literacy Gap**: Many tribal women lack the basic skills required to navigate digital platforms effectively due to unavailability of basic environment for digital education along with resources in the rural areas. **(PMGDISHA Scheme; MeitY, 2023)**.
- **Gender discrimination:** It is another major issue which restrict the tribal women to get the education properly. They are mainly subjected to household chores and other activities within the jurisdiction of their place. **(National Family Health Survey; NFHS-5, 2020–21)**.

4. Impact of Digital Learning on Tribal Women

Digital learning has the potential to significantly improve the lives of tribal women in Jharkhand:

- **Educational Empowerment**: Enhances literacy rates and provides access to higher education. **(Ministry of Education; 2020)**.
- **Employment Opportunities**: Enables skill development in various fields such as handicrafts, digital marketing, and coding. **(NASSCOM Foundation 2021)**
- **Social Awareness**: Helps women become more informed about their rights, healthcare, and financial management. **(UNICEF India 2021)**.

- **Entrepreneurship**: Digital platforms enable tribal women to sell handicrafts and agricultural products online, boosting their income. (**Mahila E-Haat; MoWCD, 2022**).
- **Autonomy and decision making skills**: The tribal women will be able to develop the autonomy and will take right decisions due to awareness of every small things going around her. (**NITI Aayog 2020**).
- **Prohibition of gender discrimination**: Educated tribal women would be able to teach the next generation about the equality of gender. (**Ministry of Women & Child Development 2022**).
- **Documentation of indigenous culture**: As women are involved in every sphere of life, they are well-aware of their culture, traditions, rituals, religion, and their importance in the life and society of tribal community. Digital learning will help them to document their every pages of their traditional knowledge which will benefit their as well as mainstream society. (**TOI Article on Dulari Hansda, 2023**).

5. Case Studies and Success Stories

Free Mobile Scheme for Women Entrepreneurs: Under this scheme free smart phone will be provided to the women entrepreneurs. The aim of the scheme is to boost the digital India and to make women digitally literate and economically strong. (**Jharkhand State Government Reports 2023**).

Key Government Schemes for Financial Inclusion

Pradhan Mantri Jan-Dhan Yojana (PMJDY) -The Pradhan Mantri Jan-Dhan Yojana (PMJDY) is one of the most significant financial inclusion initiatives launched by the Government of India. Its primary objective is to provide universal access to banking facilities, including at least one basic banking account for every household, financial literacy, access to credit, insurance, and pension. (**PMJDY Portal; Ministry of Finance, 2023**).

Impact on Tribal Women:

1. **Access to Banking:** PMJDY has facilitated the opening of bank accounts for many tribal women, providing them with access to formal banking services.
2. **Financial Literacy:** The scheme includes financial literacy programs that help tribal women understand and use financial services effectively.

National Rural Livelihood Mission (NRLM)

The National Rural Livelihood Mission (NRLM) aims to reduce poverty by enabling poor households to access gainful self-employment and skilled wage employment opportunities. It focuses on promoting self-help groups (SHGs) and other community-based organizations to facilitate financial inclusion. (**NRLM Annual Report 2022**).

Impact on Tribal Women:

1. **SHG Formation:** NRLM has significantly contributed to the formation of SHGs among tribal women, fostering a culture of savings and credit.
2. **Income Generation:** The scheme provides support for income-generating activities, enhancing the economic status of tribal women.

Stand-Up India Scheme

The Stand-Up India Scheme aims to promote entrepreneurship among women and SC/ST communities by facilitating bank loans between INR 10 lakh and INR 1 crore for setting up greenfield enterprises in manufacturing, services, or the trading sector. (**Stand-Up India Portal; SIDBI, 2023**).

Impact on Tribal Women:

1. **Entrepreneurship:** The scheme has encouraged tribal women to start their own businesses, thereby

promoting economic independence.

2. **Access to Credit:** By providing easy access to credit, the scheme helps overcome one of the major barriers to entrepreneurship for tribal women.

Mahila E-Haat

Mahila E-Haat is an initiative under the Ministry of Women and Child Development, providing a direct online marketing platform to support women entrepreneurs, including those from tribal communities. (**Ministry of Women and Child Development 2022**).

Impact on Tribal Women:

1. **Market Access:** The platform helps tribal women reach broader markets for their products, enhancing their income potential.

2. **Digital Literacy:** Participation in Mahila E-Haat requires basic digital skills, thus promoting digital literacy among tribal women.

Case Studies and Success Stories

Case Study 1: The Role of SHGs in Jharkhand

In Jharkhand, SHGs formed under the NRLM have played a crucial role in promoting financial inclusion among tribal women. These groups provide a platform for women to save money, access credit, and invest in income-generating activities. The case of the "Sakhi Mandal" in the Dumka district is particularly notable. This SHG has not only improved the financial status of its members but also empowered them to take on leadership roles within their community. (**NRLM Case Studies 2021**).

Case Study 1: A Jharkhand-based NGO introduced mobile-based learning modules for tribal women, significantly improving literacy rates in remote villages.

Case Study 2: A government-led initiative trained tribal women in basic computer skills, enabling them to secure online jobs. Pradhan Mantri Gramin Digital Saksharta Abhiyaan (PMGDISHA) is a Digital Literacy Scheme by the Ministry of Electronics and Information Technology (MeitY), to make six crore persons in rural areas, across States/UTs, are digitally literate, reaching around 40% of rural households by covering one member from every eligible household. (**PMGDISHA Reports 2023**).

The Scheme is applicable only to rural areas of the country. Only one person (14 - 60 years of age) per eligible household would be considered for training. Priority would be given to Non-smartphone users, Antyodaya households, college drop-outs, and Participants of the adult literacy mission; digitally illiterate school students from class 9th to 12th, provided facility of Computer/ICT Training is not available in their schools. Preference would be given to SC, ST, BPL, women, differently-abled persons, and minorities.

The Scheme is aimed at empowering the citizens in rural areas by training them to operate computer or digital access devices (like tablets, smartphones, etc.), send and receive e-mails, browse the Internet, access Government services, search for information, and undertake digital payment, etc. and hence enable them to use the Information Technology and related applications, especially Digital Payments to actively participate in the process of nation building. Thus the Scheme aims to bridge the digital divide, specifically targeting the rural population including the marginalized sections of society like Scheduled Castes (SC) / Scheduled Tribes (ST), Below Poverty Line (BPL), women, differently-abled persons, and minorities

Case Study 3: Women from the Santhal tribe utilized digital platforms to promote and sell their traditional artworks globally. But in a recent article covered by TOI these as is local artisan by the name of Dulari Hansda who has opened a Godna parlour where she applies the traditional motifs and believes that she does not provide tattoo service but 'an experience' of the Santhal culture as the group of people assisting

her in the parlour; sing the folk tales (Santhal community is famous for their folklores) and dance and provide an entire experience with traditional inks but latest tattoo tools. **(Times of India 2023)**.

6. Strategies for Improving Digital Learning Access

Digital access is one of the important factor which when used properly and leverage its capabilities gives productive outcome for the artisans by helping them to expand their market reach, improve operational efficiency and stay competitive in an increasing digital market. It will help the tribal women artisans establishing an online presence in the websites of global platform. **(UNDP Digital Strategy Reports 2022)**.

- **Strengthening Digital Infrastructure**: Expanding internet connectivity and electricity access in tribal areas. **(BharatNet Project; DoT, 2023)**.
- **Affordable Digital Literacy Programs**: Introducing low-cost or free courses tailored for women. **(NASSCOM Foundation; 2021)**.
- **Localized Content Development**: Creating e-learning materials in regional and tribal languages. **(Ministry of Education 2021)**.
- **Community Engagement**: Encouraging local leaders and communities to support women's digital education. **(World Bank 2021)**.
- **Public-Private Partnerships**: Collaborations between government, NGOs, and private sectors to provide technology and training. **(MeitY Reports 2023)**.

7. Conclusion and Recommendations

Digital learning presents a transformative opportunity for tribal women in Jharkhand, addressing key barriers to education and employment. While challenges persist, targeted interventions can significantly enhance digital literacy and access. Policymakers should prioritize infrastructure development, subsidized digital resources, and culturally relevant educational content to bridge the digital divide. Further research is needed to evaluate the long-term impact of digital learning on tribal women's socio-economic mobility. This paper highlights the critical role of digital learning in empowering women in tribal societies and provides a roadmap for improving access and effectiveness. Future efforts should focus on collaborative initiatives to ensure inclusive and sustainable digital education for all. **(Ministry of Education 2021)**.

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