Sakshamaa Briefing Paper

Working Towards Bridging the Gender Digital Divide in Bihar

Digital transformation, or digitization, across sectors is fundamentally changing the way we operate. It is reshaping industries, markets, occupations, and processes on a rapid scale - providing efficiency, enhancing productivity, and creating new opportunities. However, this vast transformation needs to be more equitable, to ensure that historically marginalized communities can access the benefits being offered by digital changes. Equitable realisation of benefits of digitization is a significant challenge, especially among adolescent girls and women. Due to several constraints around access, ownership, social norms, and skills to meaningfully use technologies, their scope to benefit from our increasingly digital world remains limited.

India is among the biggest data consumers globally, but domestically the gender digital divide is vast despite Government of India's (GoI) ambitious Digital India programme which envisions transforming India into a digitally empowered society and a knowledge economy. The state of Bihar is at the bottom among states, reporting the lowest percentage of women using internet. Further, Bihar has the lowest number of internet subscribers at just 32.45 per 100 people.

The 2021 Union Budget has proposed an allocation of INR 1500 Crore to boost digital payments in India. It is expected that digitization and automation will witness a tremendous growth, including mass adoption of e-payments. Incidentally, despite the prevalent gender digital divide, the Union Budget announcement did not specifically mention any strategy to encourage digital and financial literacy for adoption, adaptation, and usage of digital transactions.

With the COVID-19 pandemic, the gender digital divide or digital exclusion in sectors like education, e-banking, e-commerce, e-governance was evident, as these services were only accessible digitally in this period. The present era demonstrates that technology and internet are more important than ever and connectivity should be at the core of program design in the domains of health, education and delivery of other government services. Digital linkage can be a great enabler for women and girls, increasing their access to critical information, services and opportunities. But for this, their access to technology, devices, digital training and understanding on safe usage needs to be strengthened. In this regard, the extant Briefing Paper gives an overview of gender digital exclusion in Bihar and why this gap needs to be bridged.

What is the Digital Divide?

Digital Divide or Digital Exclusion refers to the gap between those who have access to internet and internet-enabled devices, and those with limited or no access. Due to increasing digital transformation, digital divide is growing among people from marginalized sections of society, especially poor, rural, elderly, specially-abled and women who do not have access to devices and internet connection. Digital exclusion is quite evident between communities living in urban and rural set-ups; between more educated and less educated population; and between the economically developed and under developed families. The two types of digital divide that we generally notice are Gender Divide and Access Divide.
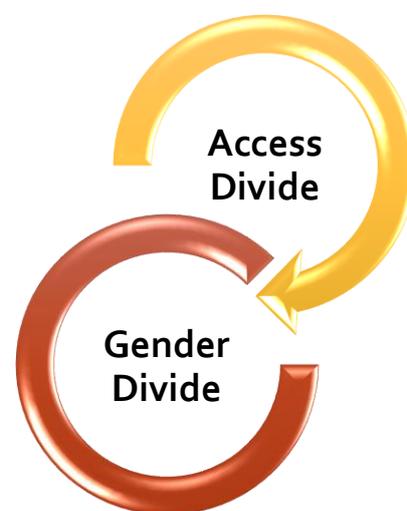
The digital divide exists despite rise in wireless subscribers in the country. According to the September 2020 report of TRAI (Telecom Regulatory Authority of India), there were 1148.58 million wireless subscribers, with access in urban areas at 626.16 million and rural areas at 522.42 million. Broadband subscribers during the same period were 726.32 million.
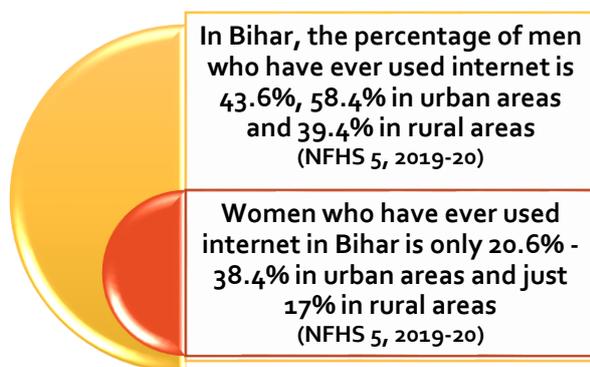
The National Sample Survey (2017-18) reported a wide gender, class, and digital divide in India. Only 23.8% of Indian households have access to internet. On top of that, there is a huge rural-urban disparity when it comes to access to facilities like internet or smartphone(s). The rural population makes up for 66% of India's population, but only 14.9% has access to internet as compared to 42% in urban areas. Further, women who have access to mobile internet make up only 16% of the population as compared to men, who are the primary users, making up 36% of the population having access to mobile internet.

Connected Women: A Mobile Gender Gap Report, published by UK-based GSM Association in March 2020, stated that though access to mobile internet is expanding, it is not expanding equally. Similarly, while awareness of mobile internet is growing rapidly, it remains lower for women. The report mentions that while nearly 63% of Indian women own mobile phones, only 21% of them use mobile internet. Further, women are 50% less likely to use mobile internet than men. The key factors attributing to digital divide include education- a major barrier to digital literacy, household income and social control or patriarchy. Households with higher levels of education are more likely to use digital devices, further the household income plays a significant role in ownership and usage of digital devices and internet the report highlighted.

Gender Digital Divide in Bihar

As per the India Internet 2019 report, mobile phones remain the first choice for a device to access internet in both urban and rural India due to their affordability, along with availability of economic data plans. The female internet user population in India is roughly half of the 258 million male Internet users. Among state groups Kerala, Tamil Nadu and Delhi have higher proportion of women using internet. The report mentions that the Internet penetration is just 28% in Bihar, whereas all India average is 36%. Internet users in Bihar along with Assam and other north eastern states, Jharkhand, and West Bengal are less affluent and predominantly male. The gap is more evident in rural India mainly due to challenges related with connectivity, quality of service and affordability of mobile internet.

In Bihar, the percentage of men who have ever used internet is 43.6%, 58.4% in urban areas and 39.4% in rural areas
(NFHS 5, 2019-20)

Women who have ever used internet in Bihar is only 20.6% - 38.4% in urban areas and just 17% in rural areas
(NFHS 5, 2019-20)

Bihar is the third most populous state of the country, with a low literacy rate among women. While male literacy rate as per latest NFHS-5 data is at 78.5%, female literacy is only 57.8% - meaning 2 out of 5 women in the state are illiterate. A similar trend can be observed in terms

of digital literacy as well – only little over 20% female have accessed internet in their lifetime. This gap is pronounced among adolescent girls as well. Centre for Catalyzing Change in its recent Policy Brief: Bridging the Digital Divide for Girls in India, highlights that there is a wide gender gap in access to devices in Bihar – only about 18% adolescent girls have access to devices whereas over 80% boys enjoy digital access.

Dimensions of Gender Digital Divide

Education and poverty, along with prevalent social norms, stand as key barriers to digital inclusion for adolescent girls and women in Bihar.

Poverty – a huge determinant for access and affordability - greatly hinder girls and women in using digital tools and benefitting from digitisation. The incidence of poverty is highest in Bihar; the annual per capita income at INR 3650 which is about a third of the national average of INR 11,625. Perhaps poverty is a key reason why despite decline in data prices, majority of women owning mobile phones have no access to internet.

Education is one of the key factors contributing to digital gap. Without having the fundamental skills of reading, writing and understanding content, the benefits of digitisation cannot be realised by women and men. Access to education continues to be a greater barrier for women than men, there is a difference of around 20 percentage points between male and female literacy rates in Bihar. The situation is better in urban areas with 75% women being literate while only 54.5% in rural areas. Further, in Bihar ICT in education (ICT@School, implemented at only 1000 Govt. schools) started off late and has limited functional coverage.

There are 38 state government engineering colleges across all districts in Bihar. As per 2019-20 available information, only eleven colleges have permanent campus. Further, the stated engineering colleges have an intake capacity of only 9155 students with maximum seat allocation under civil engineering. The prevalent situation may lead to majority of women missing opportunities for higher learning in the state.

Thankfully, the Bihar state government has given special emphasis on education in its 2021-2022 budget by giving it highest allocation (of Rs.39,467.3 crore, 18.1 per cent) with budgetary allocations for promoting higher education among girls and opening of new engineering colleges in the state. Giving priority to technical education, teaching of computer science shall start from class 6th onwards in government schools.

Social norms favouring men create disparities between men and women, and often acts as a barrier to girl and women's education, social status, choices and behaviours. The space of technology is dominated by men; use of technologies are often considered to be within the purview of men which limits women's opportunity to learn, adapt, use and benefit from technology. Further, women are not entering technology jobs at the same rate as men. By the 2017-2018 school year, women earned 31.7% of the engineering and tech degrees in India—an increase, but still not gender parity (AISHE, 2018). Unemployment among them is much higher in comparison to their male counterpart. According to *Walking the Tightrope* study released in January 2020 - the unemployment rate among Indian women engineers is five times higher than that of male engineers.

Availability of time for self – social norms put pressure on women to conform to traditional gender role as a primary caregiver particularly when she is married and has children. The burden of household and family care responsibilities leave women with little time to learn and practice new technologies. It leads to discomfort with technology and becomes a strong reason for not using internet and internet enabled devices. E-commerce, mobile banking and digital wallets are now a growing and widely used phenomena. Without digital literacy, women and girls shall remain excluded from the digital economy.

Why Bihar Needs to Bridge the Digital Divide

Bihar is yet to achieve significant progress in providing employable skills, appropriate work and entrepreneurship opportunities to women and girls of the state. The Saat Nischay / Seven Resolve (Part-2) initiative of the government focusses on health, infrastructure and jobs which will support in creating an enabling environment for gender equality, poverty eradication, and employment, and needs to include digital linkages to have the impact it envisages.

The existing digital divide works unfairly for women and girls, it limits their opportunities towards economic and social participation. Because of digitisation, traditional jobs, particularly low skill jobs are disappearing. The emerging job opportunities mostly require digital skills; women in jobs or looking for job opportunities are less likely to acquire skills needed for changing labour market. Further, lack of skills and access to connectivity and digital devices pose challenges for them to use services available over digital platforms and benefit from digital economy. Therefore, investing in digital literacy for women and adolescent girls is crucial for Bihar. It is important for the state government to give it a push.

Apart from inclusive policies for increased access and use of digital platforms by women and girls, the Bihar state government may like to consider below mentioned suggestions:

- Scaling up of digital literacy and digital rights literacy specially targeted at women and adolescent girls, pursuing grassroots approach. Digital literacy, especially for women engaged in low skill jobs, requires long term engagement. Also, due to mobility limitations, women and girls face challenges in accessing training facilities. So state government must promote suitable capacity building and mentorship programmes for women.

Bihar's response to the Digital Gap

Due to growing recognition of importance of digital literacy in education and jobs and central government push for 'Digital India', Bihar government has undertaken measures to promote it.

The state government visions to bridge the digital divide which separates the citizen in urban areas from those in rural areas by creating a robust infrastructure and deliver online services to every citizen in the state. The vision will be achieved through infrastructure development; developing conducive business environment; and skill development.

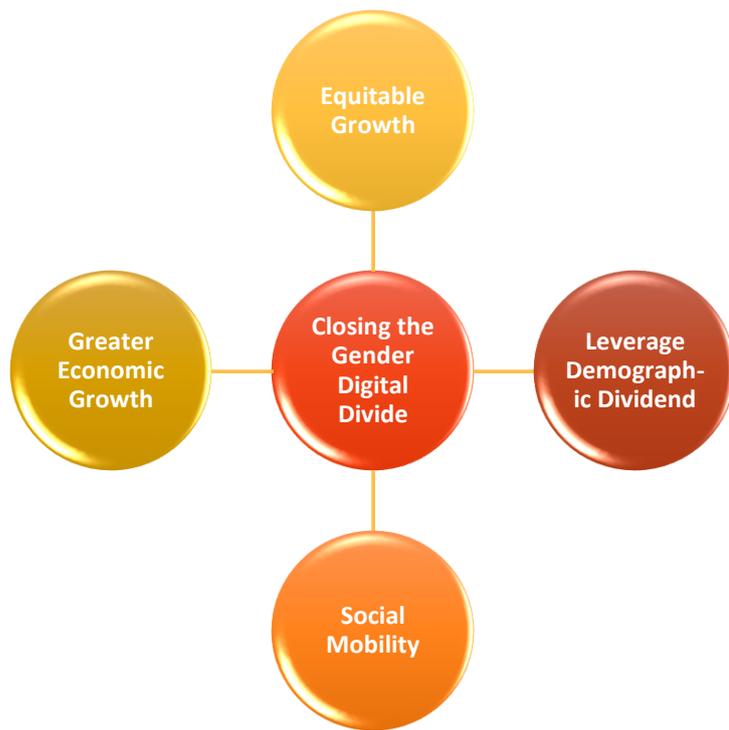The near term projects envisaged by the state government include: -

1. World Class IT Tower in Patna Existing Software Technology Park of Biscomaun to be upgraded
2. Free Wi-Fi HOT SPOTS at prominent locations.
3. An IT incubation Centre of 100 seat
4. Bihar ESDM (Electronic System Design and Manufacturing) Policy

During the COVID lockdown and uncertainty over reopening of schools, an online learning programme/ initiative namely 'Mera Doordarshan - Mera Vidyalaya has been initiated. Another breakthrough programme "Unnayan Bihar" started across the state in 5646 secondary/higher secondary schools.

Bihar implemented National Digital Literacy Mission (NDLM) and 'Digital Saksharta Abhiyan' (DISHA). Currently the state is implementing Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA) that aims to train one person per household (6 crore persons across India) in rural areas on digital literacy.

Bihar needs to strengthen institutional response to gender digital divide and make it as part of state strategy, may be integrate it with the existing 'Women Empowerment Policy'.

- Promote affordable internet enabled devices and connectivity to strengthen women participation by way of Digital Scholarships. As internet access is vital to the economy, make special efforts to improve access among rural women.

- Sensitise and educate masses about data privacy, security, data storage and online safety concerns through targeted messages and digital literacy curricula.

- As a long term goal, make basic literacy essential to digital literacy and vice versa.

- Women and girls are underrepresented in STEM (Science, technology, engineering, and mathematics) as well as in technology-skilled positions. Promoting education of women and girls in STEM stream through infrastructural arrangements, scholarships and suitable job placements.

- Engagement with parents / spouse and community to address social norms that work against women for digital inclusion.

- Maintain gender disaggregated data on gender inclusion with outcome measures (mainly, learning, usage and employment).

- Invest in researches for consumer segment insights to product designing suiting to needs of women.

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