



**POLICY BRIEF**

# BRIDGING THE DIGITAL DIVIDE FOR GIRLS IN INDIA





# EXECUTIVE SUMMARY

**N**ationwide closure of schools and institutions, and extended confinement at home during the COVID-19 pandemic has adversely impacted adolescents including students and learners. The nature of such social, educational and health exigencies have also reiterated the need to bolster digital governance, information and service delivery mechanisms and most importantly, the online access to critical information, resources and learning for this affected population group. With this, the issue of digital divide has resurfaced in a big way in developing and underdeveloped countries. In India, 'Gendered Digital Divide' among adolescents has come out starkly, highlighting ways in which the harmful effects of COVID-19 are disproportionately experienced by Adolescent Girls.

The policy brief is an effort to bring focus on how the digital divide is affecting the adolescent girls against the backdrop of the COVID-19 pandemic and hereafter with reference to pre-COVID-19 digital gaps as well. The brief brings out the key areas that can help bridge the gendered digital divide for girls in India, by presenting an on-ground reality of adolescent girls amidst socio-economic challenges such as staggering family income, job insecurities, slow health services, lack of access to critical information and benefits, and loss on attendance in school, given the uncertainty of the pandemic.

The brief presents locally collected sex- dis-aggregated data to understand the access to digital/mobile devices, access to connectivity and costs, and attitude of the family members in supporting online access for the adolescent girls, besides examining the access and nature of digital content and availability of digital skills. Adolescent girls in India especially in rural areas, are often at the brink of managing their lives, aspirations and education in the background of fulfilling expected social, familial and reproductive roles. The outcome of this brief is aimed at garnering attention towards designing and implementing comprehensive programs that cater to bridge the digital divide for adolescent girls during and post the pandemic. Provisioning and preparing adolescent girls in India with digital access, resources, information and opportunities can mainstream and prepare them as empowered women for tomorrow. Lastly, the policy brief also garners specific focus on state- wise differentiation of access to digital devices and services for the adolescent girls. These further coaxes policy makers to create robust plans and implementation strategies for specific states and address the issue of digital disparity more accurately.



The need of the hour is a holistic gendered digital approach that calls for multi stakeholder partnership and investment for digital inclusion. It is critical to focus on girls in both in and out of school/institutional settings who are from vulnerable communities with barely any access to devices or last mile internet. This will create avenues for more advanced learning such as AI and ML, breaking the female underrepresentation in STEM. So, it's time we #LogHerIn.

**DR. APARAJITA GOGOI**

Executive Director, Centre for Catalyzing Change



There is a serious discrimination against women in general and girls in particular, when it is a matter of access to education. Covid19 has highlighted the deep cesspool of the digital exclusion of girls but through data and insights we wanted to bring forward how intense the effort is required to overcome gender digital divide to enable our girls with digital access.


**MR OSAMA MANZAR**

Founder Director, Digital Empowerment Foundation

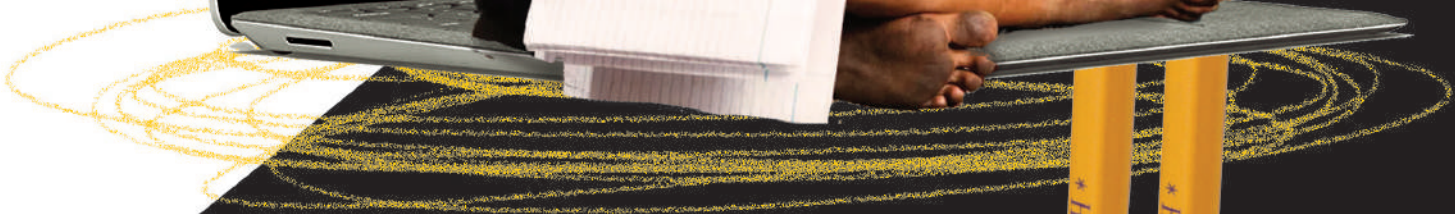
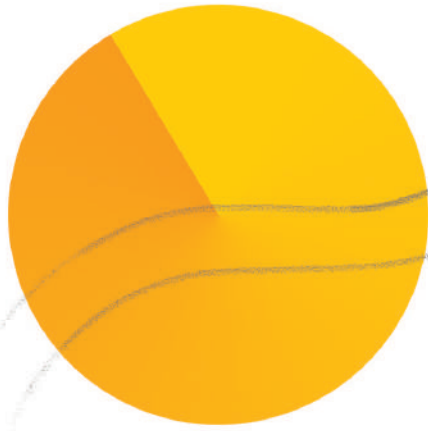


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# INTRODUCTION

India has the world's largest adolescent population: 253 million, with every fifth person in the country between the ages of 10 to 19 years (Census 2011). Almost half of this population comprises of girls.

Such a large youthful demographic group holds obvious advantages for the country's development, and has the potential to benefit it "socially, politically and economically"<sup>1</sup>. However, without access to digital modes and media, this potential would remain largely unfulfilled. Even as India finds itself in a digitally emergent phase, it has not moved ahead with the required pace on bridging the digital gap that exists among its young people, especially girls.

Globally, 12 per cent more men than women used the internet in 2017; in India, a mere one-third of the total internet users are women<sup>2</sup>. As a result, India alone accounts for nearly 50% of the gendered digital divide in the world. Such figures are incomplete if the gendered digital divide among adolescents are not taken into account.

The current pandemic has forced nations and communities into realigning their priorities: there is now an increased need to bolster digital governance, information and service delivery mechanisms. More importantly, online access to education, information and resources has become critical. With this, the issue of gendered digital divide – where the negative impacts of the pandemic are being disproportionately felt by adolescent girls – has resurfaced in a big way in countries like India (see Figures 1 and 2).

While the subject of digital gender gap has been deliberated on under a few umbrella policies for women, a specific focus on 'digital access for girls' has remained absent from the policymakers' radars. The challenge becomes more confounding because of the



India accounts for half of the world's gendered digital divide. A mere **one-third** of its internet users are women

1. Adolescent Development and Participation, UNICEF India, November 20, 2020, <https://www.unicef.org/india/what-we-do/adolescent-development-participation>

2. The State of the World's Children 2017: Children in a Digital World, UNICEF, December 2017, [https://www.unicef.org/publications/files/SOWC\\_2017\\_ENG\\_WEB.pdf](https://www.unicef.org/publications/files/SOWC_2017_ENG_WEB.pdf)

The COVID-19 lockdown in India has affected **158 million girl students**, destroying their dreams and chances of a formal education and better lives at one stroke. For most of them, online and digital learning is not even an option

lack of enough statistical evidence specific to adolescent gender digital divide. India needs to holistically and urgently address this divide, considering the role the country's adolescent population plays in contributing to its digital society and economy.

#### Why the 'adolescent girl'?

The World Health Organization (WHO) defines 'adolescence' as a period of specific developmental needs, a time during which a child develops knowledge and skills, and learns to manage relationships while transitioning into an adult.<sup>3</sup> However, this period of natural change differs according to gender. Boys are expected to get prepared to acquire skills and become the breadwinner of the family. Conversely, social norms determine that girls are largely suitable for marriage (even before reaching the legal age, in some cases), and managing the unpaid care work of households, with constrained mobility and agency. Restrictions on movement, concerns about safety, economic constraints, and household responsibilities keep girls away from participating in the public sphere. These constraints have now extended into the digital space.

But despite these odds, there are some women – older in age – who have managed to break these shackles and find ways of bringing their stifled voices on to public platforms with policy and programme support. The 'adolescent girl', however, has remained unlucky on that score: this segment of the population has been relatively unreachable and ignored, and that is

the fundamental reason behind the focus of this policy brief.

#### COVID-19 – how has it deepened the challenges for the 'adolescent girl'?

In many parts of the world, the first response to the COVID-19 crisis was unprecedented lockdowns – educational institutions were one of the first to be closed. A UNESCO report suggests that the lockdown of schools in India affected 320 million children, out of which an estimated 158 million were female students.<sup>4</sup> Studies conducted during the course of India's national lockdown and after point towards the devastating long-term impact this has had for girls: millions were forced to drop out of school and lose the already tenuous connect that they had to formal education.

In such a scenario, the digital and online medium offered a pathway for providing continuous educational content, and ensuring uninterrupted learning at home. But for most adolescent girls, this pathway has remained either completely barred or only partially open.

#### What are the key context areas of the 'digital divide for girls' in India?

The context analysis of pre-pandemic, pandemic and post-pandemic circumstances points to five key dimensions that need to be assessed for understanding the crisis of digital access for adolescent girls in India, as well as the many fallouts which are impacting their socio-behavioural, economic, personal and professional development as empowered citizens.

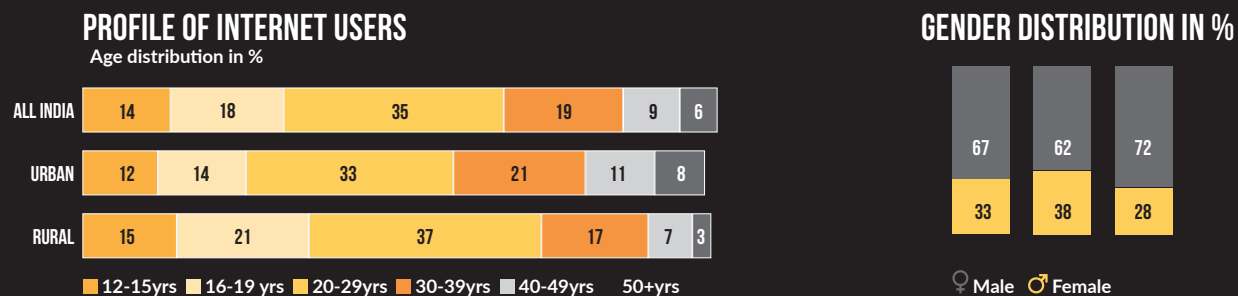
3. Adolescent Health and Development, World Health Organization, October 19, 2020, <https://www.who.int/news-room/q-a-detail/adolescent-health-and-development>

4. Shruti Jain, Gender Dimensions of School Closures in India during COVID-19: Lessons from Ebola, ORF, September 11, 2020, <https://www.orfonline.org/expert-speak/gender-dimensions-of-school-closures-in-india-during-covid19-lessons-from-ebola-66643/>

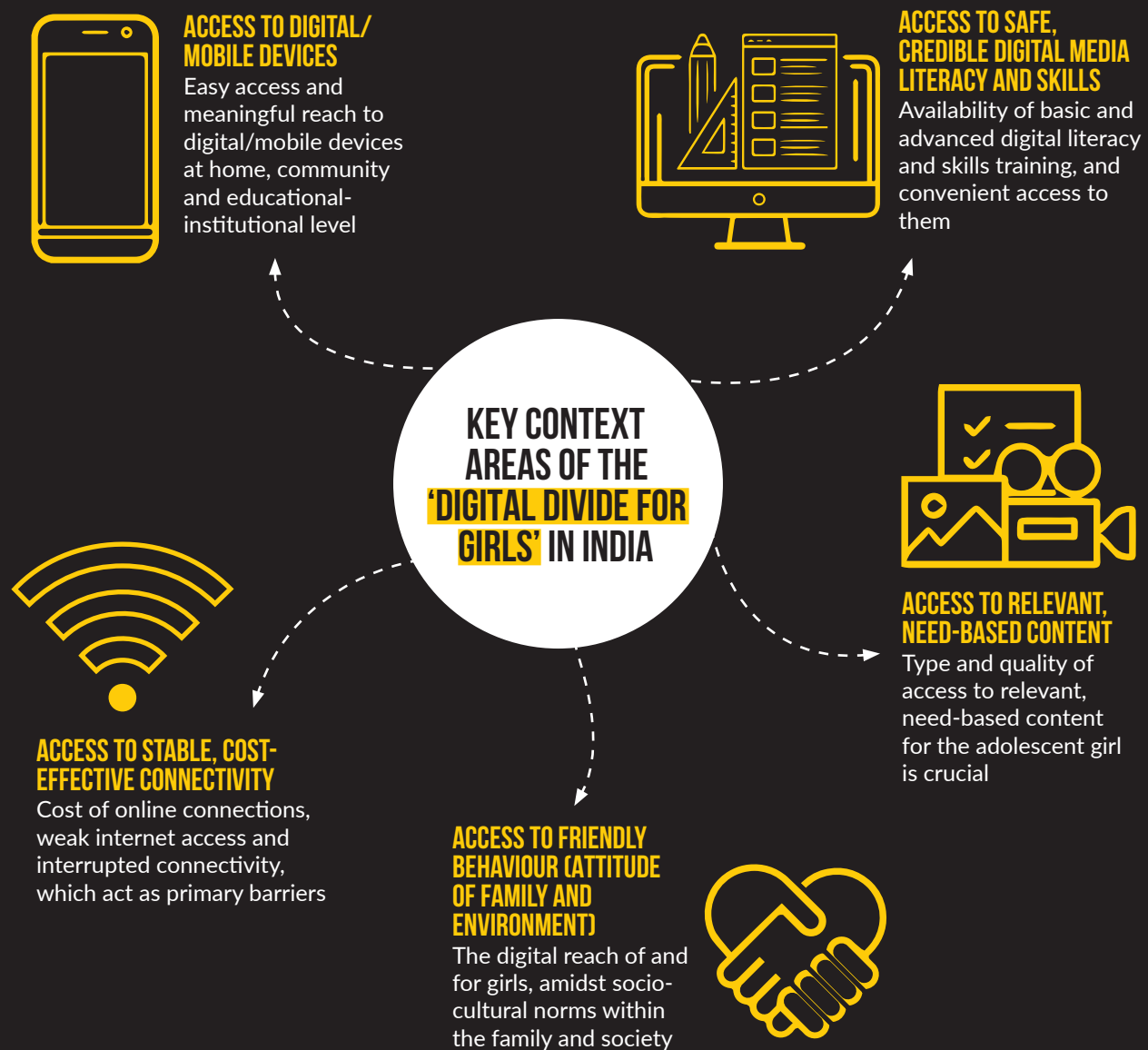


## FIGURE 1 & 2 India – profile of internet users and gender distribution

The data indicates how skewed the balance is against women and girls



Source: IAMAI, India Internet 2019





# MAPPING THE INITIATIVES

**Sustainable Development Goal 5.B focuses on "enhancing the usage of enabling technology, in particular information and communications technology, to promote the empowerment of women"**

### **The Global Context**

According to the International Telecommunications Union (ITU), 94 per cent of young people in developed nations, between the ages of 15-24 years, use the internet; in developing countries, the figure is 65 per cent.<sup>5</sup> However, the access is skewed in favour of young males. Evaluations on the impact of the gendered digital divide, conducted by global partnerships and independent organisations such as Plan International, estimate that connecting 600 million more women in developing countries to the internet can translate into a GDP rise of US \$13 billion and US \$18 billion for the world.<sup>6</sup>

Globally, there have been some efforts to address this issue. The United Nations Sustainable Development Goal (SDG) 5 lays down a path for signatories to follow the goal of "achieving gender equality and empower all women and girls"<sup>7</sup>. SDG 5.B focuses on "enhancing the usage of enabling technology, in particular information and communications technology, to promote the empowerment of women".<sup>8</sup> But the criteria to populate this specific indicator relies on the proportion of individuals who own a mobile, characterised by gender. Furthermore, possession of a mobile phone is not enough – the owner of the phone should have the necessary skills and know-how to use it.

Between 2008 and 2015, The World Bank had supported the Adolescent Girls Initiative (AGI) to propel increased enrolment of adolescent girls in schools in eight developing countries.<sup>9</sup> The Bank

**According to the International Telecommunications Union (ITU), 94 per cent of young people in developed nations, between the ages of 15-24 years, use the internet; in developing countries, the figure is 65 per cent.**

5. 'Safer Internet Day: UNICEF Calls for Concerted Action to Prevent Bullying and Harassment for the Over 70 per Cent of Young People Online Worldwide', UNICEF, February 5, 2019, <https://www.unicef.org/india/press-releases/safer-internet-day-unicef-calls-concerted-action-prevent-bullying-and-harassment>
6. Bridging the Gender Digital Divide, Plan International, accessed August 1, 2020, <https://plan-international.org/education/bridging-the-digital-divide>
7. Sustainable Development Goal 5: Gender Equality, UN Women, accessed July 30, 2020, <https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs/sdg-5-gender-equality>
8. UNCTAD DGFF2016 SDG Goal 5.b - Women Empowerment through ICT, UNCTAD DGFF 2016, accessed August 20, 2020, [https://stats.unctad.org/Dgff2016/people/goal5/target\\_5\\_b.html](https://stats.unctad.org/Dgff2016/people/goal5/target_5_b.html)
9. Adolescent Girls Initiative, World Bank, accessed September 11, 2020, <https://www.worldbank.org/en/programs/adolescent-girls-initiative>

believed that reaching this target group was critical, as adolescent girls had lesser freedom and fewer opportunities in terms of education as well as employment compared to their male counterparts.<sup>10</sup> The Bank – and other similar international organisations – have categorised girl’s education as a strategic development priority during the COVID-19 pandemic, acknowledging that drop-out rates of girls increase as caregivers go missing from households due to COVID-19 related work, illness or death.<sup>11</sup>

In 2020, UNESCO and the Global Education Coalition, which was launched when the pandemic hit the world, initiated the ‘Keeping Girls in the Picture’ multilingual program to safeguard efforts made on girl’s education and learning continuity during the lockdowns.<sup>12</sup> The United Nations Girls’ Education Initiative (UNGEI) organised an inter-generational dialogue between women activists and Plan International, discussing the ‘new normal’ where gender inclusion and equality would be considered central to education systems in the world.<sup>13</sup>

### The National Context

India has adopted a welfare-oriented approach in addressing issues related with adolescent girls. Apart from international collaborations and support, the Government of India – through its Ministries of Women and Child Development, Social Justice and Empowerment and Electronics and Information Technology, among others – has put in place schemes and programmes to aid in development and empowerment of women and adolescent girls. In 2010, for instance, the Adolescent Girls (AG) Scheme implemented by the Ministry of Women and Child Development under Integrated Child Development Services (ICDS) fundamentally recognised ‘adolescence’ as a crucial phase for building nutritional health and self-development in a woman’s life.

The Kishori Shakti Yojana (KSY)<sup>14</sup> has targeted adolescent girls (11-18 years) with the aim of improving their health, hygiene and

opportunities of learning life skills. It also aimed at going back to school to assimilate adolescent girls as productive members of the society. Within ICDS, the Scheme for Adolescent Girls (SAG) was implemented in 205 districts of the country using the Anganwadi Centres (AWCs); this scheme promised to bridge the learning and skill gap, besides providing information on existing public services.<sup>15</sup>

The Ministry of Human Resource and Development (MHRD) launched the Digital Board Operation in 2019 to boost quality education by turning classes into digital classrooms and by making e-resources available for students from Class 9th onwards. This digital model also introduced ‘intelligent tutoring’ by making use of Machine Learning, Artificial Intelligence and Data Analytics.<sup>16</sup> In April 2020, the Ministry followed up with the launch of the ‘Bharat Padhe Online’ Campaign which crowd-sourced ideas for improving e-learning and online education during the pandemic.<sup>17</sup>

Although digital learning programmes like e-Pathshala<sup>18</sup>, DIKSHA, NROER, NPTEL, e-pgpathshala, SWAYAM and Swayam-Prabha DTH channels were already operational to facilitate blended learning, more digital schemes such as the PM eVidya-One Nation One Digital Platform were introduced in May 2020 to strengthen e-learning during the COVID-19 crisis.<sup>19</sup> PM eVidya, which offers multi-mode access to digital/online education, consists of e-content for reading, radio podcasts for the visually impaired, and dedicated channels for every class from the 1st to 12th standards, called ‘One Class One Channel’.

Although 78 per cent of India’s 1.3 billion population own mobile phones, according to the Telecom Regulatory Authority of India (TRAI), tele-density (number of telephone connections per 100 individuals living in a certain area) in rural regions of India remains as low as 57 per cent. The Niti Aayog, in its Strategy for New India@75 report, has also highlighted low connectivity and weak internet as major bottlenecks during the pandemic.<sup>20</sup>

In the light of this, the role of non-

10. Ibid

11. Girls’ Education, World Bank, September 30, 2020, <https://www.worldbank.org/en/topic/girlseducation>

12. COVID-19: UNESCO and Partners in Education Launch Global Campaign to Keep Girls in the Picture, UNESCO, August 28, 2020, <https://en.unesco.org/news/covid-19-unesco-and-partners-education-launch-global-campaign-keep-girls-picture>

13. Rebuilding a ‘New Normal’ for Girls’ Education amid COVID-19, UNESCO, June 12, 2020, <https://en.unesco.org/news/rebuilding-new-normal-girls-education-amid-covid-19>

14. Ministry of Women & Child Development, accessed September 14, 2020, <https://wcd.nic.in/kishori-shakti-yojana>

15. Ministry of Women & Child Development, Scheme for Adolescent Girls- Administrative Guidelines 2018, August 31, 2018





governmental organisations in reaching the last mile has acted as a catalyst, connecting the State to the citizen. For instance, the initiative “Chaa Jaa” by The Girl Effect, a global NGO, was one of the many initiatives launched in 2019 that aimed to connect, inform and equip adolescent girls with digital media.

Similarly, Code Unnati<sup>21</sup>, an initiative to foster digital inclusiveness in India, established in 2017, has trained over 410,930 children and adolescents in digital literacy – primarily HTML5, MS Office and Scratch – through its Integrated Digital Literacy curriculum. It’s Ok To Talk, an online platform, allows children and young people to share experiences and seek online support on mental health and wellbeing. Since 2016-17, the ‘English and Digital for Girls Empowerment’ (EDGE) initiative of the British Council in India has been concentrating on empowering girls with basic and functional digital and English language skills.

**India has adopted a welfare-oriented approach in addressing issues related with adolescent girls, with many schemes and programmes that aid in their development and empowerment**

16. Ministry of HRD, ‘Operation Digital Board (ODB) Is a Revolutionary Step to Boost Quality Education in the Country – Shri Prakash Javadekar, 2019, pp. 1-2

17. CSDS, Bharat Padhe Online: Intensifying Online Education, [https://www.csds.in/bharat\\_padhe\\_online\\_intensifying\\_online\\_education](https://www.csds.in/bharat_padhe_online_intensifying_online_education).

18. Ibid

19. Afsha Gul, PM EVIDYA: One Nation One Digital Platform (Diksha QR Code e-Content), PM Modi Yojana, November 25, 2020, <https://pmmodyojana.in/pm-evidya/>

20. ET Government “How Lockdown Reveals Actual State of e-Education in India,” ET Government.com, May 20, 2020, sec. Education.

21. <https://codeunnati.org/>

Despite **78%** of India's population owning mobile phones, tele-density in the country's rural regions remains a **low 57%**. In the light of this, the role of NGOs in reaching the last mile has acted as a catalyst, connecting the State to the citizen

“**Didi told me about Badhtey Kadam classes where they were teaching girls to use computers and I jumped at the opportunity. Over the course I learnt everything about laptops and smart phones, I could surf the internet, use email and other applications.**”

17 YEARS, C3'S BADHTE KADAM PROJECT

For the last 3 years, Centre for Catalyzing Change (C3) has been working to equip and empower around 10,000 adolescent girls from rural, tribal and vulnerable regions of Jharkhand and Chhattisgarh to access and become well versed with technology, through their digital literacy programs Akanksha and Badhtey Kadam. Experience working in the field has showed that a major barrier in digital access for young girls in such remote areas was their fear of technology. Since they neither understood it nor got a conducive environment for learning it or even knowing what something as essential as the internet is. C3 worked towards demystifying technology for the girls by teaching them basic digital skills and how they could use it in their daily lives. From mastering softwares like MS word and powerpoint to effectively navigating the internet. Akanksha and Badhtey Kadam, have taught these girls what they needed to know in order to become a well-informed and effective technology user. Our end-line surveys have shown that after being a part of C3's programs, these girls became more and more confident and capable in using technology. Many of them are opting for smartphones and are using online resources to learn new skills (like sewing, henna art, and so on). They are using their knowledge of technology to understand how internet banking works and are now exposed to a lot more educational and livelihood opportunities because of this digital knowledge.



# BRIDGING THE DIGITAL DIVIDE

A GROUND REPORT

## THE SURVEY

Centre for Catalyzing Change (C3), in association with Digital Empowerment Foundation (DEF), embarked on a primary survey to understand the yawning digital gap that India's adolescent girls are faced with, at a time when the country itself is undergoing a heightened interest in and demand for a digital transformation in economy and society. With the shadow of the COVID-19 pandemic still looming long and dark over India (despite the encouraging dip in cases), this gap may widen and deepen. C3 also partnered with Feminist Approach to Technology (FAT) to gain insights from girls who are digitally empowered to have a holistic view. This Policy Brief – Bridging the Digital Divide for Girls in India – attempts to bring together the findings of the survey and offer a roadmap for action.

“We used to go to tech center to operate computers. There we use a Wi-Fi facility for the internet, but it is closed due to lockdown because of COVID-19.”

16 YEARS, BIHAR (FROM FAT)

## COVERAGE



**Survey Period**  
**August-October 2020**



Randomised collection through  
**tele-sampling**



**4,100** respondents



**10** states and **29** districts



**Four stakeholder groups**

- o **2,220** adolescent girls (aged 12-20 years)
- o **630** family members of adolescent girls (between the age groups of 25-70 years)
- o **617** teachers and educators (primary, secondary and higher-secondary)
- o **633** representatives of community organisations (government employees, NGO workers, private employees and self-employed workers)

## OBJECTIVES

- To identify, analyse and document issues and challenges in digital access and empowerment of adolescent girls, more in the light of COVID-19 and post-COVID-19 circumstances in critical areas of access to education, health, knowledge-skills, capacities and digital access.
- To propose action-oriented recommendations to policy framers, grant makers and implementers at the State and National levels to look into the core empowerment aspects in 'Digital for Girls', as a priority in bridging gaps in gender digital divide at a very fundamental stage in womanhood – the stage of adolescence.

## THE FIVE DIMENSIONS

- **ACCESS** to digital/mobile devices
- **ACCESS** to connectivity involving cost
- **ACCESS** to relevant, need-based content
- **Gender-inclusive** attitude of family and friends
- **ACCESS** to digital skills, capacities, knowledge and support

## THE PURPOSE

The purpose is to recommend a policy framework that addresses the everyday challenges faced in owning, using, accessing, and building capacity of the adolescent girl with digital technology and access. Data analysed with a focus on the five dimensions informs the policy discussions, but also vitally instils a participatory and inclusive framework by bringing the voices of adolescent girls in the public domain.



# THE FINDINGS OF THE SURVEY



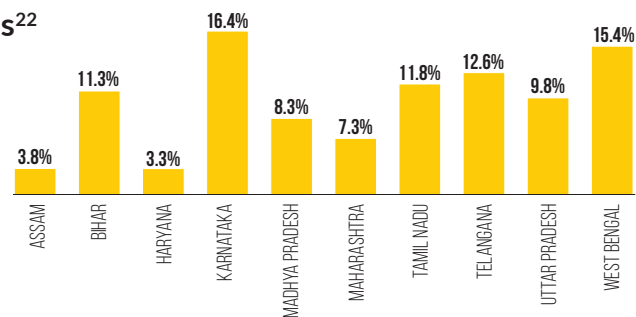
## ACCESS TO DIGITAL/MOBILE DEVICES

The survey-study asked all four stakeholder groups to respond to the idea of basic digital access, which is governed by some key factors – that of ownership of digital devices, affordability and ease of use of these devices, and the ability to use them within a supportive environment.

Interestingly, the results indicate the need for a more holistic approach to address the institutional and socio-economic contexts.

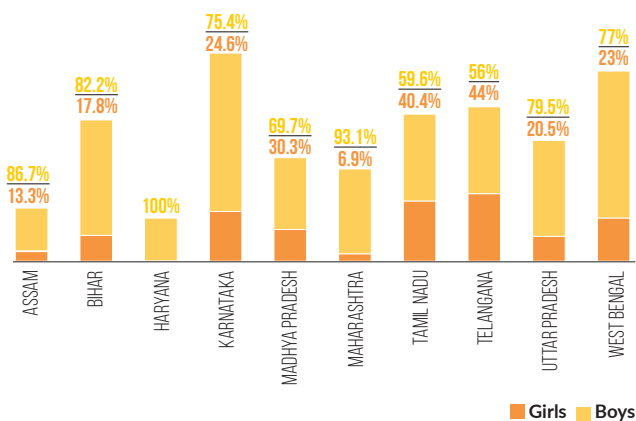
**FIGURE 3.1** Uneven access to digital devices<sup>22</sup>

- 65 per cent of adolescent girls in Karnataka enjoy easy access to digital/mobile devices. West Bengal is a distant second with 15.4 per cent access.
- Haryana stands lowest with 3.3 per cent access, followed by Assam at 3.8 per cent.



**FIGURE 3.2** Gender gap in access to digital devices

- There is a difference between adolescent girls' and boys' access to digital devices/mobiles across states.
- In Haryana mostly boys have easy access to digital devices/mobiles: the state indicates huge disparity.
- Maharashtra is the second state with a high disparity: 93.1 per cent of boys have access against a mere 6.9 per cent of girls.
- In Assam, 86.7 per cent of boys have easy access compared to 13.3 per cent of girls.
- States in the south fare better. Telangana has the lowest difference of 12 per cent, while Tamil Nadu has 19 per cent.



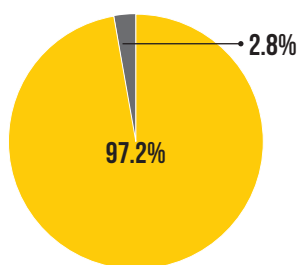
22. The source of all graphs in this chapter is the C3-DEF survey

### FIGURES 3.3-3.4 Lack Of Financial Affordability

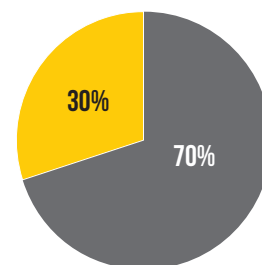
- 97.2 per cent of the surveyed adolescent girls said it is important to own a mobile phone to access information.
- 71 per cent of these girls do not own a mobile phone – they cannot afford it financially.
- This has led to lower access to information and educational content and online classes, and restricted communications with friends and family.

- Parents of adolescent girls demonstrated similar concerns. 70 per cent of the families informed that the daughter did not have her own phone. 81 per cent of parents cited ‘financial constraints’ in owning a smartphone. 79 per cent of the families did not have access to a computer at home.
- The other two groups of stakeholders -- teachers and community organisations – too responded that ‘poor financial condition’ was a basic impediment.

**Importance of mobile phone to access information and content for Adolescent Girls**  
 ■ No ■ Yes



**Daughter owning own mobile phone**  
 ■ No ■ Yes

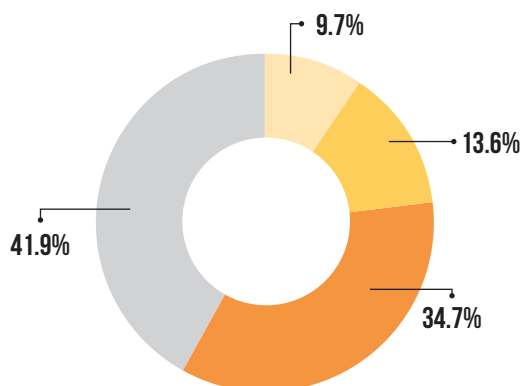


### FIGURES 3.5-3.6 Male family members get easier access; girls don't

- 87 per cent of the families have a mobile phone at home; 86 per cent of adolescent girls have access to it. However, this access is only for a very limited time. 41.9 per cent of the girls have access to the family's mobile phone for less than one hour in a day.
- 863 out of 2,600 adolescent girls informed that the family phone was only allowed to be used by them for online classes.
- 611 girls out of the 2,600 indicated that the “protective nature” of the family limited their free access to the phone. Parents offered reasons such as “phones are not safe”, “waste of time”, “may harm

her eyes”, or that the daughter “may misuse it”.

- These rigid biases go hand in hand with the father in the family apportioning the maximum use of the phone to himself – regardless of the fact whether he is digitally literate or not.
- This has entrenched the gender bias and highlights the comparative ease with which boys/males get access to digital facilities in schools/colleges.
- 57.6 per cent of adolescent girls feel that boy students get easier access to digital facilities in schools and colleges.

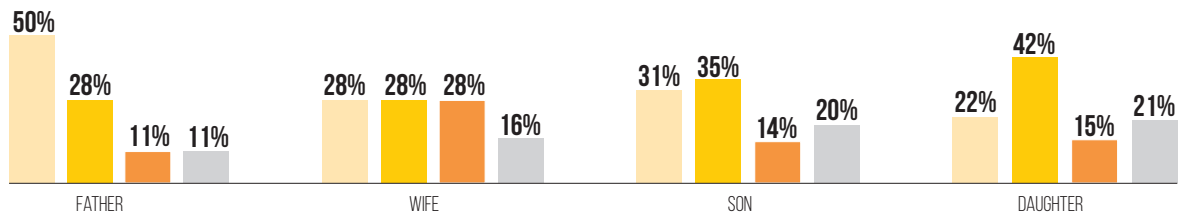


**Duration of access to family mobile phone for girls**

- 1-2 days a week
- 2-5 days a week
- 3 hours a day
- less than 1 hour in a day

### Kind of accessibility family members have

Available for use but not digitally literate    Digitally literate and allowed to use  
Digitally literate but not allowed to use    Not allowed to use



### FIGURES 3.7-3.9 Limited access to community digital infrastructure

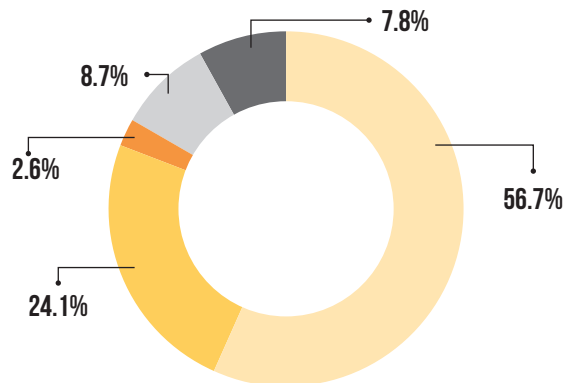
- 57 per cent of adolescent girls said their poor financial condition was a major block in accessing laptops and mobile phones. 85 per cent of the girls do not have laptop/computers at home.
- Community facilities such as schools, community libraries, community centres and internet cafés

became the alternative for accessing content online. However, an alarming 83 per cent of the girls get less than an hour in a computer lab facility in a week.

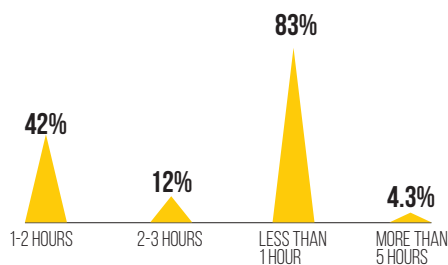
- This affects the girls psychologically and directly impacts their confidence, inducing remorse and instilling a feeling of hopelessness in them.

### Challenges facing girls in getting own mobile phone

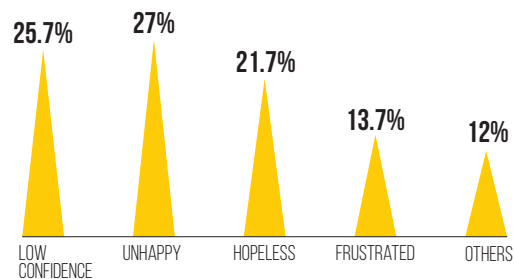
Poor financial condition  
Family is concerned about my safety and security  
Family is afraid that I may misuse it. Lack of trust  
Girls in my area are not given access to mobile / laptop  
Others



### Number of hours an adolescent girl gets access to computer lab facility in a week



### Lack of access and the overall feeling



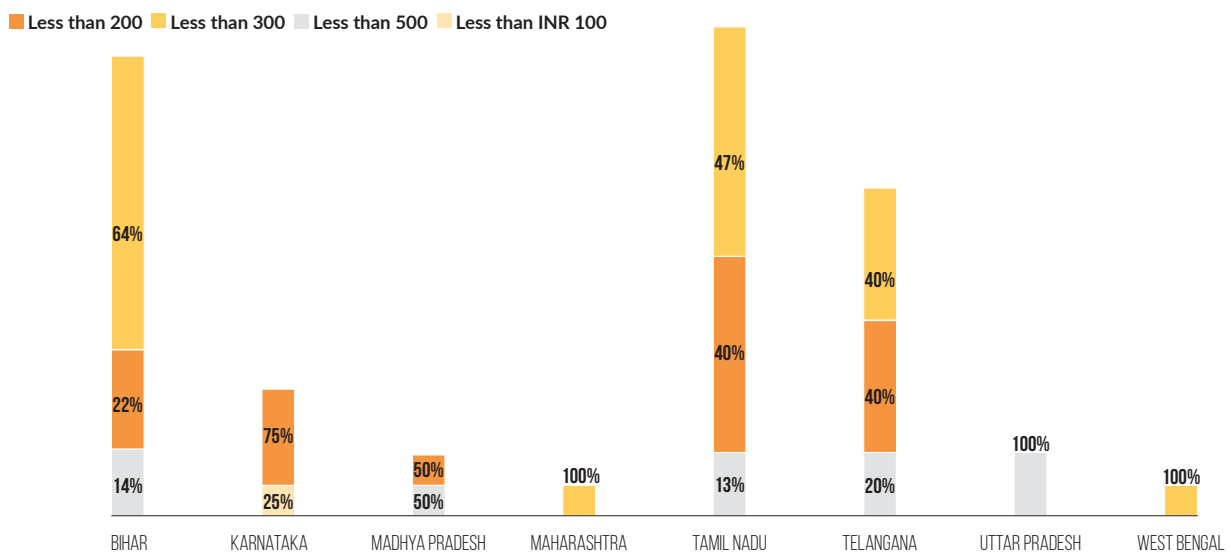
**FIGURE 3.10** Costs of accessing the internet – a state-wise differentiation (in a month)

- In Bihar, Tamil Nadu, Telangana and Maharashtra, a majority do not spend more than INR 300 for internet connectivity in a month.
- Uttar Pradesh, Telangana, Tamil Nadu and Bihar show only moderate rates of spending.



## ACCESS TO AFFORDABLE CONNECTIVITY

Access is incomplete without connectivity supporting the basic digital structure. Affordable connectivity cost becomes an important linkage in deriving the benefits of digital technology, when it comes to attending online classes, using social networking, availing opportunities, and conveniently accessing information and admission results.



**I get it done by myself, but when I don't have my own money, then I don't get the recharge done. When I got this mobile, I joined a Corona abiyaan. so for now, the recharge is getting done by them.**

17 YEARS, BIHAR (FROM FAT)

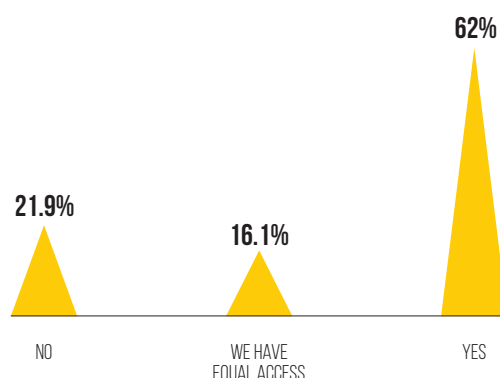
### Growing costs and financial difficulties in spending on internet access

- 84 per cent of adolescent girls face financial difficulties in spending on internet access. Majority spend less than INR 300 for internet access on phone/community internet facilities in a month.
- Out of 209 parents who do not have internet access at home, 153 (73.2 per cent) attributed 'financial constraint' as the sole reason for lack of access at home. Majority of them spend less than INR 200 on internet access in a month.
- However, within this bracket and overall, 80 per cent of the parents see internet access as an expensive proposition.



**FIGURE 3.11** The result – easier internet access for male family members

- Boys have a comparatively easier and dominant access to mobile phones, compared to girls. 62 per cent of the adolescent girls surveyed agree that the male members in the family have better access to mobiles.
- In some cases, parents' incapability in spending on internet connectivity finds expression in excuses such as their daughter is "too young for it", or may "misuse it".



**ACCESS TO RELEVANT, NEED-BASED CONTENT**

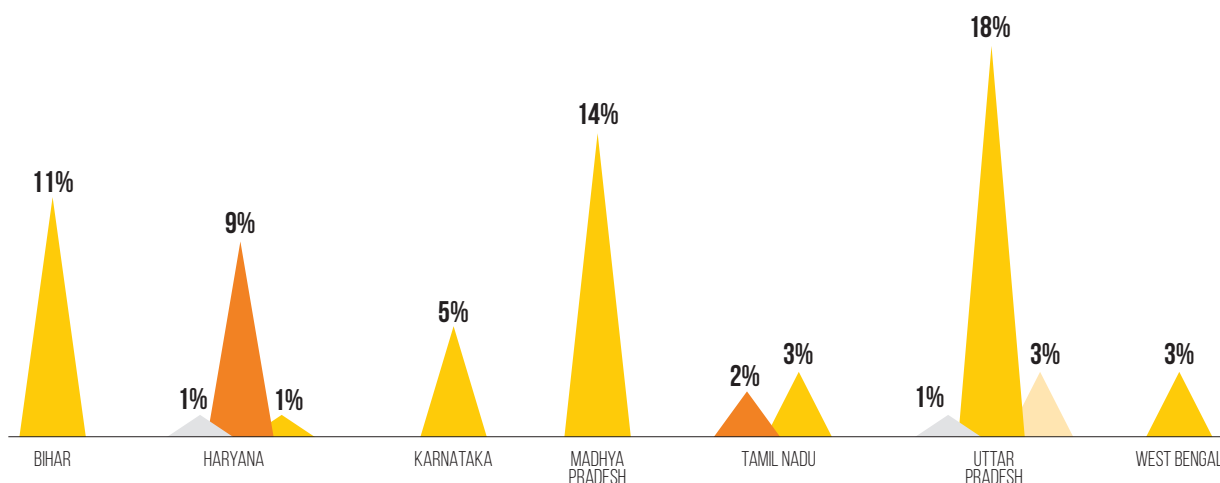
The benefits of digital transformation trickles down in everyday life through the availability of relevant, need-based content. Digitally mediated content is the fundamental source for accessing information and news from around the globe, besides online educational content, especially during the pandemic.

All the four stakeholder groups agreed that online content is 'necessary' to access educational material, information for job opportunities, etc. However, for optimal utilisation of this content by adolescent girls, social and institutional support would be needed. This would include infrastructural support of internet cafés, libraries and community centres.

**FIGURE 3.12** Sources of access to digital/online content for girls – state-wise differentiation

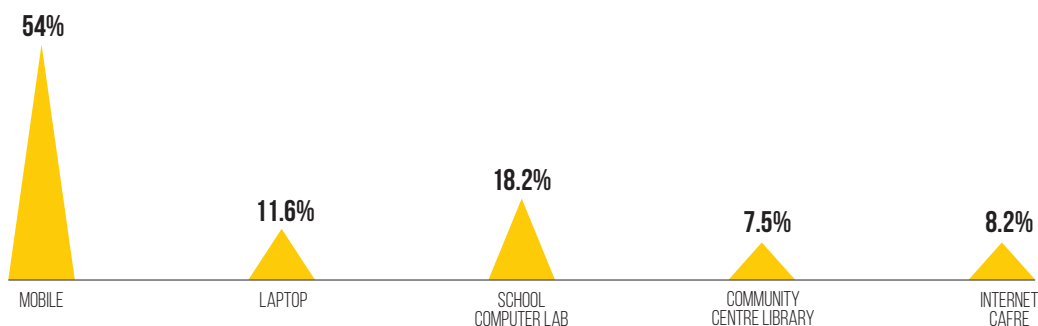
- Use of internet cafés is highest in Haryana with 9 per cent. It is the lowest in Tamil Nadu (2 per cent).
- Use of libraries to retrieve content is average in Uttar Pradesh (3 per cent).
- Use of community centres as content sources is the lowest in Haryana and Uttar Pradesh.

Community centre Internet cafe Mobile Library



**FIGURE 3.13** Need-based content – gap between its perceived relevance and access to it

- 91 per cent of parents agreed that “access to online content is necessary for knowledge and information purposes”.
- 42 per cent of the parents do not have access to online content.
- 537 parents out of the 1,535 surveyed said their daughter accesses online content through a mobile phone.
- 54 per cent of adolescent girls accessed digital and online content through mobile smart phones.
- 74 per cent of adolescent girls do not have a laptop/computer at home.
- Teachers and educators believe it is important to have access to online content – this content is “necessary” and “useful” for adolescent girls; 74 per cent of teachers opine that adolescent girls have “better access to online content in schools/colleges”.
- Community organisations too agreed with the significance of having access to need-based relevant content, but also said “parental and family attitudes” is an underlying reason for the unequal access to content.



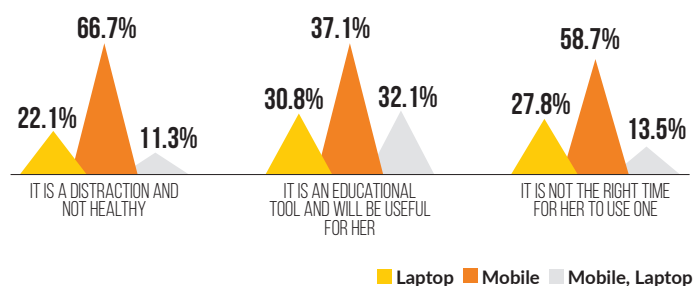
**FIGURE 3.14** Perceptions about access to digital/mobile devices and online content by adolescent girls

- Despite an improvement in family members’ attitudes towards adolescent girls having access to a mobile phone/laptop/computer, there is a need for an attitudinal shift within the family and society at large to support equal and indiscriminate access to digital technology.
- Majority of teachers and community organisations opine that being a girl is a factor in accessing digital technology.
- Most parents have a negative perception around the use of mobiles, attributing it to an “unhealthy distraction” for the adolescent girl.



**GENDER-INCLUSIVE BEHAVIOUR**  
ATTITUDE OF FAMILY AND ENVIRONMENT

Ascribed traditional roles and gender stereotyping have kept adolescent girls away from accessing digital/mobile devices, developing their skills and continuing education, or contributing to their own household incomes. Existing social norms and cultural barriers have further acted as deterrents in shaping attitudes of family members in providing a conducive digital environment to adolescent girls. These underlying causes have compounded during the pandemic.

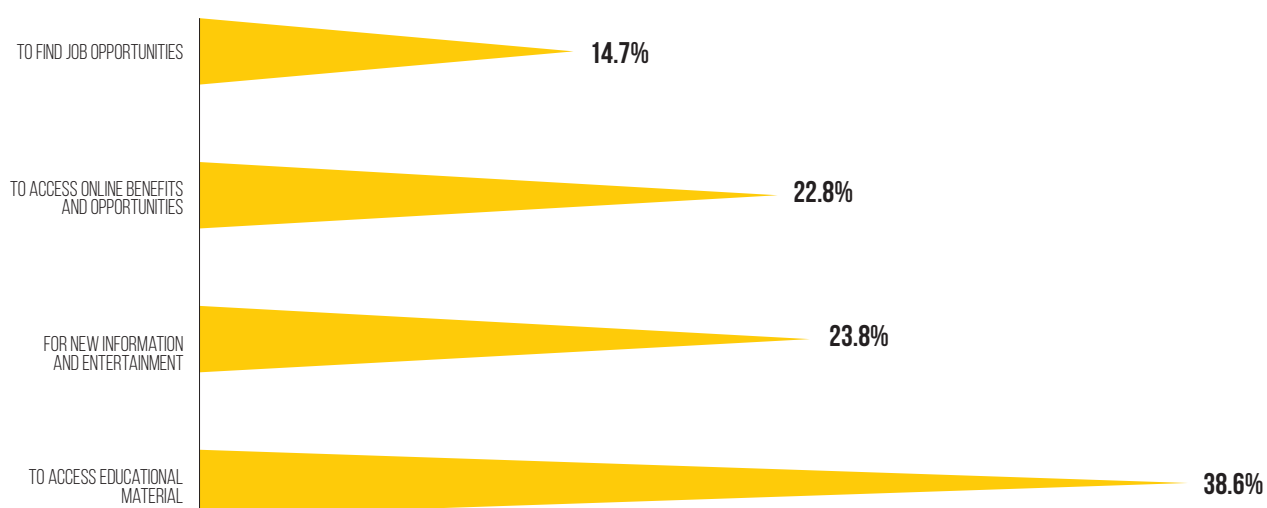


First of all the neighbours usually scold us for using Smartphone and they think that it is not at all useful for us. I also see that daughters of the neighbours are really scared of their parents. They don't get freedom, and they crush their dreams because of their parents and the society though they have the capacity for doing big things.

17 YEARS, BIHAR (FROM FAT)

**FIGURE 3.15** Educational content – most common reason for using mobiles and computers

- Internet use for educational content is seen as a key reason why adolescent girls need to access the digital platform.
- Use of digital devices and internet for the purpose of accessing educational material is what is endorsed by parents, teachers and community organisations
- Parents are most comfortable with the girls accessing educational content (38 per cent), followed by news & information (24 per cent) and then online benefits and opportunities (23 per cent)
- But while it is vital to access educational content, adolescent girls should not remain bereft of surfing for entertainment-based content. This aspect has special significance for accessing different kinds of content during the pandemic.



Right now, I use a phone. I have got this phone from FAT in March. And I can use laptops and computers. Even though I am interested in using still, I cannot use them because no one in my family has a laptop or computer.



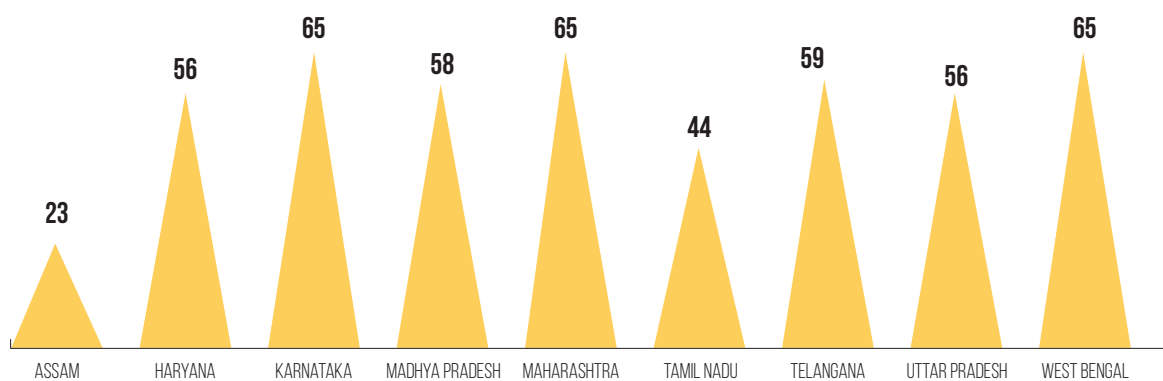
17 YEARS, MAHARASHTRA (FROM FAT)

## DIGITAL SKILLS AND CAPACITIES

Digital skills are a prerequisite to making optimum use of digital technology, and realise its full potential. Lack of digital skills among the recipient populations may render an even strong digital infrastructure redundant.

**FIGURE 3.16** Infrastructural support to adolescent girls – how the states fare

- Karnataka, Maharashtra and West Bengal provide a better tech environment at colleges/schools to support girls.
- Assam stands at the bottom of the rung at 23 percent.



My father earns Rs.10,000/- per month, and we have to fulfill all our needs with that amount. We cannot save anything to buy a smartphone as it is expensive and not affordable for us.

17 YEARS, MAHARASHTRA (FROM FAT)

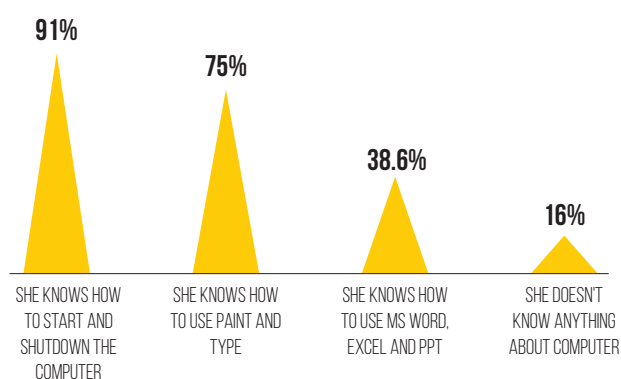
## Financial constraint – major obstacle in digital upskilling

- Out of 462 adolescent girls who did not get support from their families, 373 stated “financial constraint” as the reason for being unable to learn digital skills. Their parents affirmed this fact.
- Teachers and educators from schools which could not provide the necessary computer skills and capacity building initiatives, said “lack of resources” was the main reason for them being unable to digitally upskill adolescent girls.
- Community organisations were of a similar opinion. These organisations also pointed out that “digital skill schemes for girls” would be the most effective solution for building digital skills among the girls.



**FIGURE 3.17** Infrastructural support to adolescent girls – how the states fare

- 32 per cent of adolescent girls know how to only “receive calls” on the mobile; 26 per cent know “how to use features like clock, calculator, torch and other offline apps”; a mere 15 per cent know how to “use online apps like WhatsApp and Facebook”.
- 91 per cent of parents confirmed that their daughter knows “how to start and shut down the computer”; 75 per cent admitted that “she knows how to paint and type”; only 16 per cent stated that their daughter “doesn’t know anything about computers”.
- 38 per cent of adolescent girls do not “know how to use MS Word, Excel or PPT”.
- Teachers and educators say that access to digital skills can best be given by “more digital schemes for the girls”, followed by “better facilities in schools/ colleges” and “community facilities for training”.
- Thus, limited and insufficient digital skills are not only indicative of lack of exposure to digital learning, but also open a niche for targeted policy action.







# RECOMMENDATIONS

This policy brief forms part of an effort to address the gendered digital divide facing adolescent girls, a pillar of strength and support for the country. Based on an analysis of the field inputs and data collected through this extensive survey, this policy brief offers the following recommendations for framework and action.

# INDIA – A LOOK AT THE ACTIONS TAKEN TILL NOW

THE GOVERNMENT OF INDIA, through its ministries the Ministry of Women and Child Development; Ministry of Skill Development, Entrepreneurship, Youth Affairs and Sports; Ministry of Health and Family Welfare; Ministry Human Resource Development; Ministry of Social Justice and Empowerment; Ministry of Electronics and Information Technology; and Ministry of Labor and Employment has devised several programmes aiming towards empowerment of marginalised adolescent groups.

- The Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDSA), implemented through the Common Services Centres (CSCs), has provided digital literacy training to over 1.96 crore individuals from rural areas across the country.

- The ICT@Schools scheme, subsumed under the Rashtriya Madhyamik Shiksha Abhiyaan in 2013, led to the provision of computers and other digital infrastructure in over 85,000 schools across the country.

- The government has also launched the BharatNet project which is responsible for bringing high speed internet connectivity to all schools.

- The MHRD'S Operation Digital Board, an initiative to convert all schools into digital classrooms, aims at providing internet, digital tools and e-learning resources to introduce new ways of learning and teaching into the education system.

- Other digital learning programmes like the National Repository of Open Educational Resources, SWAYAM, ePathshala, and DIKSHA provide educational e-resources including textbooks, audio-video resources, periodicals etc. on mobiles, tablets, and the web. These programmes do not just cater to children and adolescents, but also to teachers and parents.

- The dispersal of e-content is enabled through devices in educational centres, schools and satellite communication technologies via an initiative called SWAYAM Prabha on a 24x7 basis.

The state governments too have customised several of these initiatives along with community partnerships to adapt to their local audiences.

- The Government of Andhra Pradesh has partnered with Reliance Foundation and Microsoft to create digital content in local language (Telugu) and English and to use machine learning (ML) to model and predict which students are at the risk of dropping out of school.

- The Government of Himachal Pradesh, with NHM and Piramal Swasthya, has launched a program in 2015 to establish telemedicine units at government primary healthcare centres (PHCs) and sub-centres to provide specialist care, including in child and adolescent health.

**DIGITAL SCHEMES FOR GIRLS**  
Targeted digital schemes for girls can ensure better results in the middle and longer terms. Schemes enabling mobile and laptop access, cheaper internet plans, and digital skills for adolescent girls can be explored

- The virtual school education program in Kerala has been named "First Bell" and has been designed as an academic program for the year 2020-21. The classes are made available through television and YouTube. Before making the classes available through television, Samagra Shiksha Kerala conducted a survey to calculate the number of government/aided school students who did not have

access to an internet connection or a TV and did a rigorous training of teachers. Incidentally it is also a state which has made (access to) internet a basic human right.

Clearly, there have been many efforts towards gender equality and bridging the divide; and now, Goal 5 of the UN SDG (Gender Equality) has also clearly highlighted this major concern. But officially, India does not yet have a visible, stated, formal announcement or document that categorically accepts and states that this 'digital inclusion, mainstreaming and empowerment of adolescent girls-to-women, is a vital path in addressing gender development divide in a country where a substantial proportion of the population is made up of women'. This digital priority is missing in the critical education and health sectors of adolescent empowerment, at both the national and state levels.

### Adopting a targeted approach

There is a critical social and economic need for investing in digital inclusion, which will strengthen the pathways for empowering adolescent girls. For this, a targeted and focused approach is required, one that prioritizes the needs of adolescent girls belonging to diverse backgrounds - girls both in and out of schools/institutional settings, and in rural, tribal, minority and underdeveloped clusters. Addressing the specific gaps facing these groups can have multiple positive impacts, such as arresting drop-out rates, improving adolescent health and nutrition outcomes, and mainstreaming girls' skilling and job linkages for a better future. Building social capital around adolescent girls can have a multiplier effect on families, community, and national development.

### Envisaging a gendered digital strategy

It is crucial to adopt a gendered digital strategy before formulating any policy or action plan for adolescent girls. Building the evidence base, by strengthening the collection and analysis of gender-disaggregated data on digital access, use, and impact, from rural and urban India, is a key first step to envisage a gender transformational digital strategy. This data and evidence can aid in shaping a 'measuring toolkit' for progress on the gender digital divide. This will be specific to the needs of adolescent girls in both rural and urban areas highlighting the more exigent locations requiring substantive support. This approach should also orient towards strengthening gender digital budgeting within larger policy plans and budgetary priorities.

**Government should provide facilities for girls to make digital media easy to them. They should give free Wi-Fi in every home, and they should at least give one phone in every family so that people can use it.**

17 YEARS, DELHI (FROM FAT)

### Building sustainable digital safety nets

It is important to add sufficient and effective digital social safety nets to the existing national and state plans to combat financial strain in digital access, especially in COVID-19 and post-COVID-19 settings. The C3 survey has clearly underlined the need to push for financial assistance and support or schemes to make digital devices and good internet connection affordable, and enable access to useful information and content. Additionally, provisioning better and accessible digital facilities in schools, colleges and community centres is a viable alternative. The data also shows that better digital infrastructure and maintenance support, increasing machine-student ratio, digital skill schemes for girls and sustained access to internet can bridge the access and usage gap for adolescent girls. Having connectivity is not enough; what matters is sustained, meaningful and uninterrupted connectivity at proper speed, which will determine utility. Digital educational content support and integration of digital-based curriculum sessions in schools and colleges can encourage and motivate to learn and excel. The concept of digital libraries can be helpful for those out of school, and enable girls to access the digital space at the community level.

### Prioritizing last mile connectivity

Digital vulnerability is felt more by the majority living in the bottom end of the digital pyramid: the girls in this group are the major sufferers. Targeted last mile connectivity in the backward deprived villages, panchayats and blocks is the need of the hour; affordable access to community devices and affordable internet access at the community level are critical. Provisions in every village/panchayat for digital resource centres for girls with regular access to internet, content and digital resources, within a school setting or in Anganwadi centres, can be beneficial. This can be supplemented by family internet packs for BPL and poor households.

### Strengthening e-learning for girls in public schools

Apart from ways and means to improve access for girls at the personal and family levels, making public schools digitally sound for girls with integrated digital and e-learning modules, courses and resources will enhance motivation, determination and aspiration to complete education and pursue goals for self and growth.

## Digital content banks

Keeping in mind the fact that useful, relevant and need-based content is key to digital empowerment, a provision could be made for creating Content Banks in schools, colleges and community centres; this could offer free and easy access to enhanced learning, knowledge and development.

This will also help address gender biases at the home and community levels.

### Encouraging attitudinal shift in parents and families

The primary data in this survey indicates rigid family attitudes as one of the major reasons contributing to the digital divide faced by adolescent girls. An attitudinal shift among parents and families, through counselling sessions and online/offline workshops, could help ensure non-discriminating behaviour towards girls vis-a-vis the boys in the house. Workshops should hold priority discussions on issues such as measuring online risks through safe and secure internet access, guiding parents to share disproportionate domestic work between males and females in the family, and allowing free use of digital devices for sufficient duration for adolescent girls.

### Establishing regular short-term digital skill-building programs

The survey shows that adolescent girls are reluctant to visit community centres, internet cafes and public libraries to access digital devices, compared to the ease with which boy students do. Secondly, most of the girls in the survey reported having minimal computer skills. Therefore, there is a need to digitally upskill adolescent girls by training them, firstly, to critically gauge the credibility and safety of online content; and secondly, to learn job-oriented skills which would enable them to optimally utilise job and entrepreneurial

**In my area, most people think that, if a girl is using the phone a lot, then they'll get ruined**

17 YEARS, JHARKHAND (FROM FAT)

**I want to request the Government to open the tech centers in the areas where girls can reach easily. Girls who reside in remote villages cannot come to the cities to attend tech centre classes. So, they should be taught in their villages.**

17 YEARS, JHARKHAND (FROM FAT)

opportunities. There is a need to design short-term and regular initiatives which enhance adolescent girls' ability to use technology within real-life situations.

#### **Creating useful, safe content and a secure digital space**

It is critical to ensure that the quality of content available through digitally mediated technologies is useful and interactive. While new programmes, relevant content, applications and services have been made available for online educational purposes, information on health, news, social security, job opportunities and even entertainment should also be made freely available and accessible. Simultaneously, circulation of unlawful content and cyber bullying and harassment on these platforms must be strictly contained through legislative and legal interventions. Adolescent girls should be trained in the basics of cyber security to keep themselves safe online. Such steps would build their confidence and equip them to stay safe in both the online and offline worlds.

#### **Fostering multi-stakeholder partnerships**

Efforts made with industry representatives and private actors to ensure affordable digital access for girls need to be leveraged during and in the post-crisis phase of the pandemic. There is need for introducing basic and advanced learning by incorporating newer technologies such as Artificial Intelligence (AI) and Machine Learning (ML). At the same time, efforts must

be made to strengthen collaboration with other non-state actors such as civil society organisations (CSOs) and non-governmental organisations (NGOs), which have stronger grassroots level reach and last-mile interaction with remote regions. Collaboration with these organisations and the feedback that is generated can in turn be fed into the design and delivery of technology, making inclusive data sets that incorporate any intersections of caste, religion or income variability for adolescent girls. These partnerships can be critical when community-level schools, colleges or libraries are incorporated into a working framework with predetermined outputs and outcomes for achieving girl's digital empowerment.

#### **Designing a digital policy framework for girls**

A well-thought out and designed policy framework, when implemented, usually provides the desired results. What is needed is such a digital policy framework for girls in India, with national- and state-level interventions that can help embed digital elements as core empowerment necessities in education, health and skill development. Donors and agencies can also have a key role in ensuring and enabling digital as a core in areas of development focus and investment with girls as a key focus group. Though no such moves are evident as yet, India can lead the way in caring for her own daughters, more so with the lessons that have been learnt from Covid-19.



# CONCLUSION

Adolescent girls are a vibrant force, especially in the context of India where they constitute a large percentage of the population. Their inclusion in the electronic space, by meeting their digital needs, is a fundamental necessity today. The five key aspects that this policy brief has focused on – access to digital/mobile devices, access to affordable connectivity, access to relevant and need-based content, gender-inclusive attitude of family and environment, and access to digital skills and capacities and knowledge support – serve to highlight the scale of the gendered digital divide in India.

There is a critical need to prioritise targeted policy formulations and frameworks that focus on digital empowerment of adolescent girls. This priority has to be clearly visible in the education and health sectors of adolescent development, at both national and state levels. This will act as a means to address the gendered digital divide and build capacity of adolescent girls with the required digital skills and access. Of specific relevance in this context is India's pursuit of Goal 5 of the SDG – to begin with, a formal announcement or document that categorically accepts and works towards digital inclusion of girls could prove to be vital in setting the picture right.

## ABOUT C3

Centre for Catalyzing Change (C3), formerly known as Centre for Development and Population Activities (CEDPA), India, started working in India in 1987. Since then, C3 has emerged as a key change-making organization working towards empowering girls and women across various high-burdened and resource-poor states of India so they can access opportunities, realize their rights, become self-sufficient, and achieve gender equality.

At C3, we design solutions that mobilize, equip, educate and empower girls and women to meet their full potential. A significant component of our work is building and boosting the leadership skills and self-confidence of adolescent girls, and educating them on health, gender equality, nutrition, hygiene, and civic responsibility. We also connect them to employment opportunities, and offer financial and digital training to shape their futures. Through our interventions, we have touched the lives of over 1,900,000 girls across the country.

## ABOUT DEF

With the belief 'Inform, Communicate and Empower,' DEF aims to connect unreached and underserved communities of India to bring them out of digital darkness and equip them with access to information with digital literacy, digital tools and last-mile connectivity.