FROM COMMITMENT TO EXCELLENCE

A narrative of two decades of digital journey

Authored by: An International Research Visitor[1]

FROM COMMITMENT TO EXCELLENCE
A narrative of two decades of digital journey

Year of publication
2022

Design by
Satish Kumar

Authored by
International Research Visitor

Published and distributed by
Digital Empowerment Foundation

INTRODUCTION

The Digital Empowerment Foundation, perhaps better known as DEF, is turning 20. Over the last 20 years, DEF has lived and breathed its goal of "empowering people at the edge of information" as it has developed a tremendous portfolio of projects intended to empower Indians at all stages of digital literacy. A brief sample of these activities include: a crowd-sourced wiki dedicated to otherwise overlooked knowledge produced by rural teachers and school children (Gyanpedia), a network of fellows working to digitally preserving India's artistic traditions in the interest of social change (A-CODE), a grassroots effort to share vital information about COVID-19 among information-poor communities (COVID Warriors), and of course its flagship Soochnapreneur and Community Information Resource Centers (CIRCs) programs. Taken together, these programs have forged new paths in addressing the intersectional challenges of digital development, are working to decolonise knowledge in India and worldwide, and are helping to redress some of the structural harms that persist even in this age of digital growth.

The range of these projects can be

mind-boggling, but DEF's ability to work across a wide range of sectors is not just a function of its sprawling network of centres and collaborators. Instead, it is a feature of DEF's approach to digital empowerment. By understanding digital empowerment as a holistic task, rather than as simple service provision, DEF has built strong roots in communities across India and has made a difference in the lives of millions. As DEF has grown from an upstart organisation into a respected leader in the digital development field, it has become clear how essential DEF's approach of digital empowerment is to sustainable social change.

In order to understand DEF's work, it is crucial to grasp that DEF is first and foremost helping people access a *medium*, rather than providing a discrete service. This medium – the digital – is vast, and over the last 20 years has become the primary means through which information is shared, accessed, and created. But due to its size and complexity, a person trying to access the Internet encounters equally as many complex barriers. As India has rapidly transformed after achieving independence in 1947, and the opening of its doors to the global economy in 1991, it has been subject to conflicting ideas about how best to pursue the well-being of its people.

Across India, communities shaped by gender, ethnicity, and caste discrimination encounter decades of disenfranchisement and legacies of colonial exploitation. In today's political and economic climate, the urgent need to ensure access to nutritious food, hygiene, and education can be set against calls for gender parity and a broader push to attract foreign investment to India's economies and institutions. Fortunately, it becomes easier – and recently, necessary – to address these broader development goals using the tools offered by the Internet.

Traditional development models adopt a top-down approach, often involving the transfer of resources from those in power to the needy. This same pattern is also evident in those development interventions that work by sharing access to information, like extension programs that connect beneficiaries to an organisation, or a specialised service as a source of knowledge. DEF, however, offers us a different approach. By helping communities gain access to the Internet, and the crucial information and opportunities offered therein, DEF transforms people from those trapped in a state of dependence into not just people who can pursue and attain their own well-being, but also those who can *create* information that helps others in turn.

In this way, the empowerment upon which DEF stakes its name is two-fold: firstly, people's new-found ability to navigate Internet-based services empowers them to become effective advocates for themselves, and secondly, the possibility for people to digitally share their own knowledge and experiences with the world can create a new, and a more equal power relationship between marginalised and privileged communities. As we discuss further in the following section, "Who Can Claim Knowledge?," this rebalancing of power helps to respond to, and remediate many of the social problems and inequalities that have stemmed from India's colonial occupation.

The Beginnings

The founder of DEF, Osama Manzar, realised the crucial role the Internet would play in India early on. While working as the head of the Internet division at the *Hindustan Times* in the late 1990s, Manzar served as the intermediary between the newspaper's writers, editors, and its digitising readership. Every evening, Manzar stayed up late working to get the next day's news posted on the HT's' website. Observing this meant that readers abroad would get an early

glimpse of the forthcoming newspaper before it even had a chance to be printed, Manzar began to think about the ways that the Internet controls information access. Those who are digitally enabled, he saw, have an advantage over those who are not. The significance of this realisation only compounded when he began to notice patterns in the kinds of feedback the *HT* was receiving from its readership. While the printed newspaper was distributed widely across India, Manzar noticed that most of the communication the *HT* received came in through email rather than by post. The privileged access, computer users had both to the news and to email as a way to make their voices heard, was a watershed moment for Manzar, who became fascinated by information access.

After leaving the *Hindustan Times*, Manzar began researching the issue of information access even as he and his business partner began a successful web design business with content management solutions. Through his work of developing websites, Manzar witnessed firsthand the importance of a strong web presence for Indian businesses. Manzar captured these developments in a newsletter called the Internet Economy of India (INOMY), which later became a book with the same name,

released in 2001. While doing this research, Manzar realised that India was not, as was commonly believed at the time, a poor country. It was in fact a rich country held back from reaching its economic potential by a dearth of information linkages and connectivity. While India had a tremendous amount of knowledge and potential, its poor digital infrastructure prevented Indians from sharing this information and benefitting from the accelerating effects of the Internet. Manzar became dedicated to changing this, and in 2002, co-founded the Digital Empowerment Foundation in an effort to empower people living at the edge of information.

However, the Internet cannot be accessed through will alone, and the number of barriers can be shocking to those of us accustomed to living life online. In order to access the Internet, a person needs to live in a place that is connected to the electrical grid, be reachable by the lines an Internet service provider uses to connect the Internet from one place to another, live in an area where these lines are actively providing Internet service, have access to a computer, cell phone, or tablet, and be able to pay the bills for these services. On top of all of that, a person must know what to do when presented with an internet-enabled

computer, cell phone, or tablet. How to turn it on and navigate the menus, what all the letters and symbols mean, which websites to navigate to access information or complete their task, and how to tell if a source of information is reputable or not.

To those of us accustomed to living our lives online, this list may seem overly long and detailed, but in reality, these basic competencies and infrastructural considerations prevent many marginalised people in India from receiving the services they are due – let alone accessing the wealth of online knowledge that accelerates contemporary education, business, and everyday life. This gap between the many development projects that digitise services in pursuit of efficiency and transparency, and the many hurdles that the digitally enabled take for granted is where DEF makes its mark. Through a multi-pronged approach, DEF works with communities and partner organisations to close infrastructural, knowledge, and logistical gaps, and celebrate local knowledge production. This multi-pronged approach is what DEF describes as the six-fold path, which organises its wide range of activities under six thematic pillars:

- **Access and Infrastructure:** Providing

people access to the Internet and digital infrastructure, and making them digitally literate to access the resources meaningfully.

- **Education and Empowerment:** Use and leverage digital tools, access education freely as per the needs and demands of the communities in local settings, and enable and train people to access better health, education, skill and livelihood opportunities through facilitating digital tools and devising digital literacy programmes.

- **Governance and Citizen Services:** Raising awareness about rights and entitlements, and giving people the voice to demand better governance, better delivery of government services, and better protection of their basic human rights using digital literacy and digital tools.

- **Markets and Social Enterprise:** Digitally empowering micro-enterprises and communities, empowering grassroots-level civil society organisations with online presence, and digital literacy for digitally ensuring the protection of people's culture, heritage, environment and natural resources; creating an

ecosystem of enabling digital tools for efficient businesses that undertake a bottom-up approach instead of the top-down approach.

- **Knowledge Hub and Network:** Creating a knowledge network of digital practitioners, and a database of effective innovations and interventions in an effort to scale up and forge partnerships for specific socio-economic developmental needs.

- **Research and Advocacy:** Conducting research, including action-based research and advocacy-based research on the ground realities, to ensure access for all, to the Internet as a basic human right, and more extensive use of ICT and digital tools for development.

As a whole, these six pillars provide the structure within which DEF operates, and represent the many perspectives an organisation must take if it wishes to truly create a sustainable digitally empowered society. By focusing on these six pillars, instead of specialising in one specific kind of service provision, DEF is able to take a birds-eye view of the state of digital access in India, lead in areas in which it has expertise, and support those who are

interested and able to deliver more niche programming.

This approach of treating digital development as an ecosystem problem that requires an ecosystem solution helps DEF to remain at the cutting edge of digital development even as the Internet has changed dramatically over the last 20 years. By developing such a vast range of expertise, and by understanding the digital divide as a multi-faceted problem rather than simply a question of access, DEF is able to create sustainable solutions to complex problems. This ecosystem approach is exemplified in DEF's extensive service supporting other NGOs conducting related work. Through its goal of creating a knowledge hub for Internet, Communications, and Technology for Development (ICTD) practitioners, DEF works to recognise and uplift the good work that other ICTD organisations are carrying out, thus helping to support a robust digital development industry in India and beyond. In acknowledgement of DEF's cutting edge impact, in this report, we explore DEF's efforts to address the intersections between digital development and more traditional development priorities (Case Study: Intersectionality), sustainable solutions through entrepreneurship (Case Study: Entrepreneurship and Sustainability),

and maintaining its nimbleness and ability to address unexpected digital needs and opportunities (Case Study: Nimbleness).

Reading This Report

After 20 years working in the field of digital empowerment, it would be impossible to capture each and every inspiring project that DEF has had a hands on. Instead, this report seeks to provide an overview of DEF's approach to digital empowerment, contextualise the need for digital empowerment, and explore some of the big-picture implications that digital and information empowerment have not just for India, but for the world. By linking history, contemporary debates on technology and human rights, and DEF's unique approach to ICTD, this report hopes to provide a robust overview of the field in which DEF and other digital development organisations carry out their work.

The report then offers a high level overview of DEF's projects over the past 20 years in an effort to illustrate the range, impact, and tremendous growth of the organisation. However, a retrospective of DEF's work over these last 20 years would be incomplete without at least a few deep dives

into the many projects that make DEF such a leader in the field of digital development. Thus, the report concludes by drawing on key projects to illustrate DEF's approach to intersectionality, entrepreneurship and sustainability, and the need to be nimble in a rapidly changing digital world.

While one report cannot capture the full extent of DEF's work and is bound to overlook important events and perspectives, DEF's commitment to transparency means that its work has been thoroughly documented on its website, www.defindia. org. We encourage you to read and reflect on these further resources, and we look forward to hearing your feedback.

Who Can Claim Knowledge?

Decolonising Information

Founder Osama Manzar stresses the importance of information *empowerment* as the core of DEF's mission. He argues that by being dependent on others to receive crucial information, marginalised people are contained in a cycle of dependency, even if the information they receive is helping them in other ways. However, by creating programs that do not just help people carry out digital tasks, but instead teach them the skills they need to use technology themselves, Manzar and his team are helping their program beneficiaries break out of the cycle of dependence. It's the old adage – if you give a man a fish, he eats for a day, but if you teach a man to fish, you feed him for a lifetime. But what if instead of just teaching someone to fish, you empowered them to see the many ways they already knew how to find resources as valuable knowledge and helped them to share this information with others, too? This is DEF's mission as it seeks to invert the traditional development wisdom about

India and reframe it as an information *rich* country, rather than one may otherwise be trapped in a cycle of consuming and reacting to information produced abroad.

Instead of following the traditional extension model where NGOs distribute information from powerful authorities to the marginalised, DEF works to empower people as authoritative sources of knowledge in their own right. In its flagship Community Information Resource Centers (CIRCs) and Soochnapreneur programs, DEF facilitates learning, and transfer of knowledge and literacy skills to the members of under-privileged communities to serve as digital authorities in their own communities. This has the dual effect of creating sustainable enterprises that do not depend on ongoing inputs from DEF, but crucially also changes the social standing of these new digital authorities in their home communities. People, especially from marginalised genders and those with disabilities, who were previously held back are now able to draw on their own skills and experiences for the betterment of their communities.

Equally important to the ability to access information, however, is the belief that one is empowered to *create* it. In addition to its important efforts to help empower

people within their communities, some of DEF's most innovative work takes place in this realm. Take for example, Gyanpedia – an early project of DEF's that aimed to capture information that was produced by unexpected sources. Likewise, A-CODE, an ongoing collaboration between DEF and several partner organisations, is another example of DEF's innovative efforts to move beyond traditional digital development efforts. A-CODE hopes to centre creative expression and folkways as important sources of information and recognise their potential to serve as vehicles of social change. Even as it includes social media as a valuable form of creative expression, A-CODE also hosts art forms and folkways on its own platforms in an effort to give a voice to those who might not yet be able to share their art on the Internet themselves.

A bit of history is necessary here to accurately convey the particular significance and decolonial impacts of information empowerment in India. Since the onset of British colonialism, the nation that would become India has been shaped by misinformation and the unequal production of knowledge. In fact, many of the social and societal ills that DEF and other NGOs in India try to combat today can be traced directly to early British attempts to gather information

about the people living in India, and the resultant ways that this often misinterpreted information were used to reorganise society. When the British arrived in India, they faced the challenge of governing the people already living in India, and so, set out to gather the social and political information that the colonialists hoped would help make control possible.[2] They positioned themselves as the only source of authoritative knowledge, and listened only to those Indians who they understood to be elites. Early British social scientists began to travel across India collecting information about Indians' customs, religions, kinship behaviours, rituals, and caste affiliations that the British then used to administer their colonial territory. However, the British interpreted what they learned about the disparate people of India through their own traditions of rigid social hierarchies and hereditary notions of the right to rule. This initial misappropriation of information – and the exclusion of Indian voices – relegated many castes and tribes to poverty, and by promoting caste supremacy, has had dramatic effects on the Indian social fabric that persist even today.[3]

[2]Cohn, Bernard S. 1997. *Colonialism and Its Forms of Knowledge: The British in India.* Princeton: Princeton University Press.
[3]Joshi, Sanjay. 2001. *Fractured Modernity: Making of a*

As members of the upper-castes were subsequently appointed as regional administrators, they gained English-language education and accrued the kinds of wealth and influence that have led to upper-caste Indians' current dominance in Indian – and for that matter, global – tech sectors. On the other hand, however, Indians who belonged to marginalised castes and tribal communities were further excluded from access to education - let alone technology, and were unable to make their voices heard, or challenge the rigid power structures that had come to surround them.[4] Today, even after India has been independent from Britain for 75 years, these inequalities that silenced some forms and sources of knowledge and promoted others, continue to structure who has access to education, food, technology, and the other resources a person needs to live a life with dignity and self-respect.

But now, India – and the world – is changing. With each year, technology and the Internet are increasingly becoming more affordable and ubiquitous. As more and more elements of daily life are

Middle Class in Colonial North India. New York: Oxford University Press.
[4]Fuller, C. J., and Haripriya Narasimhan. 2014. *Tamil Brahmans: The making of a middle-class caste*. University of Chicago Press.

being carried out online, it has become a widespread assumption that people everywhere have the skills and tools they need to live a life online – but this could not be further from the truth. From completing government forms to learning a new skill to attending school, life is becoming digital, and the chasm between the lifestyle and opportunities available to those who know how to use technologies and those who do not is only widening. Information continues to be produced by globally powerful voices – the effect of which locks countries like India in a perpetual game of catch-up. Even as the Indian government invests in science and technology, and India is becoming more and more respected as a global power, these gains are largely limited to privileged members of Indian society whose advantages can, in many cases, be traced back to the system of social power established by the British.

The social realities of marginalisation that were initially created by colonial misinformation now affect people's ability to access the Internet, and so, continue to limit people's ability to shape the world they live in. In addition to creating centres where people can learn the skills and gain support to complete practical tasks like filling out forms and paying bills, DEF

works to transform marginalised Indians into knowledge *producers*. Programs like Gyanpedia and A-CODE amplify voices that would otherwise go unheard and unsettle the existing balance of power that keeps marginalised Indians playing catch-up. This is DEF's most radical intervention – by working to decolonise knowledge, DEF helps to create the possibilities for a more equal new world.

Information and the Internet

Over the past 20 years, government programs, services, and educational resources have rapidly digitised – in part as an effort to help democratise access to key levers of social mobility. Even so, forms and websites written in English and programs that depend on reliable Internet service often prove to be insurmountable barriers that prevent people from gaining access to services that may have been previously available to them. By using programs like its flagship Community Information Resource Centers (CIRCs) to not just focus on capacity building, but as opportunities to develop ownership and economic avenues in addition to creating expertise within beneficiary communities, DEF stops this cycle of marginalisation in its tracks.

In a previous report written as part of the 2011 Global Information Society Watch's report on *Internet Rights and Democratisation*,[5] DEF demonstrates the impact that access to information can have on marginalised communities. Early on in India's Internet revolution, an effort by farmers and landholders in Rajasthan became the springboard for digital accessibility and transparency in India. Working against the rampant corruption and manipulation of records common in rural areas, these farmers and landholders convinced the Rajasthan state government to establish an online system of record-keeping and access. By paying a small fee and providing their tehsil name, account and serial numbers, these landowners were empowered to take control of their own information. The success of this system led to sweeping changes in the management of land and revenue records across India. Following the success of the program in Rajasthan, the Karnataka state government launched a similar project called Bhoomi

[5]Srivastava, Ritu and Osama Manzar. 2011. "The Internet and the Right to Information in India." *Global Information Society Watch 2011: Internet Rights and Democratization.* pp. 136-139. Association for Progressive Communications and Humanist Institute for Cooperation with Developing Countries. Goa: Dog Ears Books & Printing.

in 1999. Bhoomi, in turn, led the central government to digitise land records across the nation, and making digitised copies of records and property boundaries available to all.

The importance of easily accessible information in self-advocacy is the crux of the right to information movement. In India, the right to information is laid out in the 2005 Right to Information Act, which specifies that public authorities must proactively publish certain categories of information – often online – in an effort to facilitate easy access. The overlap between the right to information and the ability to access the Internet – especially as the Internet makes up an ever growing sector of how we consume and disseminate information – has suggested to many that not only should there be a right to information, but there should also be a right to the Internet.

The resulting debates about whether or not the Internet should be considered a human right are ongoing, whereas for DEF, the significance of the Internet is clear. As Manzar writes in a column on just this question,

> "Any discussion on the Internet as a right should never be limited merely as a policy formulation. Internet availability and access has wider

social implications that underlines equity, natural justice and more. While proponents will have valid reasons to argue for such a right, as it will propel wider social and economic indicators, critics will find many challenges in this approach. We need to note that the right to the Internet is more of an enabling access to the Net through wider infrastructure deployment rather than actualizing it with a legislative mandate as a larger social or welfare state concept."[6]

DEF's Research and Advocacy activities continue to pursue these questions as they unpack the ways that the Internet intersects with other human rights priorities such as gender equality, the right to an education, and the right to privacy.

It would be remiss to conclude this section without talking about DEF's efforts to combat misinformation. Even as access to information and the ability to create knowledge is essential to the empowerment of millions of underserved Indians across the country, the proliferation of social media, and false and harmful messages is a clear and present concern. Where access to

[6]https://www.defindia.org/can-internet-be-a-human-right/

the Internet has outpaced digital literacy education, DEF has recently started to address this issue by incorporating training about how to recognise misinformation into existing CIRCs and Soochnapreneur programs. One particularly exciting example of this is a chatbot[7] developed by DEF and the Association for Progressive Communications (APC), which serves as a portal through which community members can report misinformation circulating within their community, and as a way to then debunk this information. By tracking misinformation in real-time and providing a trusted way to immediately counter this misinformation, DEF also begins to train people in media literacy, and how to identify reliable sources of information. This became particularly important during the COVID-19 pandemic, where access to reliable and up-to-date information was crucial to maintaining one's health and that of one's community. Soochnapreneurs trained community members to consult the chatbot as a way to access factual information about COVID-19. These efforts, alongside others including topical fake news workshops, form the backbone of DEF's efforts to not just ensure access to information, but access to *reliable* information.

---

[7]https://www.defindia.org/chatbot-tool-towards-debunking-the-misinformation-and-fake-news/

@sharadakerkar

The Last 20 Years of the Internet

Perhaps the best way to illustrate the rapid development of Internet access in India is through Manzar's own words. Recounting his early exposure to the Internet and how it would come to change his life among so many others, Manzar paints a vivid picture:

> "It was 1995 and India had just been introduced to the Internet on its Independence Day. I borrowed some money to buy a computer and spent about 18 hours a day browsing the web. The setup was at my mother-in-law's house since she had a telephone line allowing me to access the internet. For about a decade or more, I slept only 4 hours a day since I was addicted to exploring the internet. It was there onwards I could think from the perspective of access, the opportunities, the information, etc. […] At that point, I was paying a bill of 100 USD for the internet connection each month for speeds in kbps. I observed the content being produced, the consumption, the evolution of

interaction, development of web pages, and more."[8]

Indeed, while in 1995, the Internet was expensive, slow, and hard to come by, India was newly a part of the global economy and experiencing the beginnings of a rapid expansion of telecommunications services. 27 short years later, the digital, of course, proliferates: nearly everyone you meet has at least one cell phone in their pocket; delivery drivers zoom across cities to fulfil orders places through mobile apps; *chai-wallahs* accept payment through QR code, and of course, with the advent of COVID-19, many people worldwide have spent the last two years learning and working remotely.

The Internet Society (ISOC), a notable civil society organisation dedicated to advancing a beneficial Internet, provides

the key dates[9] [10] for the development of the Internet as follows:

- 1962 – J.C.R. Licklider of MIT envisions

---

[8]Manzar, Osama and the Ashoka Fellowship team. 2021. "The journey and the making of a social entrepreneur and a social enterprise." pp. 7-8

[9]https://www.internetsociety.org/internet/history-internet/brief-history-internet/

[10]https://www.internetsociety.org/wp-content/uploads/2017/10/APAC_Timeline_20170622.pdf

a globally connected network of computers from which, data and information could be accessed anywhere in the world

- 1962-1968 – The network that would become the Internet begins to take shape as DARPA and ARPANET

- 1969 – First computer connected to ARPANET at UCLA

- 1973 – Ethernet developed by Bob Metcalfe at Xerox PARC in California

- 1980s – Internet becomes widely used in U.S. universities and research communities

- 2005 – 1 billion global Internet users

- 2012 – 1 billion Internet users in the Asia-Pacific region

However in India, these dates might look a little bit different. Beginning with the inclusion of technology and industry in the Indian government's five-year development plans, telecommunications have long been portrayed as a way to escape postcolonial

legacies of underdevelopment.[11] Indeed, over the last 20 years, the Internet in India has changed from a novelty to a fact of life. Post-liberalisation, companies like Tata and Reliance have capitalised on the Indian government's preference for indigenous telecoms to build corporate empires that, while capturing an enormous market share, have also begun to focus on making cellular communication more affordable. Likewise, the Indian state by investing heavily in the legal and physical infrastructures, necessary to regulate and expand the Internet across India, has played a key role in accelerating the role of the Internet in Indian society. In addition to supporting the construction of Software Technology Parks of India (STPI) that serve as centres of technological innovation, the government has made repeated efforts to build Internet infrastructure across India. For example, projects like the shared mobile infrastructure scheme, rural broadband scheme, Digital India, and Bharat Net or the National Fibre Optic Network (NFON) have all worked to provide rural, or otherwise underserved Indians with access to the Internet.

With all of this in mind, an alternate timeline for the history of the Internet in

[11]Bassett, Ross Knox. 2016. *The Technological Indian*. Cambridge, Massachusetts: Harvard University Press.

India[12] might look like this:

- 1986 – Internet becomes available to many Indian research institutions such as ERNET

- 1991 – India opens its doors to the global economy in a transition known as Liberalisation

- 1992 – Universal access to telephones and communication infrastructure included in India's Eight Five-Year Plan

- 1994 – Liberalisation of telecommunications via the New Telecommunications Policy; prices become competitive.

- 1995 – Internet becomes widely available in India

- 1997 – Telecom Regulatory Authority of India established

- 2005 – Right to Information Act

- 2009 – WhatsApp launched

- 2009 – Development of Aadhaar begins along with a new emphasis on e-governance

[12]Thomas, Pradip Ninan. 2019. *Empire and Post-Empire Telecommunications in India*.

- 2011 – BharatNet launched

- 2015 – India rejects Facebook's Internet.org and Free Basics programs on the basis of net neutrality

- 2015 – Digital India launched with the goal of expanding access to Internet infrastructure, delivering government services digitally, and ensuring universal digital literacy

- 2016 – Reliance Jio launches subsidised 4G cellular and Internet services

- 2020 – COVID-19 pandemic shuts down in-person work, and moves education and white-collar labour online

Despite the strong emphasis that the Indian government has placed on digital development, these projects have not necessarily connected marginalised Indians with the Internet. As the historian Pradip Ninan Thomas tells us, "Uneven development is a reality in India, best illustrated by the visibility of IT enclaves in a handful of key cities, that are almost always surrounded by more traditional economies based on earlier modes of production as well as by a great variety of informal economies that are

increasingly, the basis for employment and livelihood, be it in Chennai or Mumbai."[13] When digital interventions encounter this uneven development, it is often the case that the inequalities meant to be solved by digital interventions are exacerbated unless particular care is taken to ensure that projects are attuned to local needs. Recall the list of conditions we gave earlier that must be met for a person to access the Internet:

> "In order to access the Internet, a person needs to live in a place that is connected to the electrical grid, be reachable by the lines an Internet service provider uses to connect the Internet from one place to another, live in an area where these lines are actively providing Internet service, have access to a computer, cell phone, or tablet, and be able to pay the bills for these services. On top of all of that, a person must know what to do when presented with an internet-enabled computer, cell phone, or tablet. How to turn it on and navigate the menus, what all the letters and symbols mean,

[13]Thomas, Pradip Ninan. 2012. Digital India: Understanding Information, Communication and Social Change. p. 13. Los Angeles: SAGE Publications.

which websites to navigate to access information or complete their task, and how to tell if a source of information is reputable or not."

Many of the current controversies about the Internet in India stem from this mismatch between high-level digital modernisation schemes and the material realities of life in rural and underserved communities. Aadhaar is one notorious example of this.

Introduced in 2009, Aadhaar was developed in an effort to solve the problem of citizen identification in India. While many other countries use a centralised system of identification, Indians had been using a patchwork of systems, including Permanent Account Number (PAN) cards, ration cards, and voter identification cards. In theory, Aadhaar was meant to consolidate all of these varying sources of identification and registration under a single umbrella that would assign a 12-digit code to each Indian citizen, that would then be linked with their biographical information and biometric identifiers to create a single and non-replicable citizen profile. This project, understandably, presented many logistical and ethical challenges. While the Unique Identification Authority of India (UIDAI) has been remarkably successful at linking nearly

all Indians with an Aadhaar number, this is largely because an Aadhaar number has become necessary to compl[14]ete almost any official task – resulting in the exclusion of Indians who are unable to register, or who have registered but are unable to confirm their identity with the database where Aadhaar information is stored.

This rupture in the link between an Indian citizen and the technical aspects of the Aadhaar system has been the subject of significant discussion and criticism in recent years.[15] While Aadhaar justified itself and garnered support by claiming that it would facilitate the delivery of welfare and social services to underserved Indians in the "last mile," the reality of the situation is that often times, the same social and infrastructural barriers that have caused a person to need social welfare prevent them from receiving it at all. There are countless reports of this that have been shared in the news since Aadhaar began replacing previous systems

---

[14]Abraham, Itty and Ashish Rajadhyaksha. 2015. "State Power and Technological Citizenship in India: From the Postcolonial to the Digital Age." East Asian Science, Technology and Society: An International Journal 9:65–85 DOI 10.1215/18752160-2863200

[15]Khera, Reetika. 2013. "Lessons from the East Godavari pilot." The Hindu, published 11 April, 2013. https://www.thehindu.com/opinion/lead/lessons-from-the-east-godavari-pilot/article4603273.ece

of welfare delivery. For example, in order for a ration to be distributed to an entitled citizen, a worker must scan the citizen's fingerprint on a biometric scanner, which then must connect through the Internet to a centralised database and confirm the citizen's identity. In rural areas, which have the highest need for welfare and the lowest density of cellular towers, the simple lack of infrastructure can and does prevent people from receiving aid. Furthermore, even if citizens are able to make it to a working ration distribution centre, many labourers have fingerprints that have been roughened due to hard work, and are unreadable by the fingerprint scanners.[16] This also results in the denial of aid. Finally, there are reports of Indians who are unable to register with Aadhaar in the first place, often due to disability or inaccessibility. Not only are these Indians then rendered invisible, but they are also denied the often life-saving rations and resources that they are owed by the Indian government.

Given the limitations and drawbacks, DEF works towards closing the last legs of the social and infrastructural gaps. By establishing CIRCs that serve as hubs for technical needs, and appointing Soochnapreneurs who provide information

[16]https://www.defindia.org/baseless-aadhaar-and-its-many-flaws-when-the-poor-lose-their-thumb-prints/

#DIGITAL

services to rural and underserved members of their communities, DEF is taking important steps to address the on-the-ground realities that shape a person's ability to access the Internet and e-governance programs like Aadhaar. As Neil Selwyn writes, "The biggest shift required in policy thinking is the need to recognise that the 'Digital Divide' is not merely a technical and financial issue, but is indicative of wider problems of exclusion from society, which the provision of ICT can be little expected to alter."[17] The intersecting social, economic, and political barriers that we describe above cannot be addressed by technical solutions alone, and in fact often compound to create zones of further exclusion. This – how to think about ICTs as inherently linked to, and reflective of social realities – is perhaps the greatest challenge going forward, and one that DEF is well positioned to lead via its approach to the Internet as a social ecosystem. As we have seen with the recent COVID-19 pandemic, where some Indians were able to shift their work and education online while others were further excluded, the need for an intersectional and an ecosystem-based approach to digital development could not be more urgent.

[17]Selwyn, Neil. 2010. 'People's (Non) Engagement with Public ICT Sites', in G. Murdock and P. Golding (eds), Digital Dynamics: Engagement and Disconnections, p. 161. Cresskill, NJ: Hampton Press, Inc.

The Last 20 Years of DEF

Over the course of its 20 years, DEF has engaged in a tremendous number of partnerships and initiatives towards addressing most if not all elements of the Internet ecosystem in India. While this timeline is not comprehensive, and DEF has completed and sustained many projects that are not listed here, we offer it in an attempt to reflect the directions that work at DEF has taken over the past 20 years.

2002	Digital Empowerment Foundation (DEF) is registered as a not-for-profit under Societies Registration Act, 1860
2003	World Summit Award (WSA) selected DEF founder Osama Manzar as grand jury, board member and country expert for nominating digital content best practices from India
2003	Participated in the prestigious World Summit on Information Society (WSIS) in Geneva

2003	Published a book called eContent: Voices from the Ground, a compendium of digital content from 28 countries
2003	Established partnership with WSA
2004	Formally launched Manthan Awards to identify ICTD best practices in India
2006	Collaborated with National Institute of Smart Governance (NISG) to develop e-Governance case studies
2007	Launched Community Information Resource Centre (CIRC) project with support from Intel
2008	Launched www.gyanpedia.in in partnership with the Ministry of Communication & Information Technology, Government of India, to aggregate content created by students and teachers from 500 schools across seven states of India

Year	Event
2008	Manthan Awards goes global with launch of Manthan Award South Asia
2008	Partnered with Infrastructure Leasing & Financial Services (ILFS) and Department of Electronics and Information Technology (DEITY), GOI, to develop content and services framework for Common Service Centres (CSCs; rural Kiosks) for the National e-Governance Plan (NeGP)
2008	Collaborated with IIM Ahmedabad to develop 10-day rural entrepreneurship program
2009	Launched Neerjal, an online drinking water information management system, in partnership with the Barefoot College and Department of Science and Technology, GOI
2009	Started intervention in the community radio sector
2009	Launched Chanderiyaan project with support from DEITY for integrated development of the silk weaving cluster in Chanderi, Madhya Pradesh

|	
2009	Hosted WSA Grand Jury 2009 & India International Summit with DEITY where digital experts from 40 countries participate
2009	Started eMSME project to connect micro-enterprises
2010	Initiated Digital Panchayat program to empower gram panchayats across the country
2009	DEF founder became member of DEITY's Working Group for Internet Proliferation and Governance
2010	With support from National Internet Exchange of India (NIXI) and DEITY, DEF created a digital repository of best digital content for development interventions in India and South Asia in audio-visual format.
2010	Graduated from projects being primarily driven by partners to self-determined programmatic interventions

2010	Institutionalised seven programmatic verticals – Access & Infrastructure, Governance & Services on Demand, Education & Empowerment, Social Sector & Civil Society, Market & Enterprise, Knowledge Network & Database and Advocacy & Research
2010	Became a member of the Association for Progressive Communications (APC)
2010	Launched mBillionth Award
2010	Initiated W4C program in partnership with ISOC to provide Internet access wirelessly by using unlicensed spectrum
2010	Instituted e-North East Award to reward ICTD interventions in North East India
2011	Launched Mobile for Good Awards with Vodafone Foundation
2011	Initiated Internet Rights project
2011	Began training community radio stations on how to use digital tools and go online

2012	Launched eNGO programme to digitally empower grassroots NGOs
2012	Partnered with Internews to promote Citizen Media Network (CMN)
2013	Government of India selected DEF founder as a member of the Community Radio Screening Committee
2013	Launched the district public libraries project with support from Bill and Melinda Gates Foundation
2013	Launched Red Rickshaw Revolution (RRR) with a focus on women's empowerment
2013	Launched Social Media for Empowerment South Asia Award (SM4E) with support from the American Centre
2014	Joined a consortium formed by National Association of Software and Service Companies (NASSCOM) Foundation for the National Digital Literacy Mission (NDLM), which in 2014 became a GOI Mission

2014	Launched Digital Knowledge Centre (DKC)
2014	Initiated eHeritage project with UNESCO support
2014	Launched Soochna Seva project with EU support
2014	Mobile for Good Awards become a separate entity
2014	Launched Manthan South West India Award
2014	Initiated eUttara Award
2014	Introduced Angel Fund in mBillionth Award
2014	Joined Google's campaign 'Help Women Get Online'
2014	Organised UNESCO international conference on ICT for disabled people
2014	With support from Sir Dorabji Tata Trust, DEF established 6 CIRCs in Northeast states
2015	Conceived and implemented Minority Cyber Gram Yojana, a Ministry of Minority Affairs initiative, in Chandoli, Rajasthan.

2015	Introduced a festival of development-oriented films and documentaries as part of Manthan Awards
2015	Organised first-ever national conference on rejuvenating public libraries using digital tools
2016	Started Mobile for Social & Behavioural Change project with UNICEF support
2017	Organised "Internet Saathi: Bridging the Gender Divide in Rural India" programme across India with support of Google and TATA Trust
2017	Expanded eNGO program to help NGOs migrate to the .ngo and .ong top level domains
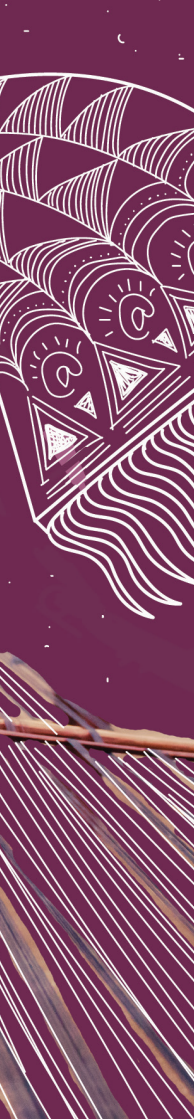
2017	DigiKargha created as an e-commerce site for local artisans
2020	Developed "WhatsNext: Building Community Entrepreneurship and Fighting Misinformation" training programme to educate against misinformation
2020	Reached 1000 CIRCs across India
2020	Established Covid-19 Relief Program (CDERP)
2021	CDERP 2.0 inaugurated to respond to the changing needs of rural populations during the coronavirus pandemic
2022	A-CODE project begun in an effort to strengthen the focus on the arts and collectives as important parts of digital empowerment

Case Study: Intersectionality and ICTD

Over the course of its 20 years, DEF has learned first-hand the importance of working with women. Founder Osama Manzar tells of how DEF has evolved to focus on recruiting women to run its CIRC programs and work as Soochnapreneurs:

> "In the last decade we noted that working with women creates a dip in expenses with a higher output. Moreover, the on-ground reality suggests that men are less reliable in comparison and their sense of accountability and responsibility is not as sincere. Thus making it economically wise to work with women as compared to men. The programs conducted by DEF gradually recruited more women to make the work more effective and efficient."[18]

[18]Manzar, Osama and the Ashoka Fellowship team. 2021. "The journey and the making of a social entrepreneur and a social enterprise." p. 15

In addition to seeing a greater impact per cost outlay while working with women knowledge partners, DEF also began to notice that helping to put marginalised women in positions of authority in their communities had several knock-on effects that helped to combat gender based discrimination. Women, who had previously been relegated to domestic work, began to be seen as valuable assets to the community and experts in their own right – an unexpected benefit in addition to the tech skills training and digital services they helped make available to their communities. Parents began letting their daughters use cell phones and go out unsupervised to DEF-operated mentorship meetings. Women became able to contribute to, or take over providing for their family's income. One woman even reported that her entire social status within her community had changed as a result of her involvement with Soochnapreneurs. She told us that her community members had begun to refer to her as Google-sister, or tablet-sister, and had even begun to identify her husband by her name.

The careful attention that DEF has paid to the ways that different kinds of marginalisation intersect with each other is emblematic of the critical race

studies concept of intersectionality, first developed by the Black feminist scholar Kimberlé Crenshaw in 1989.[19] Studying an employment discrimination case, Crenshaw observed that courts had a tendency to treat Black women as only Black or as only women, and so would argue that because Black men and white women were employed at the company, this was evidence against gender and racial discrimination. However, this ignored the compound discrimination that Black women experienced by being penalised for both their gender and their race, and so failed to remediate the harm caused by compounding discrimination. Since Crenshaw introduced this framework in 1989, it has proved to be so insightful that today it has become a key element of designing cutting-edge development interventions worldwide. In fact, the UN Partnership on the Rights of Persons With Disabilities in collaboration with UN Women have recently published a handbook for organisations wanting to incorporate an intersectional approach to their work, complete with a discussion of the urgent need to incorporate an intersectional lens in development work. In it, they explain that:

[19]Crenshaw, Kimberlé. 1989. "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory, and Antiracist Politics." University of Chicago Legal Forum. Pp. 139-167

"Without an intersectional approach, the global pledge to leave no one behind will remain aspirational. Understanding the importance of intersectionality will lead us to ask ourselves who is left behind, why and under what circumstances. It identifies hidden structural barriers and supports an understanding of how individual experiences differ, even within already marginalised or underrepresented groups. Failure to examine these elements risks to undermine the achievement of the 2030 Agenda [for Sustainable Development] and the perpetuation of intersectional inequalities."[20]

Over the course of its 20 years working in the digital development sector, DEF has seen the realities of compounding marginalisations first hand. In a recent study of tea tribe communities in Assam,[21] DEF surveyed sample

[20]UN Partnership on the Rights of Persons With Disabilities and UN Women. 2021. Intersectionality Resource Guide and Toolkit: An Intersectional Approach to Leave No One Behind, p.9
[21]Kazi, Syed Sultan, Ritwika Patgiri, and Rajdeep Singha. 2021. "Digital Empowerment of the Tea Tribe/ Adivasi Community in Assam: Towards Vulnerability Reduction and Unlocking Opportunities." Council for Social and Digital Development/North East Development Foundation.

populations in six tea districts in an effort to learn about their access to digital technologies. On the whole, DEF learned that while about half of the survey population had access to the Internet, only about 20% had *meaningful* access to the Internet – meaning a reliable connection, and the knowledge and context in which to use it. But, by teasing apart the ways that different social, cultural, and infrastructural barriers prevent the uptake of digital technology, DEF further demonstrated how digital development interventions have the potential to address a whole host of sustainable development goals including gender equality, access to healthcare, and education.

The tea tribes in Assam are descendants of Adivasi communities, whose struggle to attain Scheduled Tribe (ST) status and the ensuing governmental protections has long gone unfulfilled. The result of this is deep dispossession, with an average wage of Rs. 167 per day that has not been increased in 15-20 years, a 63% school drop-out rate, and mortality rates that are on average around 80% higher than elsewhere in Assam. In addition to this, only about half of the people in the Assam tea districts have access to the Internet; when limiting this figure to only women, the rate drops to 39%.

Stemming from patriarchal attitudes about gender and a lack of information about welfare, women in the tea tribes face added challenges. The report authors note that "women tea workers are particularly vulnerable as along with underpaid work in the gardens, they are also overburdened with unpaid domestic work. In fact, the women tea workers in Assam undertake 13 hours of physical labor per day and just 6 hours of rest. The women tea workers do the labor intensive, low paid tasks of plucking the tea leaves while the men do the better paid and more respect factory work."[22] Furthermore, women are excluded from trade unions, and so, are unable to advocate for better working conditions. Overwork and little pay takes its toll – women of the tea tribes suffer from significantly higher maternal mortality rates than women elsewhere in India, likely as a result of poor nutrition and a lack of access to medical care. A study by ActionAid in 2018 also revealed that most female workers were unaware of their entitlement to maternity leave during and immediately after pregnancy, thereby resulting in adverse effects on their own health, and that of their children.[23]

---

[22]Kazi, Patgiri, and Singha 2021, p. 13.
[23]ActionAid. 2018. *Framework 2018: Gender-Responsive Public Services.* https://actionaid.org/publications/2018/framework-2018-gender-responsive-public-services

DEF's work with the tea tribe communities is emblematic of an intersectional approach to digital development. By first targeting an Adivasi community, and then through learning about the structural realities of life in a tea tribe community, DEF was able to understand that working with women had the greatest potential to effect social change. Thus, DEF's work with the tea tribes addresses the intersection of at least two socially marginalised constituencies: adivasi tribal communities, and women experiencing gender discrimination. By further understanding how these experiences of marginalisation shape people's access to digital technologies, DEF could tailor its Soochnapreneur and CIRC programs to be most effective and inclusive.

Case Study: Entrepreneurship and Sustainability

Entrepreneurship has long been a focus of DEF's efforts to empower people at the edge of information in a way that is self-sustaining and not dependent on DEF in the long term. Above all of its other initiatives, DEF is most well-known for its social entrepreneurship programs, namely its flagship Community Information Resource Center (CIRCs) and Soochnapreneur initiatives.

CIRCs are community-driven; bottom-up platforms that seek to bridge the digital divide and transform information-dark communities into information-empowered communities. Since the CIRC project began in 2007, DEF has established hundreds of centres across the country and has no plans to slow down. Each CIRC is a hub run by a DEF-appointed community-member, often a woman, who provides skill training and technical support to their community, and is able to draw an income from their work. A typical CIRC is enabled with computers, cameras, printers, projectors,

scanners, internet, wi-fi and broadband. The enthusiastic, young, and passionate community members, who run CIRCs understand the meaning of information, and how it can empower communities of all class and cadre through helping them to build digital literacy, ICT skills, employable skills, learn English, develop entrepreneurship, RTI, access e-governance and more.

DEF's Soochnapreneur program, founded in 2016, takes this entrepreneurship model and extends it further by focusing on last-mile information delivery. To do this, DEF identified and trained women from rural areas with the necessary information and technology so that they would be able to provide people from their communities with information about the various schemes and government benefits that they might be eligible for. In return, Soochnapreneurs are able to charge a small fee for their services, and create their own small knowledge businesses. The social entrepreneurship approach brings wireless technology and mobile devices to rural India, whereby the information society and the economic ecosystem are still underdeveloped, and vast sections of society remain unreached. It also focuses on building livelihoods, facilitating skill development, and the

employability of rural youth in an information economy, while serving public and private information services to rural clients in a need-based, relevant and an affordable manner.

DEF's focus on social entrepreneurship is concurrent with the consensus in international development circles that entrepreneurship is an important method for bringing about sustainable social change.[24] As early as 1998, the United Nations Development Report observed that as a family becomes entrepreneurial and economically empowered, it begins to enjoy self-respect, a sense of belonging to the community and self-fulfilment.[25] A recent systematic review of social entrepreneurship literature[26] reports that this is still the case, noting that the innovative power of entrepreneurs plays an important part in ensuring a more sustainable future. They

[24]Dhahri, Sabrine and Anis Omri. 2018. "Entrepreneurship contribution to the three pillars of sustainable development: What does the evidence really say?" *World Development*, 106.

[25]United Nations Development Program. 1998. The United Nations Development Report. UNDP.

[26]Bansal, Sanchita, Isha Garg and Gagan Deep Sharma. 2019. "
Social Entrepreneurship as a Path for Social Change and Driver of Sustainable Development: A Systematic Review and Research Agenda." *Sustainability,* 11:1091.

argue that entrepreneurs should, therefore, be recognised as the engines of sustainable development.

DEF has witnessed the impact of social entrepreneurship models of development time and time again, but perhaps nowhere more so than through its work with the village of Chanderi. Chanderi, a village in Madhya Pradesh, is home to weavers of the famous Chanderi sarees, whose work had dried up alongside changing modern tastes. "Today, very few people demand such exquisite saris, plus the modern generation has completely different tastes and preferences. Young girls are not likely to go out wearing saris or even appreciate the worth of Chanderi sari," said Farid, a Chanderi weaver.[27] DEF realised that although the sarees generated an annual revenue of US$10 million, the average income of a Chanderi weaver was only US$50 per month in 2010, primarily due to rampant exploitation by intermediaries. Furthermore, almost half of the weavers were illiterate, and none of them knew how to use digital technology. There were no computers in town, and electricity was supplied for only six hours a day. In partnership with the

[27]https://www.defindia.org/chanderi-diaries/

Internet Society (ISOC), DEF developed its first Wireless 4 Communities (W4C) project, and established a community network in Chanderi.

This community network proved to be the starting point for Chanderi's transformation. By using low-cost Wi-Fi equipment to connect villages like Chanderi – which are unattractive to mainstream Internet providers – to the Internet, DEF ultimately empowered weavers to digitally preserve traditional saree designs, research and create new designs, enhance production efficiency, and increase their income by directly communicating with buyers instead of relying on intermediaries. DEF subsequently established a CIRC to help train community members in digital literacy. The result of this intervention has been that both traditional and new handloom designs have been digitised and stored in a repository. Weavers are now using CAD/CAM software to develop new and more accurate designs based on modern aesthetics, to appeal to the sensibilities of the upmarket global and domestic customers. There are now about 30,000 designs that can be accessed by weavers in Chanderi. The production time for each saree has also significantly reduced and more than doubled weavers' income.

Today, DEF considers Chanderi its greatest success story and a model for future projects. Chanderi sarees have become a brand – *Chanderiyaan* – and are sold through the community's e-commerce website, www.chanderiyaan.com. DEF still maintains a small presence in the village, but no longer needs to run a CIRC there – the weavers of Chanderi have taken over for themselves. It is here -thanks to the social entrepreneurship model - that the ultimate development goal of working so well that development providers become obsolete, has come to full fruition.

Case Study: Nimbleness in the Face of Uncertainty

As DEF goes into the next 20 years, it faces a world defined by rapidly changing technologies, the intensifying impacts of globalisation, and tremendous general uncertainty engulfing the global economy. As Manzar writes in his own 20-year retrospective,

> "Reflecting on 20 years of Digital Empowerment Foundation (DEF) is like painting a canvas with 20 different colours. The digital space and scenario has evolved, morphed, exploded, imploded, opened up opportunities, restricted freedom of speech, instilled confidence in the ambitious and also stunted growth succumbing to online bullying […] On one end there is a lot of discussion on information society, surveillance, online hate speech, digital interference, virtual domination, and the list of digital jargons seems to be never ending, while on the other end, there is still a huge population

reaching out to gain access. The journey of DEF has witnessed a very dynamic shift and complex evolution of the digital divide over the years in terms of impact. The continuous learnings have helped to empower the organisation to skillfully and creatively find solutions that aid in bridging the gaps of the digital world."[28]

This is, of course, to say nothing of the coronavirus pandemic that in 2019 radically upended most, if not all lives around the globe.

Earlier in this report, we have discussed DEF's innovative efforts to combat digital misinformation, and indeed this was only possible due to DEF's pre-existing network of CIRCs, Soochnapreneurs, and other collaborators with deep community networks across the country. By spending time cultivating relationships and building trust at the community level, DEF has gained the ability to respond quickly to the rapidly changing digital landscape. This same network, however, proved crucial with the onset of the COVID-19 pandemic. DEF was able to mobilise collaborators

---

[28]Manzar, Osama. 2022. 20 *Digital Years: A Narrative of Inclusion and Exclusion.* p. 2.

from: Community Information Resource Centres (CIRCs), Soochnaprneurs, Smartpur centres, Technology Empowering Girls program (TEG), Going Online As Leaders program (GOAL), Samarth Soochnapreneurs program, Digital Cluster Development program, e-NGOs, Fighting Fake News program, Wireless for Communities initiative, MeraApp team, and Internet Saathis.

In addition to translating some of their training programs to take place online, these newly appointed Covid Warriors:

- Assisted the Central Government in providing ration kits to labourers, DEF conducted a survey of those in need and assembled ration kits consisting of 500 grams cooking oil, 500 grams lentils, 5 kilograms wheat and 1 kilogram rice

- Smartpur centre coordinators created a task force to help with community outreach, mobilisation, and the distribution of necessary items like food and medicines

- Community-level WhatsApp groups were created to facilitate the sharing of accurate information about

COVID-19, and to fight fake news and misinformation.

- CIRC-ProtoVillage produced aloe vera-based hand sanitisers, which were then distributed to local health centres, the police, and the surrounding villages

- Internet Saathis collaborated with local health centres and administrations to manufacture masks and sanitisers, and generate awareness within their communities.

- Established Health Camps to spread awareness and promote healthy practices regarding the spread of COVID-19

- CIRCs operated as information hubs to replace the financial services that had shut down following lockdown

This emergency relief program, known as C-DERP, or COVID-19 Digital Emergency Relief Program, was tremendously successful with about 15,900 households receiving relief and 150,000 migrants identified for inclusion in relief programs.

While the first-wave of COVID-19 was relatively uneventful, the second wave was calamitous, resulting in millions of

excess deaths and the collapse of health infrastructure in both rural and urban areas. Recognising that the areas of need had changed, DEF launched C-DERP 2.0 – a new iteration of the relief program that focused on providing healthcare equipment, including pulse oximeters, masks, and rations, to needy households while continuing to combat misinformation and connect people to reliable resources. As the world continues to change in unpredictable ways, DEF will continue to draw on its vast network of collaborators to fulfil its mission of empowering people at the edge of information.

CELEBRATING 25 years of digital empowerment

Digital Empowerment Foundation

@defindia.org | www.defindia.org