REMINDER: LOG IN. LINK UP. LIGHT THE MARGINS

MANISHA ARYAL

Field notes from India on SoochnaPreneurs (Information Entrepreneurs) playing roles of digital social entrepreneurs at a village level

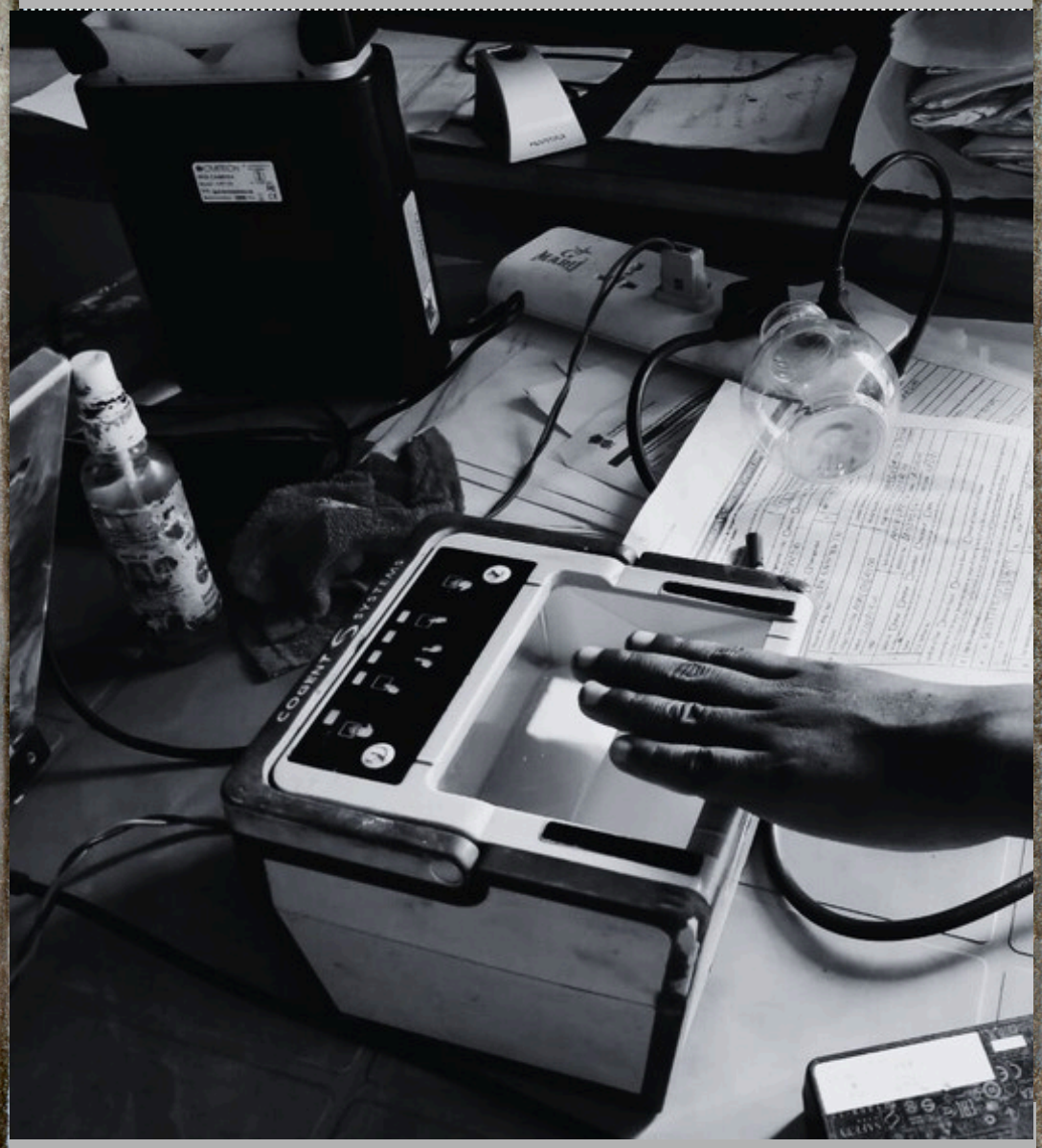


Preface by
Osama Manzar

defindia.org

Produced under the project

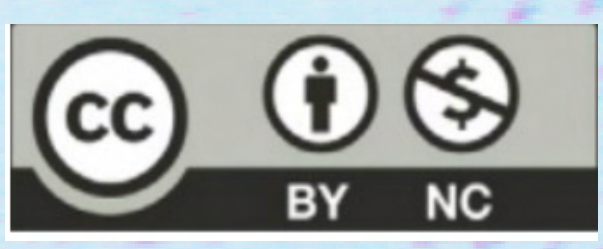
Field notes from India on SoochnaPreneurs (Information Entrepreneurs) playing roles of digital social entrepreneurs at a village level



Preface by
Osama Manzar

Reminder: Log In. Link Up. Light the Margins: Field notes from India on SoochnaPreneurs (Information Entrepreneurs) playing roles of digital social entrepreneurs at a village level

Year of Publication: 2025
Concept and Preface by: Osama Manzar
Stories and Photos by: Manisha Aryal, posted originally on LinkedIn
https://www.linkedin.com/in/manisha-aryal-6923444/
Designed by: Akanksha Ahluwalia



This work is licensed under a creative commons Attribution 4.0 International License

Published and distributed by Digital Empowerment Foundation

PREFACE

OSAMA MANZAR

Start

“So what did I learn? That technology is merely a tool, and real work is cultivating trust; that the bridges spanning India's digital divides are woven not from fibre and code, but through empathy, attention, and the patient commitment of those who choose to serve.”

These are the words of Manisha Aryal.

Manisha travelled from Washington, D.C., into the rural heartlands of India to meet Soochnapreneurs and visit Digital Centres located across the hinterland—centres managed and administered by the Digital Empowerment Foundation.

This small booklet is a soulful, ground-up report compiled from her experiences, originally shared on LinkedIn in 21 episodes, each accompanied by four to five photographs.

Manisha’s voice emerges from the heart and soul of the Soochnapreneurs—individuals who work at the village level, equipped with social capital, digital skills, and essential digital devices.

Across these 21 chapters, one can see the nuances of rural India, the persistent reality of compulsive digital exclusion, and how empathy and social ownership enable Soochnapreneurs to ensure that villagers receive their rights instead of being denied them.

We invite you to read through these notes, reflections, and photographs—and to reach out if you would like to join us in connecting another digitally divided village. Together, we can ensure that those who remain on the margins can access their rights with dignity and convenience.

defindia
org

CONNECTING COMMUNITIES ON THE MARGINS

Start

#24YEARSOFDIGITALHOPE

DHARCHULA
UTTARAKHAND
INDIA

#MEANINGFULACCESS
#LASTMILECONNECTIVITY
#DIGITAL EXCLUSION
#SOOCHNAPRENEUR

I found myself in the rugged mountains of Uttarakhand, a place of breathtaking beauty, but also immense challenges when it comes to digital connectivity. Internet service providers avoid this landslide-plagued region, as the returns on investment in setting up towers for remote, sparsely populated villages is very low.

The result? Military veterans, small landholders, business owners, entrepreneurs, and students have to traverse across tough terrain just to access e-government portals, do their banking, download lesson plans and test results, and use basic public digital services.

Connectivity is a journey. Quite literally.

I traveled with colleagues from the Digital Empowerment Foundation, working to bridge this digital divide, linking far-flung Uttarakhand hamlets to the digital world – one village at a time.

My takeaway: For digital transformation to truly work in geographically-challenged and historically-marginalized regions, we need to anchor our efforts in what I'm calling the **"Three Eyes of Digital Transformation"**:



“

I traveled with colleagues from the Digital Empowerment Foundation, working to bridge this digital divide, linking far-flung Uttarakhand hamlets to the digital world — one village at a time.



- **Digital Citizen Infrastructure:** Building robust, context-specific digital infrastructure. Think point-to-point connections, mesh networks, signal boosters, satellites, and more.
- **Infomediaries Rooted in Communities:** Upskill trusted community members so they can be their community's information intermediaries (DEF calls them SoochnaPreneurs. A blend of “soochna,” or information, and entrepreneurs.
- **Actionable Information:** Accurate, timely, and usable information, whether related to state and federal benefits, health and disaster information, digital financial services, or social enterprises.

These villages in India are living proof that investing in the three “Eyes”—digital citizen infrastructure, upskilling of local infomediaries, and making actionable information accessible—pays off. It transforms remote hinterlands into opportunity hubs by connecting them to the India's digital public infrastructure.

“

These villages in India are living proof that investing in the three “Eyes”—digital citizen infrastructure, upskilling of local infomediaries, and making actionable information accessible—pays off.

I spent a couple days this week with Digital Empowerment Foundation's hashtag *Circular Digital Economy* research team in Seelampur, Delhi.

Nestled along the Shahdara Canal in Delhi's northeastern suburbs, **Seelampur is often described as India's gadget graveyard.** Truckloads of digital discards—cracked cell phones, defunct laptops, obsolete printers, and expired batteries—make their way here to be dismantled. Over 1.75 million metric tons of waste was processed here just in 2024, representing an estimated $6 billion in recoverable materials.

The informal e-waste sector in Seelampur underpins India's overlooked digital economy. The metals and minerals extracted here (gold, platinum, silver, copper, aluminum, lithium, cobalt, nickel and rare earth minerals), go into new devices and batteries. **Some estimate that close to 60% of India's informal e-waste processing units are in Seelampur.** The workers themselves earn 60 paisa per dismantled phone, or around $35 a day if they break 5,000 units.

E-WASTE MANAGEMENT IN INNOVATION PLAYBOOKS

Start

#24YEARSOFDIGITALHOPE

SEELAMPUR
DELHI
INDIA

#CIRCULARECONOMY
#E-WASTE
#UPCYCLING
#DIGITALEXCLUSION


“
Seelampur is often described as India's gadget graveyard



Within a circular economy framework, Seelampur serves as a critical link that enables the recycling and reuse of digital goods at scale. However, working conditions are harsh and tools used are medieval. The risks to the broader environment and workers' health are alarming. Studies show elevated levels of lead, mercury, and other toxins in workers' blood and hair samples, with two-thirds reporting breathing difficulties and persistent cough.

While the global tech production trend toward planned obsolescence (the deliberate design of products to have limited lifespans) encourages consumers to seek frequent upgrades and replacements, it will also result in exponential increase in e-waste volumes.

If we acknowledge e-waste to be a core component of global digital transformation, then Seelampur represents an infrastructure with a workforce that needs to be supported (at a minimum) with:

- **Skills Upgrade**: To move towards safer, more efficient dismantling and processing practices that protect worker health while improving recovery rates.
- **Safety Standards**: To use protective equipment, appropriate tools, humane working conditions, and access to health checkup and care for the e-waste workers.



“

Some estimate that close to 60% of India's informal e-waste processing units are in Seelampur.

defindia.org

PEOPLE, NOT TECHNOLOGY, ARE THE BRIDGES ACROSS DIGITAL DIVIDES

Start

#24YEARSOFDIGITALHOPE

TEA PLANTATIONS
UPPER ASSAM
INDIA

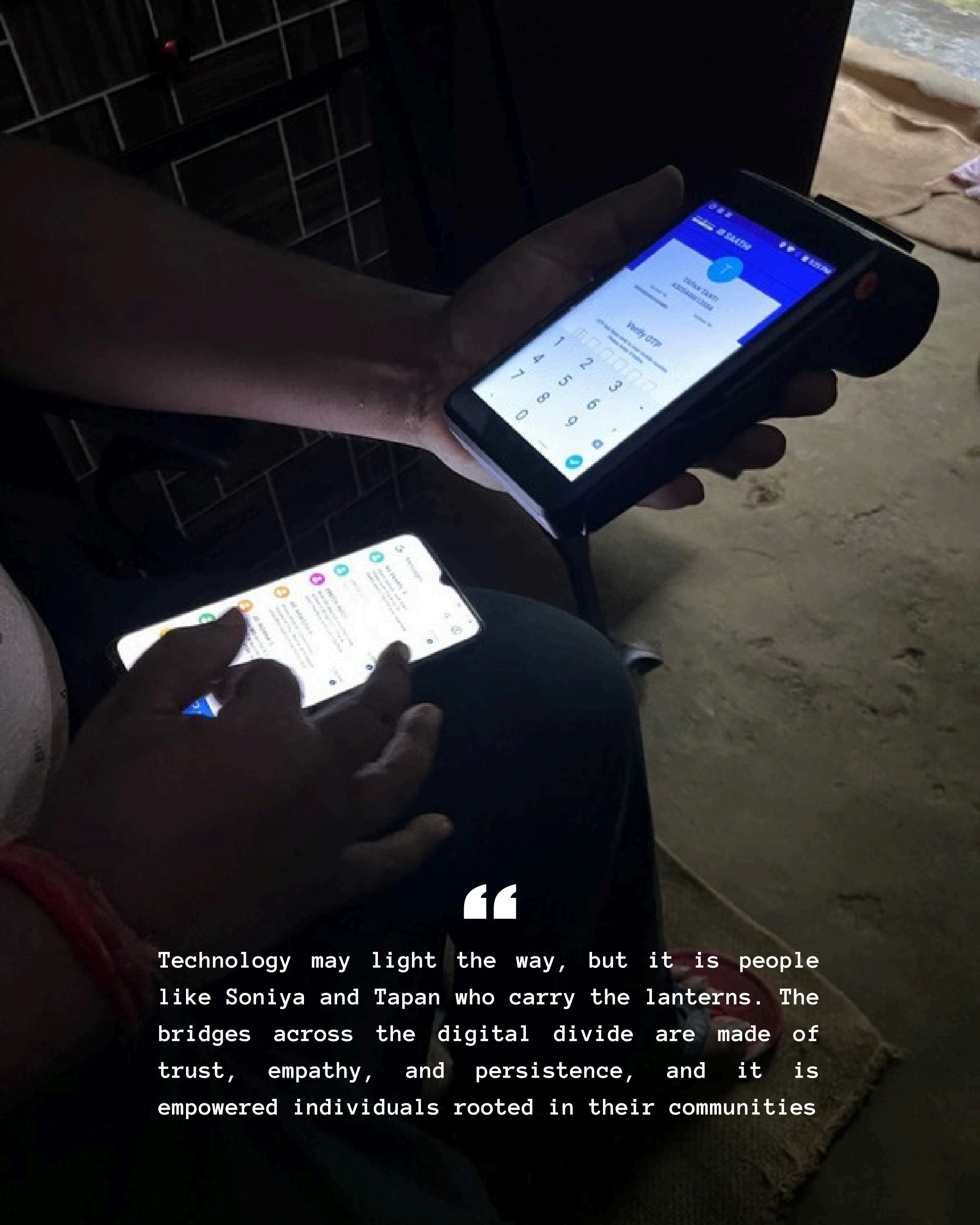
#TEAPLANTATIONS
#INDIGENEOUSCOMMUNITIES
#COMMUNITYNETWORKS
#CONNECTINGTRIBALS

Deep digital divide and persistent poverty exist side-by-side **in Assam's tea plantations, where nearly seven million Adivasi men and women labor as daily wage workers**. Ignored by internet service providers, these tribal communities live with weak connectivity and some of the country's lowest smartphone ownership (under 20%). **Tea plantation workers in Upper Assam earn less than three dollars a day, which puts data plans beyond their reach.**

Many plantation workers have still to obtained Aadhaar (government-issued biometric identification) cards, have yet to open bank accounts, and are unaware of e-government platforms for development schemes, leaving them unable to benefit from India's digital government programs and progress.

Traveling in Upper Assam, I saw how committed community leaders and activists are driving meaningful change.

Soniya Tanti, Johar District Secretary of All Aadivasi Women of Assam is a staunch ally of the rights of the plantation workers -- a trusted advocate who helps connect tea plantation communities with civil society organizations, rights based organizations, and banking opportunities. Soniya knows the tea plantation communities well and recommended Tapan Tanti to the Digital Empowerment Foundation for its SoochnaPreneur (information entrepreneur) program.



“

Technology may light the way, but it is people like Soniya and Tapan who carry the lanterns. The bridges across the digital divide are made of trust, empathy, and persistence, and it is empowered individuals rooted in their communities

Many plantation workers have still to obtained Aadhaar (government-issued biometric identification) cards, have yet to open bank accounts, and are unaware of e-government platforms for development schemes, leaving them unable to benefit from India's digital government programs and progress.



Tapan Tanti now is the SoochnaPreneur at Tyroon Tea Estate, providing digital information services from his one-room office in Titabor, Jorhat. Tapan began with basic equipment: a laptop, printer, a lamination machine and a biometric scanner to help plantation workers with their IDs and benefits. He later added a micro ATM. His services now include:

- Correcting Aadhaar digital ID errors, which allows plantation workers to access e-government services.
- Assisting plantation workers to open bank accounts, reducing wage theft.
- Acting as a micro-ATM, or a community banking access point, saving workers long trips to far away banks.
- Connecting the next generation to scholarships via government portals like SIRISH. (Just this year, he helped 25 students apply for scholarships.)

There are 220 such community information access centers across Assam, including 95 now in the tea plantations. These centers are critical in connecting communities to e-government platforms, e-banking and digital financial services, and critical information literacy programs — all through trust-building and meaningful connectivity.

Technology may light the way, but it is people like Soniya and Tapan who carry the lanterns. The bridges across the digital divide are made of trust, empathy, and persistence, and it is empowered individuals rooted in their communities (not devices or apps) that determine how technology becomes a tool of transformation, and not just a privilege a few enjoy.

SHIFTING THE APPROACH: FROM LIVELIHOOD TO ENTREPRENEURSHIP

Start

#24YEARSOFDIGITALHOPE

GUWAHATI
ASSAM
INDIA

#SOOCHNAPRENEURS
#UDYAMINI
#BUSINESSMITRA
#RURALENTREPRENEURSHIP

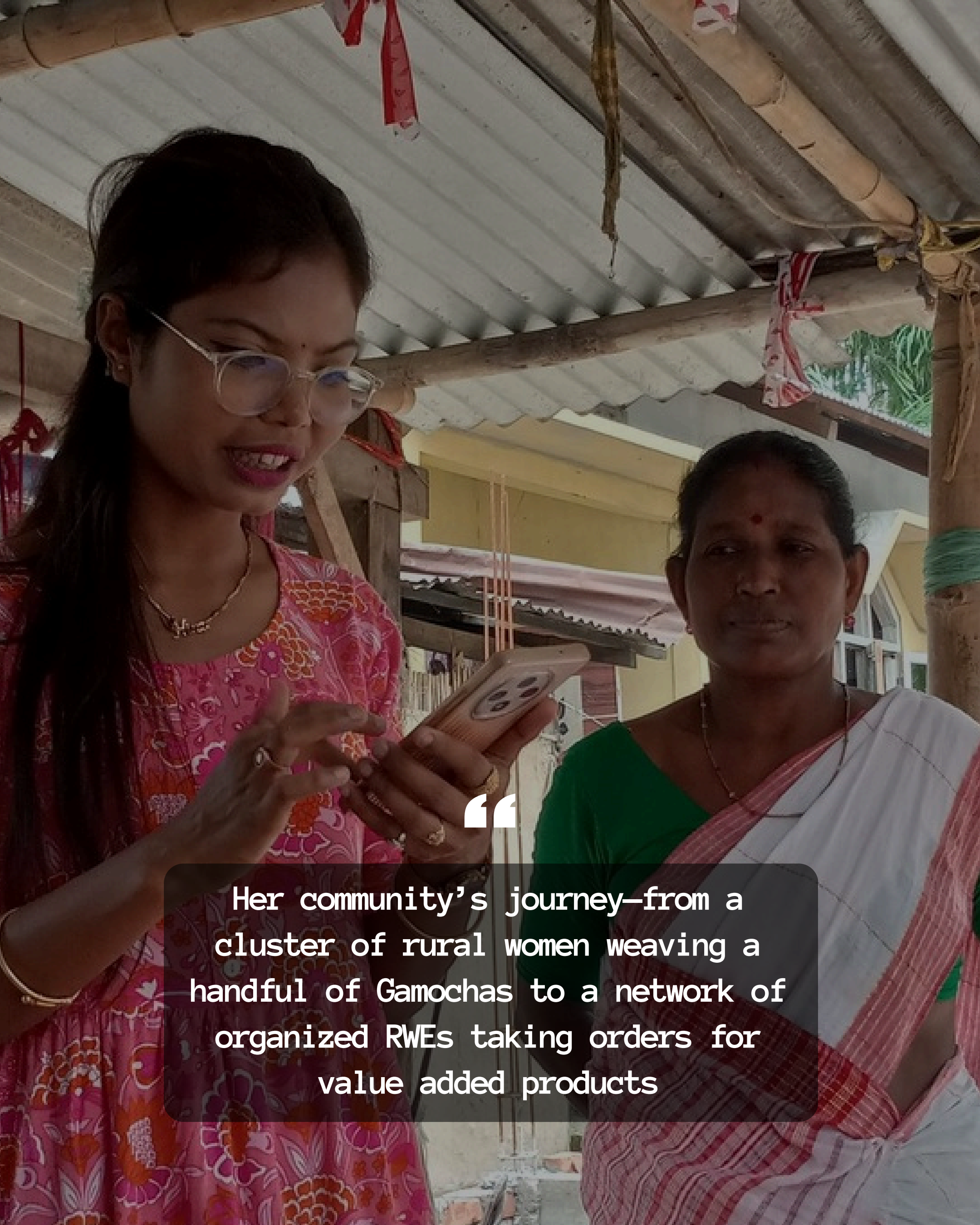
Traditional economic development programs targeting women in the Global South rarely move beyond offering alternative livelihood opportunities. These initiatives expect women to increase their income by raising more goats and cows, growing bigger harvests, or weaving extra scarves and carpets.

Yet, these efforts quickly hit a wall. Deep-rooted barriers—rigid social norms, inadequate technical knowledge, limited access to finance, and closed-off markets—continue to hold women back. **And now, as India surges digitally ahead, women without digital access and skills face growing exclusion.** These barriers don't just limit individual progress; they create a cascading effect, systematically shutting entire communities out of economic opportunity.

In Guwahati, Assam, I met Hiramoni Das, a SoochnaPreneur Business Mitra (SBM) and a business enabler for small and medium enterprises. Her experiences and insights show how a digitally-savvy business enabler, living within (and respected by) her community can systematically break down the barriers that hold women back.

Hiramoni supports over a hundred Rural Women Entrepreneurs (RWEs) by:

- Assisting with craft and business license online applications
- Helping open bank accounts and teaching online banking
- Setting up Facebook business pages



“

Her community’s journey—from a cluster of rural women weaving a handful of Gamochas to a network of organized RWEs taking orders for value added products

- Creating WhatsApp support groups for peer support and advice
- Training RWEs in accounting systems using simple apps like MeraBill
- Connecting RWEs to state and federal SME opportunities
- Negotiating with businesses seeking to connect directly with producers
- Guiding RWEs through loan applications
- Identifying and organizing targeted training for various value chains

Across Assam and West Bengal, some two hundred SBMs like Hiramoni support a network of more than 20,000 RWEs working in handloom, handicrafts, food processing, dairy, livestock, and tea. These SBMs are local business enablers and digital facilitators, helping women build sustainable businesses from the ground up.

Now also a member of the Gram Panchayat (she was recently elected by her community), Hiramoni can advocate for her RWEs with even greater impact. **Her community's journey—from a cluster of rural women weaving a handful of Gamochas to a network of organized RWEs taking orders for value added products** (such as cushion covers, table runners, bed covers, etc.) and running thriving enterprises—mirrors her own transformation from a social worker to community leader.

Together, they are a powerful story of how a digitally savvy business enabler bridge the digital divide by helping women network, connect, and succeed, even in the most remote corners.

WOMEN AS GATEKEEPERS AND GATEWAYS

Start

#24YEARSOFDIGITALHOPE

SUPUR VILLAGE
WEST BENGAL
INDIA

#SOOCHNAPRENEUR
#RURALWOMENENTREPRENEURS
#FINANCIALINCLUSION
#DIGITALSKILLING

As I sit among women from the Kasba Sangha Mahila Self Help Group Cooperative Society in West Bengal, I ask **what single factor shapes a woman's entrepreneurial journey.**

"Family support," they answer in unison.

Not community, I press.

"Community rarely helps," explains Jharbe Mete, a senior member of the cooperative. "They're quick to question why a woman is spending so much time outside her home. They obstruct the path, at least initially."

Any advice, I ask.

"You need your family in your corner. When your husband and your mother-in-law stand by you, no one else can stop you. Let the critics and the questioners tag along to Sonagadi Haat. A day hawking goods in the heat, and their opinions will melt away."

Nods. Laughter follows.

In West Bengal, **where men control resources and decisions, supportive husbands can ignite or extinguish women's entrepreneurial aspirations.** Within Bengali families, mothers-in-law hold considerable sway over family's decisions. So when husbands champion their wives, and mothers-in-law step in to help with household chores, childcare, and encouragement, they lay the foundation for a daughter-in-law's success.



“

When mothers-in-law and husbands become gateways rather than gatekeepers, amplifying women's entrepreneurial aspirations and digital access, they dismantle invisible barriers

This support becomes even more crucial when confronting the digital divide. Less than 15% of rural West Bengal women use the internet, creating "multiple layers of disadvantage" that further compound existing barriers and leave women behind.

Jinnatunessa Khatun (Jinnu), a SoochnaPreneur Business Mitra (digital business enabler) in Supur Village, embodies this transformation when family support and digital access align. **With her family's backing, she empowers 120 Rural Women Entrepreneurs (RWEs), enabling them to apply for online banking and digital payments, as well as for digital applications and trade licenses**. She has even set up a pop-up store (Palash Avoran Kantha Products Boutique) at her center to showcase silk sarees, dupattas, bags, and notebooks produced by her RWEs.

Her husband Sofikul Sekh, who works for West Bengal Grameen Bank, helps her navigate e-gov platforms and online banking. "A supportive husband is like having a dedicated business mentor at home," Jinnu says. With his support, she has helped 40 community members secure bank loans and 20 obtain Kisan Credit Cards.

When mothers-in-law and husbands become gateways rather than gatekeepers, amplifying women's entrepreneurial aspirations and digital access, they dismantle invisible barriers that have systematically obstructed women's economic participation and society's progress.



“

With her family's backing, she empowers 120 Rural Women Entrepreneurs (RWEs), enabling them to apply for online banking and digital payments, as well as for digital applications and trade licenses.

Jinnatunessa Khatun (Jinnu), a SoochnaPreneur Business Mitra (digital business enabler) in Supur Village, embodies this transformation when family support and digital access align. With her family's backing, she empowers 120 Rural Women Entrepreneurs (RWEs), enabling them to apply for online banking and digital payments, as well as for digital applications and trade licenses. She has even set up a pop-up store (Palash Avoran Kantha Products Boutique) at her center to showcase silk sarees, dupattas, bags, and notebooks produced by her RWEs.

WHEN HASHTAG MEETS HERITAGE

Start

#24YEARSOFDIGITALHOPE

ISLAMPUR
WEST BENGAL
INDIA

#SOOCHNAPRENEUR
#RURALWOMENENTREPRENEURS
#FINANCIALINCLUSION
#DIGITALSKILLING

On the balcony of a building facing the road to Pattamadai in Tamil Nadu, four Pattupai artisans gathered at midday to meet Digital Empowerment Foundation's Cluster Coordinator Vinoda Sin to learn how to use AI.

A mostly Muslim village **along river Thamirabarani, Pattamadai has been home to generations of women weaving Pattupai mats crafted from locally harvested korai grass.**

The grass is carefully processed: soaked, pith removed, split into fine strands, and dyed before being woven into intricate patterns. Each humble floor loom demands precision and coordination: nimble fingers manipulate the warp threads, long needles pass korai weft through the shed, and swift feet operate the loom's mechanism, backs arcing over ornate patterns that can take weeks, even months, to complete. The mats' meticulous craftsmanship has earned the artisans a GI tag, and embody craftsmanship passed down like whispers from mother to daughter.

The artisans—Muhaideen Meena, Mydeen Meena, Segu Fatima, and Aminal—had never used AI prompts, yet they quickly adapt. The session started by scrolling phone galleries for a photo of a mat leaning against a cluttered wall. Within seconds, AI reimagined the mat as a wall hanging framed by brass lamps and cushions, then as a runner on a minimalist dinner table. Each transformation placed their craft into settings the weavers had never seen.



The challenge is bridging the gaps between hashtags and heritage, ensuring future generations value and sustain traditional skills that define regions like Islampur.



“

AI reimagined the mat as a wall hanging framed by brass lamps and cushions, then as a runner on a minimalist dinner table.

While intricately woven silk sarees can be found in specialty shops and state exhibitions, now they're also finding new life online. The younger generation (children of weavers who once avoided acquiring skills), have begun marketing their families' work on social media, modeling and promoting handwoven sarees on Instagram and Facebook.

In digital marketing sessions, Priyanka finds mothers send daughters to attend in their place. Inspired by social media influencers, daughters are eager to learn. Priyanka seizes these opportunities, **training young RWEs to leverage online platforms: to market the sarees online, connect directly with buyers, and secure higher margins through videos, photos and storytelling to showcase collections.**

This partnership may herald a new beginning. With tech-savvy youth supporting them, older artisans may reach audiences that value authenticity and heritage. With time, these young influencers, themselves, might move beyond content creation and into craft creation sphere. And with time, daughters who once modeled their mothers' sarees online may pick up the loom, becoming the next generation of master artisans.

The tools—social platforms, global markets, and rising demand for artisanal products—are in place. **The challenge is bridging the gaps between hashtags and heritage, ensuring future generations value and sustain traditional skills that define regions like Islampur.**

defindia.org

FIBER OF THE FUTURE

Start

#24YEARSOFDIGITALHOPE

WEST BENGAL

#SOOCHNAPRENEUR

#RURALWOMENENTREPRENEURS

#FINANCIALINCLUSION

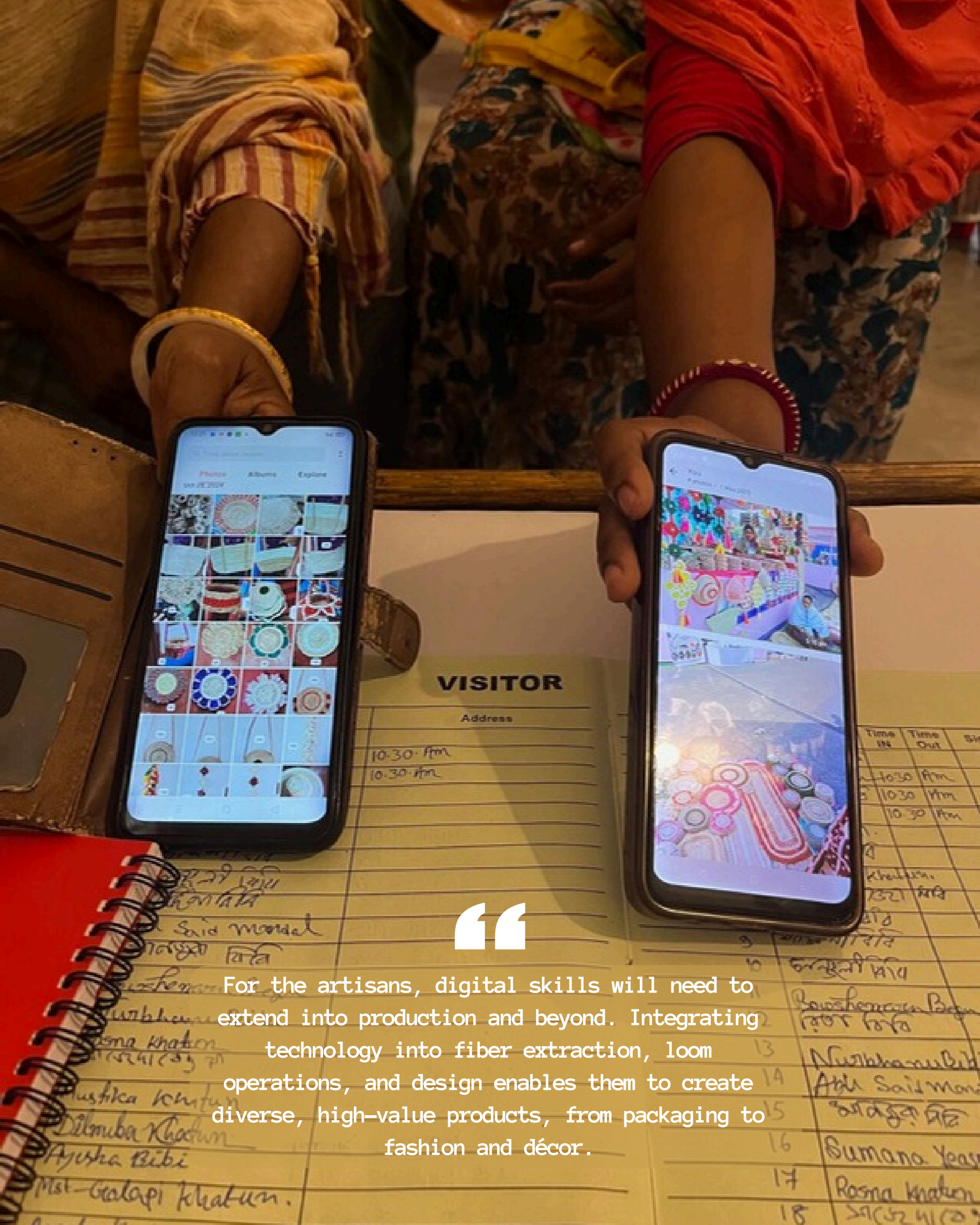
#DIGITALSKILLING

For artisans like Kohinoor Khatoon, becoming a digital entrepreneur – acquiring trade licenses, navigating e-government platforms, securing loans, marketing online, and accepting digital payments – is a milestone, not the journey's end. While digital access is opening doors in the villages of West Bengal, it is also surfacing persistent barriers, shifting the challenge from connectivity to competitiveness.

Global demand for jute bags dropped 30% last year even as plastics flooded India, polluting waterways, cities and villages, harming wildlife and popping up as microplastics in food. Despite rising global interest in sustainable products, most jute items remain basic sacks and bags.

Jute artisans (rural women entrepreneurs who hand-make jute bags) face challenges beyond cheap synthetics. For the jute artisan to be competitive it requires reimagining jute fiber itself, not just as a plant used to make traditional handicrafts items, but as a quality base for beautifully designed, functional accessories.

This may involve rethinking design, adopting advanced treatments for softer thread, and applying modern finishing to enhance form and function. Only then might just be able to compete with synthetic products and keep its eco-friendly edge. Artisans also need to embrace circular economy principles: -- designing for durability, repair, and reuse, while repurposing waste -- to unlock the fiber's potential and position Bengal's jute as a sustainable alternative to single-use plastics.



“For the artisans, digital skills will need to extend into production and beyond. Integrating technology into fiber extraction, loom operations, and design enables them to create diverse, high-value products, from packaging to fashion and décor.

For artisans like Kohinoor Khatoon, becoming a digital entrepreneur — acquiring trade licenses, navigating e-government platforms, securing loans, marketing online, and accepting digital payments — is a milestone, not the journey's end. While digital access is opening doors in the villages of West Bengal, it is also surfacing persistent barriers, shifting the challenge from connectivity to competitiveness.



Modern consumers seek authenticity, innovation, usability, and style. They want artfully woven products for fashion-forward accessories and décor. Even as every product needs to meet benchmarks for aesthetics, creativity, and durability, they also need to undergo rigorous quality control and adherence to international standards.

For the artisans, digital skills will need to extend into production and beyond. Integrating technology into fiber extraction, loom operations, and design enables them to create diverse, high-value products, from packaging to fashion and décor. As they seek bigger international markets, they will need help navigating trade standards, certifications, and export logistics. Building an integrated ecosystem requires artisans to work with technologists, designers, and market experts.

Artisans need to learn to communicate complexity. Beyond anecdotes about product origins and heritage, storytellers will need to articulate concepts such as environmental stewardship and circular economy.

While digital adoption is the start of an entrepreneur's journey; innovation in design, and excellence in quality can ensure Bengal’s bags thrive globally, embracing the future, while keeping tradition alive.

defindia.org

AI, MEET ARTISANS

Start

#24YEARSOFDIGITALHOPE

PATTAMADAI
TAMIL NADU
INDIA

#GILOCATIONS
#DIGITALCLUSTERS
#WOMENENTREPRENEURS
#DIGITALSKILLING

On the balcony of a building facing the road to Pattamadai in Tamil Nadu, four Pattupai artisans gathered at midday to meet Digital Empowerment Foundation's Cluster Coordinator Vinoda Sin to learn how to use AI.

A mostly Muslim village along river Thamirabarani, **Pattamadai has been home to generations of women weaving Pattupai mats crafted from locally harvested korai grass.** The grass is carefully processed: soaked, pith removed, split into fine strands, and dyed before being woven into intricate patterns. Each humble floor loom demands precision and coordination: nimble fingers manipulate the warp threads, long needles pass korai weft through the shed, and swift feet operate the loom's mechanism, backs arcing over ornate patterns that can take weeks, even months, to complete. The mats' meticulous craftsmanship has earned the artisans a GI tag, and embody craftsmanship passed down like whispers from mother to daughter.

The artisans— Muhaideen Meena, Mydeen Meena, Segu Fatima, and Aminal— had never used AI prompts, yet they quickly adapt. The session started by scrolling phone galleries for a photo of a mat leaning against a cluttered wall. **Within seconds, AI reimagined the mat as a wall hanging framed by brass lamps and cushions, then as a runner on a minimalist dinner table.** Each transformation placed their craft into settings the weavers had never seen.


Looms will stay; and patterns will endure.
But props and backgrounds, and with them
these women’s futures, may change.

A mostly Muslim village along river Thamirabarani, Pattamadai has been home to generations of women weaving Pattupai mats crafted from locally harvested korai grass. The grass is carefully processed: soaked, pith removed, split into fine strands, and dyed before being woven into intricate patterns. Each humble floor loom demands precision and coordination: nimble fingers manipulate the warp threads, long needles pass korai weft through the shed, and swift feet operate the loom's mechanism, backs arcing over ornate patterns that can take weeks, even months, to complete. The mats' meticulous craftsmanship has earned the artisans a hashtag#GI tag, and embody craftsmanship passed down like whispers from mother to daughter.


2:54
ercontent.com

Mydeen Meera's eyes widened at the possibilities: centuries of tradition meeting an unlimited digital canvas. **For these rural entrepreneurs unable to afford high end photographers and staging at glamorous locations, AI-generated backdrops allowed them to test aesthetics—from Bollywood-chic to ultra-modern sleek—for the price of a data plan.**

Vinoda explained Instagram's algorithm rewards novelty: high-quality images keep feeds fresh; varied backgrounds offer possibilities to buyers, and carousels can document the journey—from korai fields to finished mats in upscale Mumbai or Manhattan lofts.

Initially I'd wondered if introducing AI would feel like stringing neon lights across an ancient heritage site. Yet diamond lattices echoing Islamic geometry remain human code, memorized by kerosene light long before WiFi arrived. Technology doesn't weave these mats, but for the artisans, it certainly widens the stage.

As the session wrapped up, Muhaideen Meera tried one last prompt: Make office woman in red saree carry laptop sleeve. Up popped a poised professional carrying her laptop.

Eyes sparkled as the artisans saw their work not just as static artifacts, but as lifestyle products for markets beyond Tirunelveli.

I left Pattamadai with a table runner and an observation: cutting-edge technology, offered respectfully, can extend tradition across continents. **Looms will stay; and patterns will endure. But props and backgrounds, and with them these women's futures, may change.**

defindia.org

TAG-TEAMING TECH IN THE TERRACES

Start

#24YEARSOFDIGITALHOPE

OOTY
NILGIRIS
TAMIL NADU
INDIA

#GILOCATIONS
#DIGITALCLUSTERS
#WOMENENTREPRENEURS
#DIGITALSKILLING

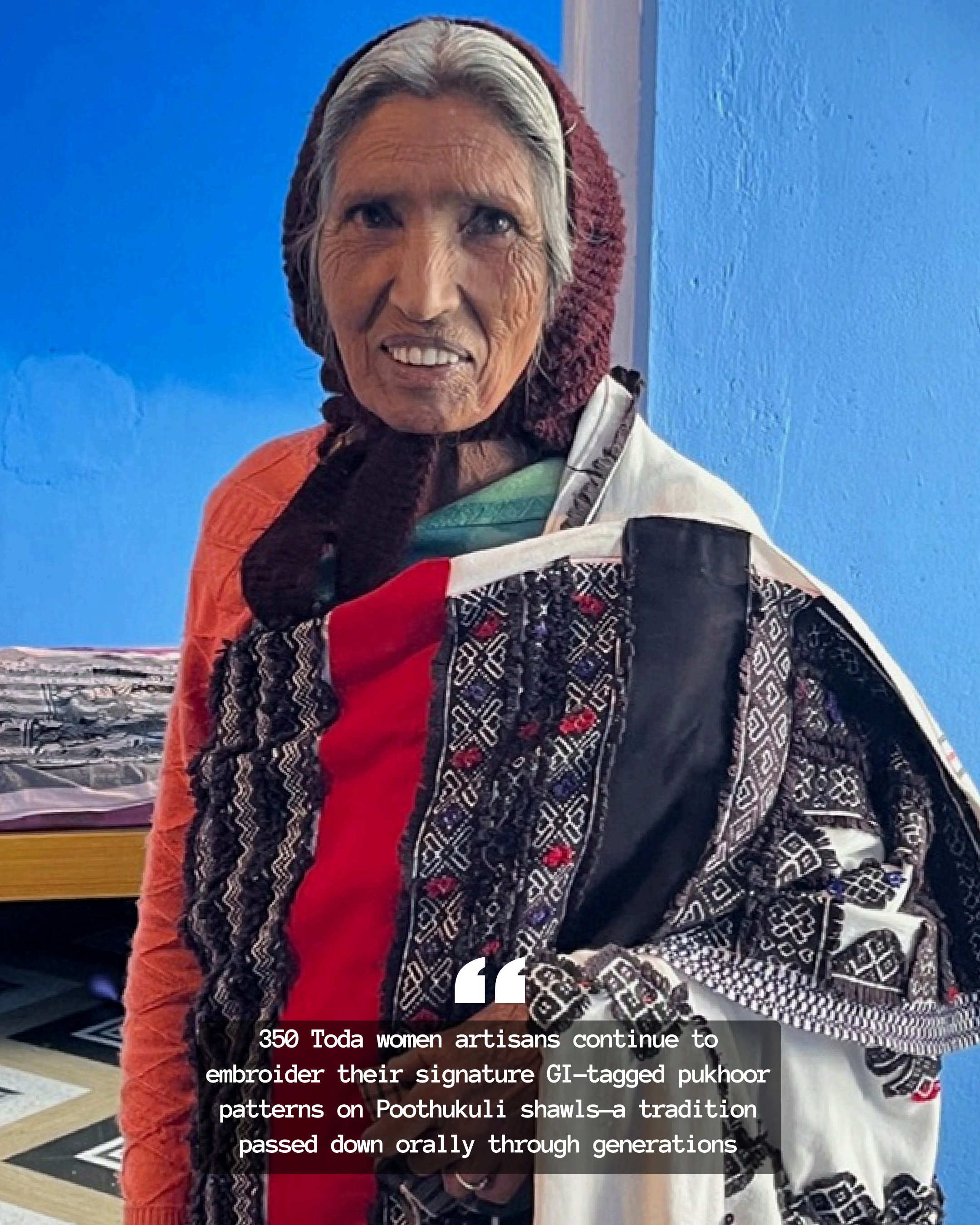
In the mist-draped Nilgiri Hills, where terraced tea plantations descend steep slopes, the indigenous Toda people have preserved their pastoral way of life for centuries. Scattered across 62 Munds (settlements), some 350 Toda women artisans continue to embroider their signature GI-tagged pukhoor patterns on Poothukuli shawls—a tradition passed down orally through generations.

But this cultural seclusion—fortified by jagged escarpments, dense Shola forests, and miles from the nearest roads and cell towers—also isolates the 1500 or so Toda community members from the digital world, so essential for thriving in modern India.

The Digital Empowerment Foundation confronted this paradox when they enlisted Sajiya Sin to be their first SoochnaPreneur in the Nilgiri Hills. Nestled between three other Toda hamlets and the Glenmorgan Tea Estate, the Tharnadu Mund village offered a strategic location for providing much-needed e-services to the Toda community and the tea plantation workers. However, the mountainous terrain scrambled the signals, making connections frustratingly unstable.

Unable to connect to e-government and e-banking services, Sajiya struggled to sustain a digital services center in Tharnadu Mund!

This left the region digitally stranded!



“

350 Toda women artisans continue to embroider their signature GI-tagged pukhoor patterns on Poothukuli shawls—a tradition passed down orally through generations

In the mist-draped Nilgiri Hills, where terraced tea plantations descend steep slopes, the indigenous Toda people have preserved their pastoral way of life for centuries. Scattered across 62 Munds (settlements), some 350 Toda women artisans continue to embroider their signature GI-tagged pukhoor patterns on Poothukuli shawls—a tradition passed down orally through generations.

Not for long, however. An alternative solution emerged, not as a technical fix to resolve connection issues, but through human ingenuity that worked within connectivity limitations.

Enter twenty one year-old Abita Sin, a new mother living in Tharnadu Mund! Within weeks, she took on tasks that needed in-person action—photocopying, filling out forms, and gathering materials that demand physical contact. **She runs the Instagram account "thread_of_toda" to spotlight younger Toda artisans and sell their work online.** When the tourism season starts in the Fall, Abita plans to run a visitors' center with an embroidery pop-up corner, and a café for tourists curious about the Toda way-of-life.

Meanwhile, Sajiya launched Shaloom Net World digital center in Finger Post, near Ooty. She draws on her experience in microfinance at Ujjivan Small Finance Bank, along with her recently acquired digital skills, to process online applications requiring reliable internet—such as ration cards, Aadhaar updates, loan requests and passport applications—linking the Nilgiri Hills to India's complex e-governance network.

Once a week, Sajiya and Abita meet at Tharnadu Mund to coordinate service delivery and support tasks. Together they tag-team to bridge the digital divide, connecting the Toda tribes and the tea plantation workers to government e-services, federal and state benefits, and markets beyond Nilgiri Hills.

Their alliance shows that sometimes the solution lies in the partnership itself—because it takes two to navigate tradition, technology, and the terraces!



ROOM, ROOT AND REACH

Start

#24YEARSOFDIGITALHOPE

SIHAWALI
BHARATPUR
RAJASTHAN
INDIA

#SMARTVILLAGE
#DIGITALVILLAGE
#WOMENENTREPRENEURSHIP
#CONNECTINGNETWORKS

Posture straight, eyes steady, 28-year-old **Ataiya Banu sat at the podium of Triple IT Hyderabad, bridging two worlds—her own village of Sihawali in Rajasthan's cracked ochre belt, and the one before her in the soft-lit hall of the Gender and Inclusion Conference, where academics, researchers, techies, and policymakers had gathered.**

She had traveled 700 miles to Tilangana with no slides, no polished script. She spoke of Sihawali's lone hospital, five miles from the village, yet a universe apart: journeys begun in the brittle hope of erratic buses, hours yielded to crowded waiting rooms, and that familiar disappointment of not meeting a female doctor at appointed time.

Some 700 miles from Sihawali, her voice carried the quiet force of one who has coaxed neighbors to look at hazy screens, towards moments of digital trust. She described how with eSanjeevani and DocOnline telehealth platforms, a laptop transformed into a lifeline. She registered women who could barely write, coached them through blinking log-ins, and translated symptoms shielded by shyness into words distant doctors could decode.

In Sihawali, the body's lower half is territory unspoken: menstrual cramps, untreated UTIs, the ongoing burdens of reproductive health. But with Ataiya beside them, and a female doctor's face flickering onto the laptop, the hush broke. Reticence gave way, silence splintered and trust quietly took root. She spoke of how she would repeat a diagnosis until each woman left seen, and truly heard.

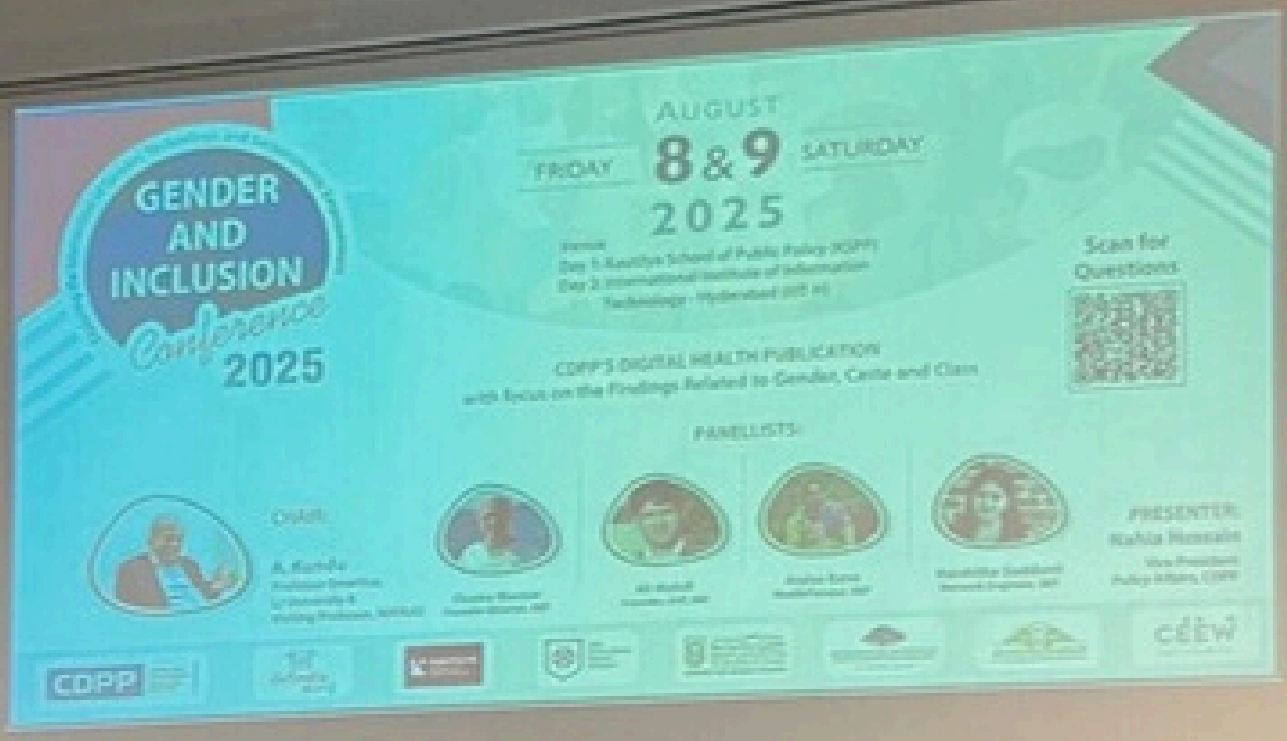
Technology, she told the room, could be a bridge. But only when someone you trust is there to walk you across!

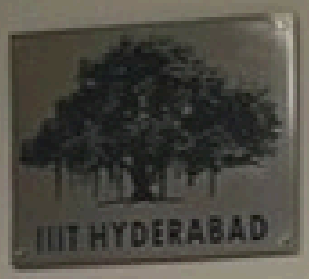


“

I will organize a community health meeting. Run a health camp for teenage girls and I must practice more English…to understand more quick, and to tell our story.

Some 700 miles from Sihawali, her voice carried the quiet force of one who has coaxed neighbors to look at hazy screens, towards moments of digital trust. She described how with eSanjeevani and DocOnline telehealth platforms, a laptop transformed into a lifeline. She registered women who could barely write, coached them through blinking log-ins, and translated symptoms shielded by shyness into words distant doctors could decode.


GENDER AND INCLUSION Conference 2025
AUGUST
FRIDAY 8&9 SATURDAY
2025
Scan for Questions
CDPP'S DIGITAL HEALTH PUBLICATION
with focus on the Findings Related to Gender, Caste and Class
PANELISTS:
CHAIR:
PRESENTER:
CDPP
CEEW


IIIT HYDERABAD


ng the Intersection
der, Technology,
cioeconomic
vernment
GENDE
AND
INCLUS
Confe
2025
AUGUST
8&9
2025

Later, during coffee break, I watched Ataiya pace the corridors, phone in hand, and asked her what she would take back. She was capturing images of conference posters, tables stacked with research and policy briefs, and faces mid-argument or lit with shared mirth.

"It looks difficult for women everywhere," she said. "Not just my village." She showed me pictures of slides from sessions she'd attended on the gendered impacts of digital tech, fragments she would carry home as evidence. Her plans took shape as we spoke. "I will organize a community health meeting. Run a health camp for teenage girls." And finally: "And me, I must practice more English…to understand more quick, and to tell our story."

The conference gained roots: stories that anchored slides to textures of pain, drug availability, patient hesitation, and algorithmic bias.

Ataiya discovered reach: her horizon widened, her work reframed within a larger, more intricate map of global health.

And the humming, sprawling architectures of e-health? They idle, awaiting programming that can navigate a crowded, code-strewn path—so people are more than user personas in design workflows or data points in interface mockups; they are THE very core for which the algorithms are to be optimized.

FROM DISABILITY TO DIGITAL ABILITY

Start

#24YEARSOFDIGITALHOPE

AMBEDKAR SOCIETY HALL
NARAYANKHED
TELANGANA

#PEOPLEWITHDISABILITY
#SAMARTHSOOCHNAPRENEUR
#RESILIENCE
#DIGITALINCLUSION

When Padma Jeripothula joined the Digital Empowerment Foundation in Telangana in early 2025, her brief was simple: recruit 100 people with disability as SoochnaPreneurs this year!

Street-smart and socially wired, Padma knew not to rely on open calls; the richest leads lived in the tangled canopy of her network. She began with WhatsApp: pinging contacts, posting in groups, and coaxing replies from community leaders. She walked into self-help group meetings, drifting through weddings and events to map Telangana's 33 districts, and to spread word to the hashtag#PWD.

On paper, DEF's intake is simple: register, answer multiple-choice questions, then appear for an interview, in-person or over a video call.

I sat in on one such interview at the Ambedkar Society in Narayankhed, a few hours from Hyderabad. **Padma's questions got straight to DEF's true metric: grit over grades, empathy over degrees, resilience over credentials.** Could the applicant navigate the labyrinth of government forms without surrender? Draw meaning from letters clogged with official jargon? Adapt when the connection froze or printer coughed mid-page?

The field visit would be next. **She would travel beyond paddy fields and painted shrines to stand where a digital node might one day sit. Can it survive the monsoon? Is there reliable power? Strong WiFi? An accessible space to wait for service? Does the future SoochnaPreneur have family support? And the goodwill of the village?**

One afternoon, I followed her to meet recruits who had passed all three tests.


“
They reminded me that a digital society’s spine is sheer human will: people who will turn a laptop into a lifeline delivering entitlement, opportunity, and dignity.

Suvarna Pokala waited in her office in Uppal, her disability-adapted scooty parked outside. For years she had run a copy shop; recently she added digital services. Between helping a retiree claim a pension, and guiding a woman through an Aadhaar correction, she worked with measured precision, competence stitched through a life hemmed in by the quiet cruelties of an able-bodied world.

In Boramcha, Mohammad Aabdul Sami welcomed us into his one-room kiosk. **Laminated rate posters covered freshly painted walls, a desk angled to accommodate his gait and his crutches.** He spoke with the calm pride of someone anchoring his community, and standing steady in a changing world.

Chandrakala Gauri had just unboxed her printer, laminator, laptop, and biometric reader. She and her husband (also a PWD) survive on less than US$ 100 a month in welfare. Her face lit up as she spoke of teaching computer to children in her housing colony in Ramanthapur.

As dusk enveloped Telangana, I left behind the newly onboarded SoochnaPreneurs— no ordinary recruits but engineers of inclusion, people whose disabilities once had limited their worlds, now using their digital skills to help others. **They reminded me that a digital society's spine is sheer human will: people who will turn a laptop into a lifeline delivering entitlement, opportunity, and dignity.**

Chandrakala Gauri had just unboxed her printer, laminator, laptop, and biometric reader. She and her husband (also a PWD) survive on less than US$ 100 a month in welfare. Her face lit up as she spoke of teaching computer to children in her housing colony in Ramanthapur.



APS, BOTS AND BUREAUCRACIES

Start

#24YEARSOFDIGITALHOPE

NARAYANKHED
TELANGANA
INDIA

#PEOPLEWITHDISABILITY
#SAMARTHSOOCHNAPRENEUR
#RESILIENCE
#DIGITALINCLUSION

Electricity was out since early morning, leaving the air in Narayankhed, Telangana, heavy. Beams of sunlight slanted through barred windows of the Ambedkar Society hall, illuminating the faces of 12 people with ambulatory disabilities. Gleaming in half-light in their hands, they held their smartphones—portals to a world of possibilities.

This was no casual gathering. They were newly-onboarded SoochnaPreneurs, each with a story of persistence, learning to wield two digital tools developed by the Digital Empowerment Foundation.

MeraApp and Skillbot would transform them from mere information consumers into essential services providers, threading digital access into the fabric of their communities.

Trainers Padma Jeripothula and Satheesh Bunga moved patiently from chair to chair, bending low, voices steady as they guided fingers across glass screens, where icons opened into entire bureaucracies.

MeraApp looked straightforward enough on their Android phones. Inside it lay a catalogue of government welfare schemes—health, education, disability, livelihoods, finance, social security—indexed by state, searchable by theme, fortified with audio support and regional languages. Entering a villager's socioeconomic details could match them with entitlements. One tap retrieved a crop insurance form; another printed a status or ration card. And it worked even without a reliable internet connection, a quiet assurance in places where outages are part of the weather.



“

I was turned away everywhere. I was ready to give up. All I ever wanted is honorable work, and not be a burden. Now, I can help myself. And help others.

MeraApp looked straightforward enough on their Android phones. Inside it lay a catalogue of government welfare schemes—health, education, disability, livelihoods, finance, social security—indexed by state, searchable by theme, fortified with audio support and regional languages. Entering a villager's socioeconomic details could match them with entitlements. One tap retrieved a crop insurance form; another printed a status or ration card. And it worked even without a reliable internet connection, a quiet assurance in places where outages are part of the weather.



If MeraApp was the storehouse, Skillbot was the teacher. Housed on Telegram, the chatbot offered bite-sized lessons: quick videos, infographic-rich reading material, and audio instructions in local dialects on everything from digital literacy to running micro-enterprises. Through quizzes, discussion cards, and certificates, it mapped each user's progress. It could walk an applicant through ag-loans or explain a pension scheme step by step.

For many, its accessibility felt magical, replacing hesitation with confident swipes and taps. By mid-afternoon, the line between learning and doing had blurred. The smartphones had turned into portals.

An intentional organizational strategy, DEF envisions 300 plus SoochnaPreneur centers across Telangana's 33 districts by 2027, each run by a PWD whose new skills anchor them as their communities' lifelines.

For Avusali Venugopala Chari, a college graduate unemployed for seven years, the training was deeply personal. **"I was turned away everywhere. I was ready to give up," he said. "All I ever wanted is honorable work, and not be a burden. Now, I can help myself. And help others."**

By dusk, MeraApp was no longer just an icon; it was a gateway. It could turn into a dispatch center, a kiosk, and a knowledge hub. Skillbot, a novelty, had become a guide. And under Ambedkar's portrait, the power-less afternoon had given birth to something enduring: a powerful defiance of possibility.

DIGITAL ENTREPRENEURSHIP HIGHWAY

Start

#24YEARSOFDIGITALHOPE

DAR, UTTARAKHAND
KALU SARAI, DELHI
NUH, HARYANA

#EXPERIENCE
#LASTMILE
#TRAINING
#WOMENENTREPRENEURSHIP

I met Mahima Sonal again in Delhi, months after first meeting her in Nigalpani in Uttarakhand. She was one of six SoochnaPreneurs heading home after a week of travels through New Delhi, and the states of Haryana and Rajasthan.

Mahima's eyes held the spark of her journey. She said she felt charged as she watched fellow SoochnaPreneurs in Nuh and Alwar weaving technology into the rhythm of their villages, and learning what services drew crowds and how lessons might leap state, terrain and cultural boundaries.

Andragogy (the theory of how adults learn) fascinates me! What motivates adults to learn? How best do they learn? I see adapting, pivoting, and relearning by adults as acts of bold defiance. A study visit offers exposure to new ideas, and inspires innovation and accelerates skill building by turning abstract concepts into tangible, usable knowledge.

How does one bottle that spark--that eureka moment when you step outside your world and encounter out-of-box thinking--and bring it home?

I asked Mahima and her travel companions (Bhagirathi Tamta from Galati and Sangita Devi from Dar) to show me one photo in their phones that will continue to inspire them. Each offered an image of Poonam Bai from Alwar, Rajasthan. Recipient of the 2024 Woman Entrepreneur of the Year award from the Digital Empowerment Foundation, she had mastered something Mahima hadn’t fully grasped: how to win and keep an entire community’s trust.



“

Silicon Valley innovation blooms in networks—ecosystems where ideas swap over coffee and iterate, and where warm introductions fuel collaborations. For Mahima and her group, this was a parallel—rural startup tour to spark enduring ideas.

Poonam hadn't just lingered behind a desk. **She mapped real needs and gaps, maintaining a live census of pension flows, eligibility for welfare schemes, and low-interest loans. She tracked buffalo deaths, water scarcity, and migrant labor cycles, searching for, and offering relief and opportunities.**

Mahima and her buddies learned two vital lessons from Poonam: that it is critical to map the land and rhythms of your community to build real trust; and digital entrepreneurship thrives on anticipation of needs--of changing seasons, heavy silences, and unspoken struggles.

Silicon Valley innovation blooms in networks--ecosystems where ideas swap over coffee and iterate, and where warm introductions fuel collaborations. For Mahima and her group, this was a parallel--rural startup tour to spark enduring ideas.

The conversations that evening were about transporting desert wisdom to mountain terraces. Mahima plans to map her community's needs: Which welfare schemes might community members be eligible for? How might climate patterns affect crops insurance needs? Might tourism spikes unlock homestay signups? Would migration patterns reveal opportunities?

Mountain terrains demand an approach different from deserts, but Mahima is determined to tap altitude, climate, and the intricate social fabric of her village into opportunities for digital innovation and resilience.

I asked Mahima and her travel companions (Bhagirathi Tamta from Galati and Sangita Devi from Dar) to show me one photo in their phones that will continue to inspire them. Each offered an image of Poonam Bai from Alwar, Rajasthan. Recipient of the 2024 Woman Entrepreneur of the Year award from the Digital Empowerment Foundation, she had mastered something Mahima hadn't fully grasped: how to win and keep an entire community's trust.



TECHNOLOGY, TRANSPARENCY AND TRUST!

Start

#24YEARSOFDIGITALHOPE

BAINSI
NUH
HARYANA
INDIA

#SOCIALENTREPRENEURSHIP
#DIGITALCONTEXT
#SOCIALSCIENCE
#HUMAN>DIGITAL

I could tell, even from the road, that Mustakeem’s SoochnaPreneur digital services center in Bainsi, Haryana's Nuh district, was thriving. A new customer-friendly building edged his property along the road, his new car was parked nearby, and behind it steadily climbed the walls of his new home.

In a district, where digital literacy rates remain abysmally low, and ICT companies non-existent, these signs mark more than business success; they stand as monuments to painstakingly-built trust.

When Mustakeem launched his center with Digital Empowerment Foundation's startup support in 2018, his village reflected rural India’s daily struggles with bureaucracy. He began delivering essential e-government services—Aadhaar cards, passports, PAN registration, pensions, and scholarships—and is helping convert Digital India's promises to its citizens into tangible lifelines.

Initially, frustration shadowed these promises: clogged forms, stalled pensions, and delayed transfers fueled suspicion that an unseen agent--often Mustakeem--was to blame.

Mustakeem introduced a simple fix: a second monitor that faced customers, mirroring every keystroke and form entry. Technology, often opaque and alienating, became transparent, as villagers watched their data move in real time, shifting suspicion to comprehension. And trust.

Mustakeem's WhatsApp group of 500+ villagers now extends this transparency. Official announcements are sifted, evaluated, and clarified. Rumors of new schemes or quick scams find a forum for verification or debunking. **“Government schemes” shed bureaucratic jargon to become real support; “fraudster scams” emerge from shadows into shared vigilance.**



> Devices and connectivity by themselves do not bridge digital divides. The key is transparency that invites scrutiny, fosters understanding, and empowers local intermediaries as gateways, gatekeepers, and trust-builders.

Today, fewer than a third of India's rural adults are digitally literate, and many struggle to navigate smartphones and complex portals. Schemes often fail to reach the last mile, stymied by bureaucracy, bandwidth, and bottlenecks, leaving rural Indians vulnerable to exclusion, disinformation, and flourishing scams.



Today, fewer than a third of India's rural adults are digitally literate, and many struggle to navigate smartphones and complex portals. Schemes often fail to reach the last mile, stymied by bureaucracy, bandwidth, and bottlenecks, leaving rural Indians vulnerable to exclusion, disinformation, and flourishing scams.

The stakes are high. But the results are also evident in Nuh.

Just the other day, a woman rushed to Mustakeem with a link, hoping to quickly turn IRs 3000, into Rs. 30,000. He patiently explained the it was a scam, shielding her savings from vanishing into a fraudster's account.

Such stories offer a vital lesson for India's digital shift: transparency forms the bedrock of trust, especially where literacy lags. And trust is cultivated through deliberate acts of disclosure and shared information, leveraging technology and transparency. This, in turn, converts skepticism into confident engagement with the digital State.

As I left Haryana, I felt gifted a digital trust blueprint: **Devices and connectivity by themselves do not bridge digital divides. The key is transparency that invites scrutiny, fosters understanding, and empowers local intermediaries as gateways, gatekeepers, and trust-builders.**

FUNDING FADES; COMMITMENTS CONTINUE

Start

#24YEARSOFDIGITALHOPE

TAIN
NUH
HARYANA

#CONNECTINGNETWORKS
#SMARTPUR
#SMARTVILLAGE
#DIGITALENTREPRENEURSHIP

A tall metal tower casts a shadow over Tain village in Haryana's Nuh district, where the Digital Empowerment Foundation's rural connectivity hub sits. **The Smartpur project (which raised the latticed frame here and in six other states) closed a year ago, funding spent, metrics tallied, and reports filed away.**

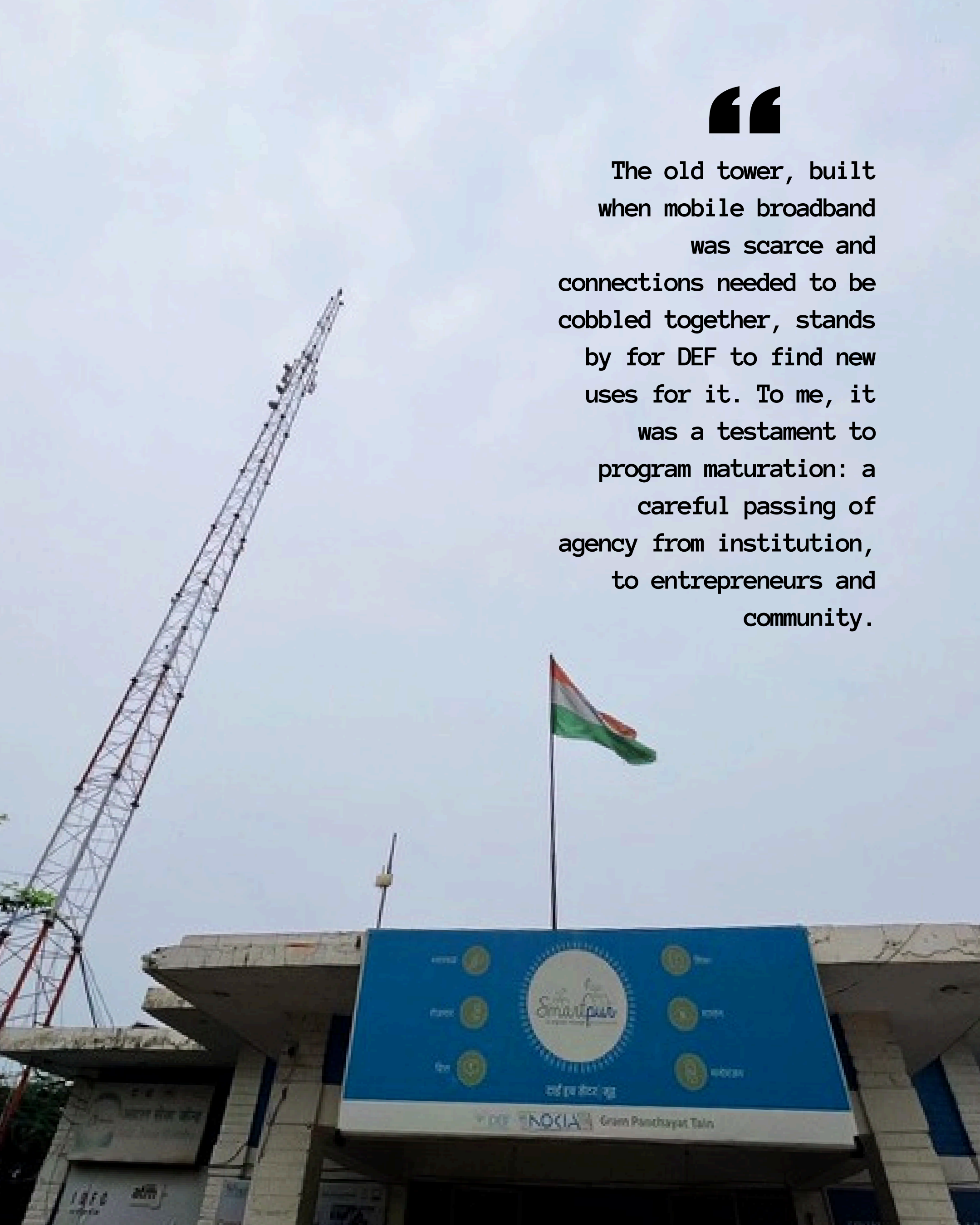
I traveled here from Delhi to see what had endured.

Haryana exists in a held breath--close enough to Delhi 's relentless sprawl, yet rooted in slow rhythms of rural agricultural life. **Smartpur took shape here in Nuh as an elegant tethering of villages through a hub-and-spokes design.**

At the center stood a hub, with computers, telemedicine booths, and a wireless tower to serve as digital backbone. From it radiated nine spokes--small centers in nearby villages, each within a three-mile radius--relaying internet connectivity and resources outward. Together, they made up "digitally equipped and information-rich communities."

The hubs anchored six domains: health, education, livelihood, governance, finance, and entertainment. From here, DEF employees delivered e-health consultations, digital upskilling classes, and information literacy workshops. It also housed a SoochnaPreneur center.

The spokes, run by SoochnaPreneurs, the patient bridges across rural digital divides, carried the vital last-mile work of bringing e-government schemes and digital services to community doorsteps. **Designed as self-sustaining micro-enterprises, the spokes outlasted donor support. When funding ceased, they bargained for better bandwidth from ISPs, troubleshot spotty connections and upped their outreach.** In Baisi village, Mustakeem's seven-year-old service center (that I wrote about last week), evolved into a trusted community institution. Slowly stewardship shifted from DEF to local entrepreneurs and the community itself.



> The old tower, built when mobile broadband was scarce and connections needed to be cobbled together, stands by for DEF to find new uses for it. To me, it was a testament to program maturation: a careful passing of agency from institution, to entrepreneurs and community.

Various hubs endure differently. DEF maintains the Nuh hub as a living lab, a testing ground for rural innovation. Digital upskilling curricula and information literacy kits sit on shelves; makerspace tools await on tables, laptops are lined up on the ready. A slim staff keeps the hub’s pulse steady and programs humming. This year, DEF's Coordinator Shahid Khan is running an AI workshops for Nuh’s youth and launching more soochnapreneur centers in the state.



Various hubs endure differently. DEF maintains the Nuh hub as a living lab, a testing ground for rural innovation. Digital upskilling curricula and information literacy kits sit on shelves; makerspace tools await on tables, laptops are lined up on the ready. A slim staff keeps the hub’s pulse steady and programs humming. This year, DEF's Coordinator Shahid Khan is running an AI workshops for Nuh’s youth and launching more soochnapreneur centers in the state.

This is no mere program extension, but a systematic evolution.

The old tower, built when mobile broadband was scarce and connections needed to be cobbled together, stands by for DEF to find new uses for it. To me, it was a testament to program maturation: a careful passing of agency from institution, to entrepreneurs and community.

Connectivity is magic in rural India. But empowerment requires much more: trust cultivated patiently; capacities grown over seasons; experiments that falter before rooting; and the recognition that digital inclusion is not just a project to complete, but a living, adapting, process to nurture.

RURAL DIGITAL INCLUSION TALENT HUNT

Start

#24YEARSOFDIGITALHOPE

ONLINE

DEF OFFICE

NEW DELHI

#SOOCHNAPRENEUR

#ENTREPRENEURSHIP

#RURALJOBS

From a quiet corner of his electrical goods shop in Odisha's Bargarh district, Dhubaleswar Bagarti logged into a Google Meet to persuade an interview panel that he embodied the spirit of a SoochnaPreneur--rural **entrepreneurs who unlock government schemes and bridge India's many digital divides.**

After meeting many soochnapreneurs across the country, I had joined a panel with Digital Empowerment Foundation's program managers Rachna Verma and Irfan Khan in Delhi, alongside District Coordinator Sunil Kumar Rana, who had dialed in from 1,200 train-miles away in Odisha.

I was specifically interested in recruitment; and the panel offered me a window into how these community change agents are onboarded.

DEF's recruitment process weaved through the jumble of rural India, with quuestions probeing Bagarti's entrepreneurial mindset, his commitment to community service, and his local stature.

Panel: Tell us about your plans to reach out to PWDs and other marginalized communities?
Bagarti: **I'll lean into my disability work and healthcare advocacy [through Anchalik Jana Kalyan Bhirnakhyam Sanghatan] to offer digital services.**

Bagarti met key DEF criteria: a person with disabilities, versed in basic digital skills, and already running a modest business in a village of 300. The absence of photocopy shops, and access to public internet revealed a gap that a budding entrepreneur could fill.



Launched in 2016, DEF programs now support some 2,200 SoochnaPreneurs in 26 states. District coordinators like Rana operate as frontline talent scouts, surfacing potential often missed by urban recruiters, while program managers ground the process with institutional insight and program breadth. Recruiting change agents like Bagarti—where community need meets opportunity—allows DEF to craft a replicable, last-mile model that outpaces government bureaucracy.

Post-call, the panel weighed his tech skills, his appetite for running a rural e-services center, and his chances of sustaining it. With a monthly income of around US$150, they judged him well-positioned to take up digital entrepreneurship as a viable livelihood.

Launched in 2016, DEF programs now support some 2,200 SoochnaPreneurs in 26 states. District coordinators like Rana operate as frontline talent scouts, surfacing potential often missed by urban recruiters, while program managers ground the process with institutional insight and program breadth. Recruiting change agents like Bagarti--where community need meets opportunity--allows DEF to craft a replicable, last-mile model that outpaces government bureaucracy.

The panel advanced Bagarti's application, triggering a field visit. Rana would visit Bagarti's village to see if his store could house a digital service center, whether the location was viable for business, and if indeed he had the social capital to succeed. This field visit would test the delicate balance of digital access, local politics, and the fragile economics that shape a rural social enterprise.

The Google Meet was more than a hiring step; it measured Bagarti's capacity to live DEF's mission--to empower rural India by harnessing digital tools for access to information. As India's rural economy shifts, each Bagarti becomes a vital node in its digital inclusion network, turning scarcity into sustenance and slowly reshaping the rural landscape.

DEF

www.defindia.org

Established in 2002, Digital Empowerment Foundation (DEF) aims to connect unreached and underserved communities of India in an effort to bring them out of digital darkness and equip them with access to information.

With the belief 'Inform, Communicate and Empower', DEF finds sustainable digital interventions to overcome information poverty in rural and remote locations of India, and empower communities with digital literacy, digital tools and [illegible] connectivity.

IMPACT THAT OUTLIVED THE PROJECT

Start

#24YEARSOFDIGITALHOPE

CHANDERI
MADHYA PRADESH
INDIA

#ARTISANEMPOWERMENT
#DIGITALCLUSTERS
#WOMENENTREPRENEURS
#DIGITALSKILLING

Can a digital development project's impact keep unfolding long after funding stops and implementers move on?

The question took me to Chanderi in Madhya Pradesh, where the Digital Empowerment Foundation once ran a project (2009–2012) that equipped saree weavers with digital skills, opening access to online markets and improving livelihood opportunities for artisans.

A centuries-old craft collided with emerging technology. Did the craft endure? Embrace technology?

Kalley Bhai, DEF's Chanderi point person, whose family has lived here for generations, recalls there were fewer than 3,500 handlooms before Covid-19.

Today Chanderi's lanes ring with the rhythm of 5,500 looms, marking silk's transformation into gossamer-light, translucent sarees--a striking 57 percent increase. Chanderi weavers, who once earned less than a dollar a day, now command up to 40, thanks to a new digital ecosystem the project created.

For generations, Chanderi's artisans worked in isolation: disconnected from customers and beholden to intermediaries who controlled raw materials, prices, payments, and sales, trapping weavers in dependence.

The key breakthrough arrived when designers learned JacDraw, software for jacquard weaving that converts digital designs into punch-card instructions for looms, says Kalley Bhai. Three master designers traveled to Mumbai for training, returned after three months, and trained nine others, reaching a hundred more. What took weeks to draft manually on graph paper compressed into a few hours on a screen.



“

Old and new seamlessly coexist in Chanderi today. Artisans still handweave sarees, but technology is amplifying centuries-old skills, granting weavers control over both craft and market

Old and new seamlessly coexist in Chanderi today. Artisans still handweave sarees, but technology is amplifying centuries-old skills, granting weavers control over both craft and market, says Mohammad Shadab Ansari, one of the first JacDraw trainees, sketching patterns for a client on his laptop.


KHIRID TOURISM

The ripples spread swiftly.

Weavers no longer waited weeks for patterns; customers' design requests got turned around in days. And Chanderi Weavers ICT Resource Centre was established as a design repository and training hub for weaving, embroidery, block printing, apparel design, photography, and social media.

The ultimate test arrived in 2020, when COVID-19 shuttered markets and silenced looms. Younger weavers, fluent in digital tools, took to Instagram and WhatsApp to showcase their family's work.

Orders kept flowing.

Development evaluators call this sustained and emerging impacts--unanticipated results arising from participants' own innovation and adaptation, long after the original project ends.

Old and new seamlessly coexist in Chanderi today. Artisans still handweave sarees, but technology is amplifying centuries-old skills, granting weavers control over both craft and market, says Mohammad Shadab Ansari, one of the first JacDraw trainees, sketching patterns for a client on his laptop.

Tech equipped Chanderi's artisans to rewrite power dynamics that kept them trapped for generations. Today the centuries-old craft endures, but the hands that weave it have claimed their place in a digital economy--transforming not just their livelihoods, but the very fabric of their community's future.

MONETIZING RURAL TRUST

Start

#24YEARSOFDIGITALHOPE

UMRI
GUNA
MADHYA PRADESH
INDIA

#DIGITALSERVICE
#SOOCHNAPRENEUR
#INFORMATIONAPRENEUR
#SOCIALENTREPRENEURSHIP

Can one make a living selling digital services in rural India?

Absolutely, said Purushottam Dhakad as he ushered me into his busy digital services center in Umri, Madhya Pradesh. Customers waited patiently, paperwork clutched close.

Dhakad is a pioneer of India's rural digital revolution, fueled not by slogans, but patient explanations, and a belief that every village needs someone at the helm for technology to be inclusive and transformative!

He joined the Digital Empowerment Foundation with a starting salary of 6000 rupees in 2014 to bridge the chasm between India's rural poor and their entitlements. "I went from village to village telling people they didn't have to spend all day and their savings to get a benefit card," he recalled. At the time, a laborer's daily wage was 400 rupees; a round-trip to the district headquarters cost 200, documents another hundred, plus that day's lost wages—700 rupees in all. "I offered to get it done for 30."

Word spread; clientele grew.

Post-project, DEF adopted an entrepreneurship model, and he became a SoochnaPreneur. He now makes close to 25,000 a month. "Upto 35 when new schemes launch or school admissions open," he said. **A reminder that a thriving rural social entrepreneurship is built on a foundation of trust forged by affordable charges, clear guidance, and dependable support.**


SoochnaPreneur Centre

In the fading afternoon light, we added all up: between Sept ‘15 and Aug ‘25, Dhakad had delivered 36,339 instances of digital services across 54 categories—everything from digital IDs and government scheme applications, to loans and banking. He had printed, laminated and photocopied upward of 51,650 documents.


सूचना सेवा
mation of Public Schemes
istricts in India

He pulled out files from an old tin almirah—hundreds of loan applications for fertilizer, sprinkler systems, tractors, and threshers. **A custodian of micro-transactions that keep rural life afloat, he beamed: “I have every record saved in here.”**

People drifted in and out as we leafed through his archive.

Prakash Pateria dropped by. In 2020, Dhakad helped him secure a 300,000 rupee loan through an onion storage scheme, with a 50% subsidy for construction so farmers avoid distress sales. In 2021, he received 250,000 for guava and lemon saplings, and 200,000 in a year in planting labor.

Elderly Samaji shuffled in. Beyond pensions for him and his wife, he’d gained an 8000 rupee sprinkler subsidy; 70,000 from Ladli Behna and Ladli Laxmi schemes (for his daughters and grand daughters); and 10,000 annually from the Pradhan Mantri Kisan Samman Nidhi Yojna and Mukhyamantri Kisan Kalyan Yojna (as federal and state farmer support). They are among the 700 federal and 40 state schemes that form the scaffolding of benefit architecture in MP.

In the fading afternoon light, we added all up: between Sept ‘15 and Aug ‘25, Dhakad had delivered 36,339 instances of digital services across 54 categories—everything from digital IDs and government scheme applications, to loans and banking. He had printed, laminated and photocopied upward of 51,650 documents.

Dhakad’s rural customers pay willingly to navigate the labyrinth of benefits and credit—a testament to how earned trust can be monetized to scale a rural digital social enterprise, opening a path to prosperity.

SCHEMES, SCAMS, AND SURVIVAL

Start

#24YEARSOFDIGITALHOPE

CHAKDEVPUR
RAJASTHAN
INDIA

#PERSONSWITHDISABILITY
#DIGITALDIVIDEND
#CONNECTINGTHEMARGINS
#DIGITALTRUST

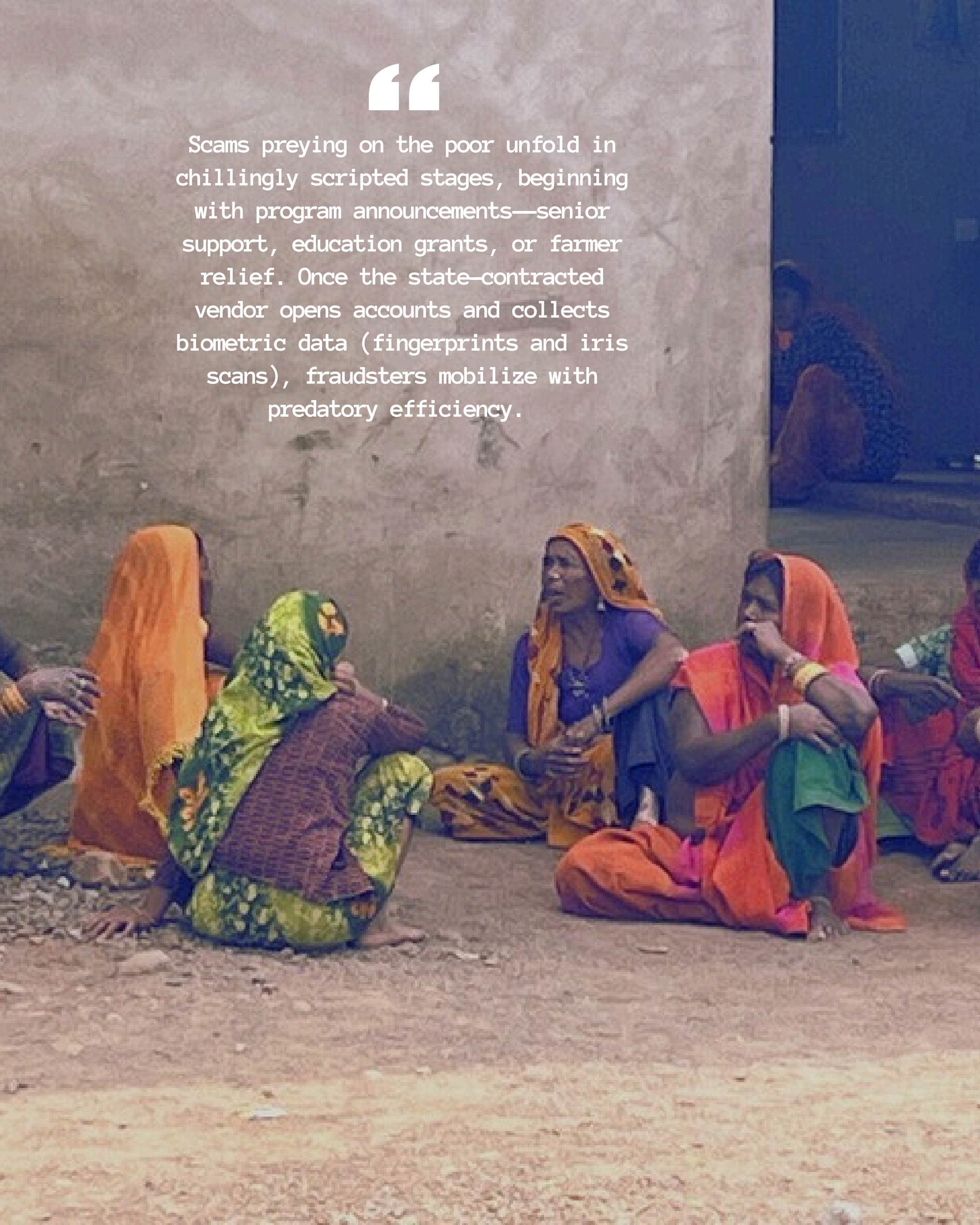
Who guards India’s identity safeguards?

In the sunbaked reaches of Madhya Pradesh, near its dusty border with Rajasthan, Chandan Banjara's digital outpost in Chakdevpur stands as a beacon of hopeful promise and perilous challenges within India's sprawling welfare and benefit architecture.

Once a Samarth SoochnaPreneur, a Person with Disability trained as a rural digital services provider, Banjara began in 2018 with a mobile phone and a printer. Seven years on, his center boasts upgrades that mark his growing value: a laptop, desktop, color printer, and biometric scanner.

The fingerprint scanner, in particular, fills Banjara with an almost evangelical excitement--for him, it represents nothing less than a technological exorcism of the ghosts haunting India's welfare system. Not spirits, but phantom beneficiaries--fake identities conjured through forged documents. "It is a magical diya guarding the door against exploitation and poverty," he said

Scams preying on the poor unfold in chillingly scripted stages, beginning with program announcements--senior support, education grants, or farmer relief. **Once the state-contracted vendor opens accounts and collects biometric data (fingerprints and iris scans), fraudsters mobilize with predatory efficiency.** Corrupt officials and slick scammers swoop in to manipulate the system, defrauding the poorest.



“

Scams preying on the poor unfold in chillingly scripted stages, beginning with program announcements—senior support, education grants, or farmer relief. Once the state-contracted vendor opens accounts and collects biometric data (fingerprints and iris scans), fraudsters mobilize with predatory efficiency.

This is where Banjara's scanner enters the narrative. "Fingerprint authentication via Aadhaar has been a gamechanger for us," he said. It even helped him locate accounts opened years earlier unknown to his customers. Each fingerprint scan is a bulwark against phantoms, and a tool of discovery. His fame has spread; he now serves customers from neighboring villages in Rajasthan.

सूचना सेवा केन्द्र

सूचना केन्द्र सूचनाप्रेन्योर द्वारा
जहां, सभी प्रकार की सरकारी यो
एवं डिजिटल सुविधाएं उप

सूचना केन्द्र पर मिलने

पैन कार्ड • मूल निवास/जाति प्रमाणपत्र/आय प्रमाण
बिल भरना • आधार कार्ड • परीक्षाओं की ऑन
योजनाओं की जानकारी • प्रिंटिंग • स्कैनिंग
डिजिटल साक्षरता आदि अन्य

DEF

SoochnaPreneur

SoochnaPreneur Centre
सूचनाप्रेन्योर केंद्र

CIRC

From Uttarakhand to Assam, Haryana to Tamil Nadu, I heard horror stories: con artists posing as officials to extract personal data via deceptive calls; women's savings drained through fraudulently-obtained thumb impressions; scam apps stealing accounts by requesting OTP codes. The very tools meant to liberate India's poor—smartphones, digital banking, welfare digitization—are also instruments of dispossession.

Low digital literacy and yawning digital divide compound these vulnerabilities.

This is where Banjara's scanner enters the narrative. "Fingerprint authentication via Aadhaar has been a gamechanger for us," he said. It even helped him locate accounts opened years earlier unknown to his customers. Each fingerprint scan is a bulwark against phantoms, and a tool of discovery. His fame has spread; he now serves customers from neighboring villages in Rajasthan.

Yet, even as biometric authentication swats old ghosts, newer scams emerge: fake Aadhaar enrollments to harvest data for money laundering; bogus "PAN" upgrade links to steal banking credentials; and phishing emails promising enormous dividends with a small deposit to wipe out accounts.

Banjara navigates this paradox daily: technology as shield and weapon. **Each version upgrade, each security advance, shadows another new exploitation.**

Stranded between digital promise and cyber predation, survival for India's marginalized rests with guardians like Banjara, who ensure every fingerprint scan is a vow that technology will shield, not betray, fragile lifelines.

TWO FOOT SOLDIERS AND THE CIRCLE OF TRUST

Start

#24YEARSOFDIGITALHOPE

DHERIKALA
GUNA
MADHYA PRADESH
INDIA

#SOOCHNAPRENEUR
#E-AGRICULTURE
#MICROENTERPRISES
#KNOWLEDGEVILLAGE

Can two rural entrepreneurs use trust and technology as their tokens to build an economy from the ground up?

As the morning sun hits the uneven streets of Dherikala in Madhya Pradesh's Guna district, Santosh Ojha was on his feet at his Soochna Seva Kendra. Customers waited on plastic stools, his desktop was piled with photocopied documents and a smartphone buzzed with WhatsApp alerts.

Like 2000 other SoochnaPreneurs and digital foot soldiers across India, **Ojha helps villagers translate the abstract bureaucracy of ag-subsidies and payments into something almost intimate**. Every interaction is a stitch in the “circle of trust” that binds Ojha to neighbors--knotted not just by digital skills but through patient years invested in their struggles and aspirations.

Ojha’s center has become a micro-hub in the rural economy, unlocking access to entitlements and making it possible for farmers to plan cash flow, buy inputs, and avoid predatory lending. **Trust is Ojha's currency; it brings people online and makes digital governance and online banking tangible at the last mile.**

A few miles away, Rajpal Kevat supervises offloading of PVC irrigation pipes. A SoochnaPreneur himself, Kevat is also building a business as an agtech agent bridging reliable suppliers and small farmers. His early work with Ojha as a service provider and e-services camp coordinator (at the Soochna Seva Project run by the Digital Empowerment Foundation), built trust in the village. As a go-between for farmers and farm equipment suppliers, Kevat is a support switchboard connecting pipes, droughts, monsoons, and farming’s urgencies. Trust is Kevat's asset, moving ahead of each pipe delivered, every payment processed, or subsidy resolved.


CIRC

Like 2000 other SoochnaPreneurs and digital foot soldiers across India, Ojha helps villagers translate the abstract bureaucracy of ag-subsidies and payments into something almost intimate. Every interaction is a stitch in the “circle of trust” that binds Ojha to neighbors—knotted not just by digital skills but through patient years invested in their struggles and aspirations.

Ojha’s center has become a micro-hub in the rural economy, unlocking access to entitlements and making it possible for farmers to plan cash flow, buy inputs, and avoid predatory lending. Trust is Ojha's currency; it brings people online and makes digital governance and online banking tangible at the last mile.


ार्यों के प्रसार
ाना


defindia
.org
SoochnaPreneur Centre
सूचनाप्रेन्योर केंद्र
soochnapreneur.in
defindia.org
email: info@defindia.org
for any complaint call at: 011 2653 2786

When a farmer needs, say, help with the process, Kevat negotiates rates, wrangles digital payments through UPI, and organizes deliveries. For him, selling equipment is ensuring it works for every field, large or small.

I chanced upon their meeting--**two men hunched over their phones and laptops, trading notes on equipment orders, scheme applications, and meeting with families needing service.** Their approach, a cycle where access to information, financial empowerment, and trusted service multiply last-mile impact.

Ojha’s data literacy and Kevet's market access create enduring impact: loans flow into new equipment and infrastructure, which cultivates more trust, expands opportunity, and brings the village closer to prosperity. Reliability through repetition, and their informal partnership prop up the gears of the village economy.

What began as a service is now an ecosystem support: **Ojha navigates platforms; Kevat delivers products.** Their entwined stories trace the subtle transformation of entrepreneurship and impact--emboldened by digital confidence, animated by trust--remaking village relationships and the very structure of rural life.

defindia.org

TECH'S TORCHBEARERS

Start

#24YEARSOFDIGITALHOPE

VILLAGES
ACROSS
10 STATES

#RURALINDIA
#DIGITALINRURAL
#DIGITALDIVIDENT
#DIGITALEXCLUSION

What did I learn from months crisscrossing India's rural frontiers, shadowing digital information entrepreneurs? That hard-earned and quietly nurtured trust travels farther than technology.

I began in May in Dharchula, where Uttarakhand's landslide-prone hills make even short journeys daunting. Watching veterans and teens risk slipping on mud and shifting scree to access government e-services, I was reminded that connectivity isn't only cable and towers; it's a journey defined by distance and persistence. Reaching the last mile is literal: an uphill climb to where the network touches down.

Traveling with the Digital Empowerment Foundation, I was struck by the quiet power of trust. The 50-odd SoochnaPreneurs (information entrepreneurs) I met underscored digital's core tenet: people, not platforms, bridge the divides that matter.

In Assam's tea estates, Tapan Tanti worked from a modest room, powered by a laptop and local knowledge no government blueprint could capture. He built trust, not portals. That made benefits tangible to plantation workers for whom the state was abstract. Technology may illuminate, but Tanti carried the torch.

Across Assam, Bengal, Haryana, Madhya Pradesh, Tamil Nadu, Telangana, and Uttarakhand, transformation was about shifting power and possibility. In Chanderi, Madhya Pradesh (MP), years after a DEF project ended, designers harnessed software through grassroots innovation, compressing weeks of saree pattern work into hours. When COVID shuttered markets, young weavers took to Instagram and WhatsApp. Impact emerged from community learning and adapting.



SoochnaPreneurs walk a tightrope—at the juncture where India's digital promise meets systemic vulnerabilities. Chandan Banjara, living with disability in MP, wields a biometric scanner as shield and sword. He finds dormant accounts and filters phantom claimants, acutely aware that the tech meant to protect can also enable predators. Emerging AI will further deepen divides—embedding biases, amplifying disinformation, creating new exclusion layers soochnapreneurs must learn to navigate.

In Nuh, Haryana, Mustakeem's transparency--adding a 2nd monitor so customers saw transactions--was radical. Suspicion dissolved; comprehension grew. His WhatsApp group of 500+ became a real-time sieve for schemes and scams.

SoochnaPreneurs walk a tightrope--at the juncture where India's digital promise meets systemic vulnerabilities. Chandan Banjara, living with disability in MP, wields a biometric scanner as shield and sword. He finds dormant accounts and filters phantom claimants, acutely aware that the tech meant to protect can also enable predators. Emerging AI will further deepen divides--embedding biases, amplifying disinformation, creating new exclusion layers soochnapreneurs must learn to navigate.

Wrapping up and reflecting, I believe impact shouldn't be measured in project timelines and burn rates, but in communities' persistent choices after funding fades. Entrepreneurs like Purushottam Dhakad of MP, who delivered over 36,000 digital services post-project in his village, are custodians of trust, whose capital is painstakingly-built reputation.

So what did I learn? That technology is merely a tool, and real work is cultivating trust; that the bridges spanning India's digital divides are woven not from fiber and code, but through empathy, attention, and the patient commitment of those who choose to serve.


Classic mats



This little book brings together field notes from meetings with Soochnapreneurs—information entrepreneurs working across 2,400 locations in India as part of the Digital Empowerment Foundation's digital social micro-enterprise initiative. Their mission is simple yet vital: to ensure that trusted and reliable information services reach marginalised communities who remain poorly connected.

Manisha Aryal travelled from Washington, D.C., across the length and breadth of India to understand how digital tools are transforming lives at the margins. She described her journey as one of the most hands-on learning experiences in understanding and addressing the digital divide.

www.defindia.org/publications

Produced under the project

A·CODE
Art and Collective for Digital Empowerment