ESTABLISHING SMARTPUR
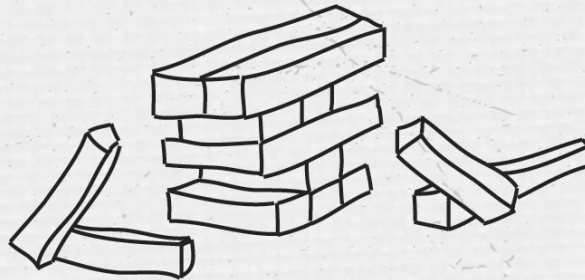
A holistic guide for creating smart villages

PART-1

Smartpur is an inisiative of DEF

CONTENT

Smartpur is an inisiative of DEF

BACKGROUND

This section gives an overview of
Digital Empowerment Foundation
and its various projects.

2 0 0 2

2 0 1 8
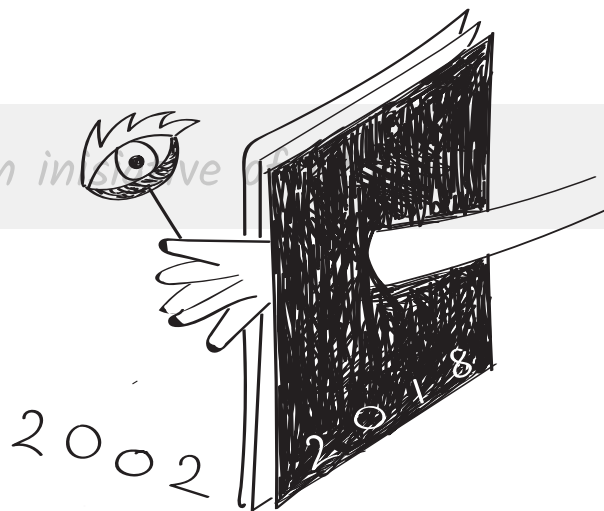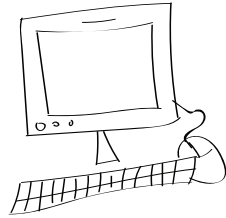
Since 2002, New Delhi-based not-for-profit organisation Digital Empowerment Foundation (DEF) has been proactively working in rural and urban spaces to empower communities with ICT tools and digital interventions. Through its rural digital model, it has been providing wireless connectivity in remote areas, creating digital classrooms in villages, training and building capacities of youth, facilitating access to public entitlements and government schemes, digitalising handloom processes and digitally archiving art, culture and heritage in some of the most backward and underserved areas throughout the country.

Smartpur is an insistive of DEF

JAMMU & KASHMIR

DELHI

PUNJAB

HARYANA

RAJASTHAN

GUJARAT

UTTAR PRADESH

MAHARASHTRA

MADHYA PRADESH

KARNATAKA

ANDHRA PRADESH

TRIPURA

PUNDUCHERRY

SIKKIM

ASSAM

ODISHA

MEGHALAYA

BIHAR

JHARKHAND

UTTARAKHAND

TELANGANA

CHHATTISGARH

WEST BENGAL

TAMIL NADU

Smartpur is an inisiative of DEF
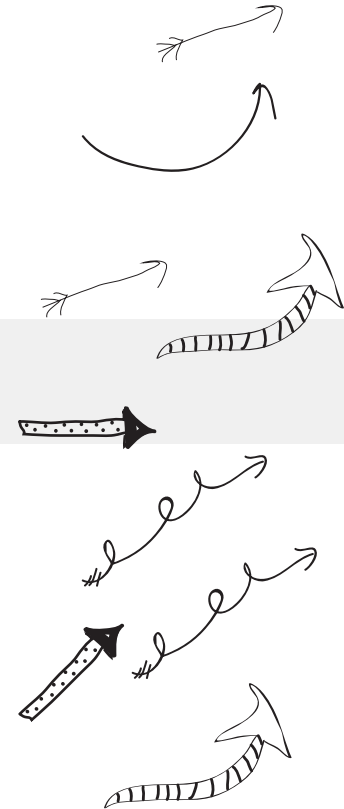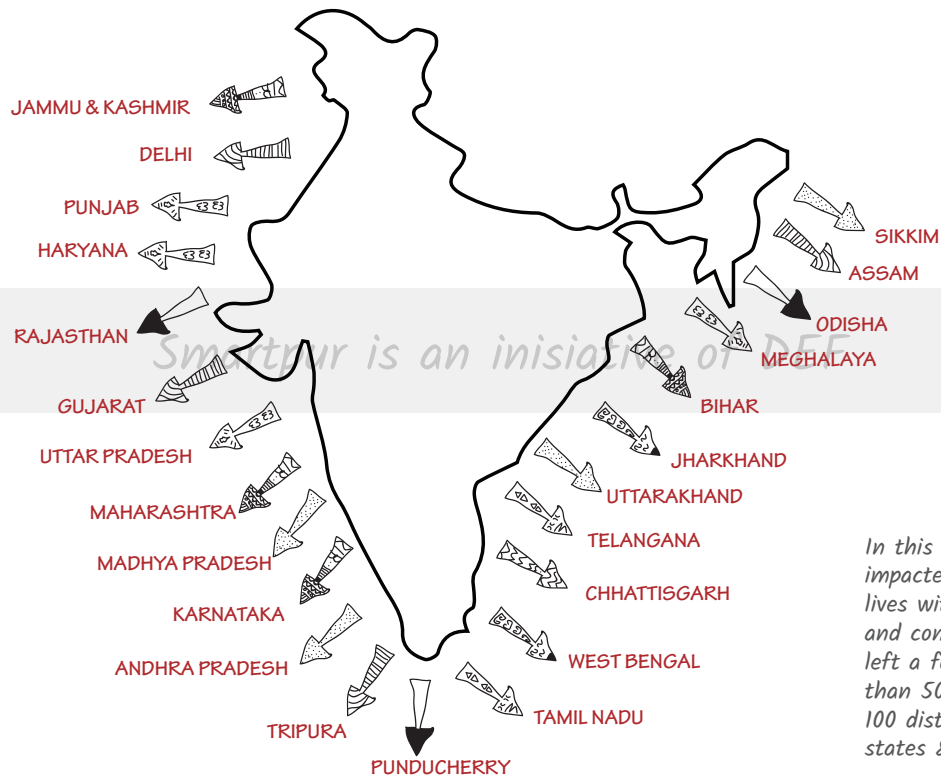
In this period, DEF has impacted about 5 million lives with digital tools and connectivity, and has left a footprint in more than 500 locations across 100 districts in 23 Indian states & Union Territories.

Over the years, the organisation has successfully conceptualised and implemented about 40 projects to digitally empower the rural communities across its six programmatic areas of Access & Infrastructure, Education & Empowerment, Governance & Citizen Services, Markets & Social Enterprises, Knowledge Hub & Network, and Research & Advocacy.

Community Information Resource Centres (CIRCs) is a project that envisions community-oriented infrastructure and information hubs built to create digitally literate, information-empowered and equitable communities across the country. The CIRCs primarily offer digital literacy, digital services, information services, citizen services and business development services to create information-rich society under a sustainable model.

Soochna Seva is an initiative aimed at facilitating information about government schemes and entitlements, and enabling access to the same for rural communities in an effort to support, strengthen and enhance capacities of grassroots communities to access and avail information and entitlements in critical areas of health, education, social & financial inclusion, livelihood and employment.

Wireless for Communities (W4C) is an initiative that aims to connect rural and remote locations of India, where mainstream Internet Service Providers are not willing to provide Internet connectivity, through frugal technology and unlicensed spectrum bands.

Together, these three projects led to the creation of Smartpur: A Digital Village Ecosystem.
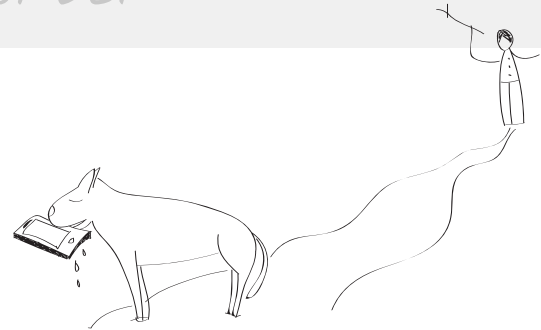
Smartpur is an initiative of DEF

Smartpur is a concept designed for a sampoorna gaon (holistic village) or a digitally-integrated ecosystem where people leverage digital tools to bring efficiency in daily lives, transparency in governance, economic prosperity for households, and ease of access to various kinds of services and information. The ecosystem is built to provide services under six development pillars — Education, Health, Governance, Finance, Livelihood and Entertainment. These pillars provide an array of services like digital literacy, digital and information services, digital health consultancy, government entitlements, digital financial services, and vocational training and skill building programmes, thus serving as a central point of connectivity for local institutions.

After an on-ground experience of over 15 years, DEF documented all its learning into an easy-to-understand user guide to share its best practices that define the systematic approach used in implementing a digital village ecosystem model with all relevant stakeholders aligned in towards taking the mission forward.
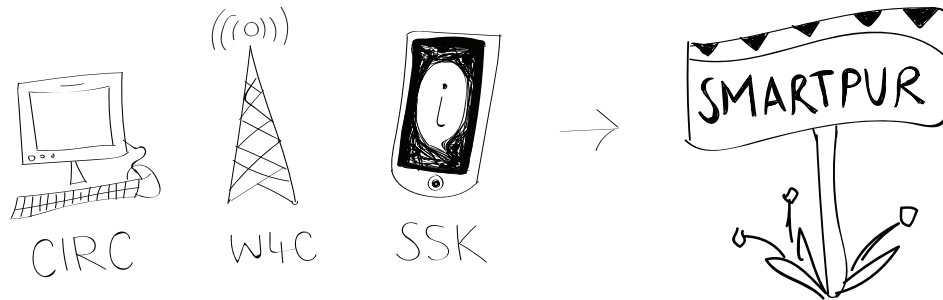
This guide aims at transforming DEF's philosophy, objectives and goals into result-oriented actions.

Smartpur is an inisiative of DEF

"Smartpur, the smart project to create sampoorna villages"

INTRODUCTION

This section briefly
illustrates the model, and
the integation of technology.

Smartpur is an inisiative of DEF

CIRC   W4C   SSK   SMARTPUR

Lack of access to Information Communication Technologies (ICTs) is a major developmental challenge as recognised by various national and global mandates such as the Digital India programme or the World Summit on Information Society. It is now globally accepted that digital inclusion of marginalised communities can eradicate poverty and help the nations achieve Millennium Development Goals (MDGs), thus creating an an information-rich society.

It is with this belief that the foundation of Community Information Resource Centres (CIRCs) was laid.

CIRC programme was launched in 2007 with the aim to empower socially-marginalised communities, by providing digital connectivity, information services, access and capacity building. The first CIRC was established in Rajasthan's Baran district with support from corporate companies. Following the roll out of this project, the need for Wireless for Communities (W4C) was realised, and the first frugal wireless rural broadband network was established in 2010 with the aim to connect the unconnected rural and marginalised communities.

In 2014, Soochna Seva project was launched with the aim of strengthening the information flow and governance at the last mile.

The successful implementation and overwhelming response received from the communities where DEF's projects were implemented led way to the creation of many more centres across the country. Since then, we have grown from one physical centre to 183 physical centres spread across 22 Indian states, serving over 50,00,000 people through various community-oriented Information Communication Technology for Development (ICT4D) interventions.

Smartpur is an inisiative of DEF

The funding for the setting up of rural digital centres, too, has grown from independent budgets and government grants to CSR funds — the latter having become the largest source of funds in recent times for DEF's centres across India. In 2017, DEF took a big step forward towards sustainability. Instead of being run and managed by DEF as philanthropic initiatives, the new centres began to be run by young entrepreneurs (individuals or organisations) under a sustainable model with knowledge and digital infrastructure support from DEF. Today, these centres operate as a social enterprises working towards creating a socially and economically-stable sustainable ecosystem.

Smartpur is an inisiative of DEF

The young rural entrepreneurs, also known as Digital Entrepreneurs (DEs), are equipped with computers, laptops, projector, printer, lamination machine, Internet connectivity and trained in entrepreneurial approaches to enable them to serve their respective communities and create revenue generating services for their enterprises. The centres can operate across sectors like education, health, environment, finance, livelihood, entertainment, art, heritage and culture, governance or allied sectors to deliver digital services relevant to the target audience.

The centres, well equipped with digital infrastructure, provide access to digital & financial literacy, digital & information services, government schemes & entitlements, digital learning & teaching content, e-shops and Wi-Fi services; thus acting as a central point to connect panchayats, schools, health centres and various other institutions in the region with affordable and quality services.

This digital rural empowerment model has proven to be successful in villages and urban slums due to its wide-ranging scope and flexible structure. The model is malleable and can be moulded to suit the aims and objectives of any developmental pillar such as health, education, governance and livelihood, among others, and is not restricted to any particular sector. It is highly driven by the entrepreneurial spirit and how the digital infrastructure is made relevant to the community's needs and aspirations.
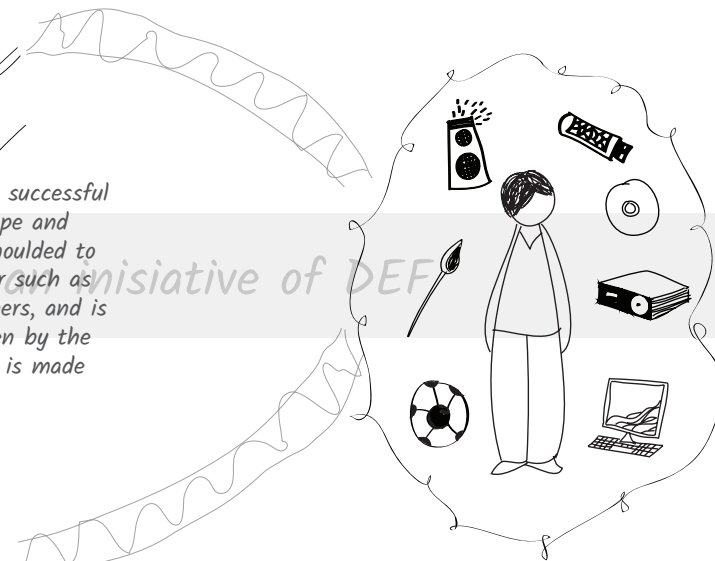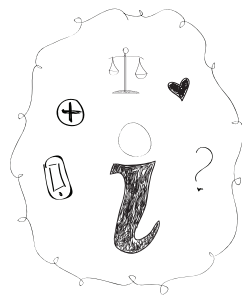
Keeping this context in mind, this guide seeks to bring before you the WHY, WHAT and HOW of establishing 'Smartpur: A Digital Village Ecosystem' to create digitally enabled and information empowered communities and individuals.

COMPONENTS OF THE GUIDE

This guide aims to describe the desired digital ecosystem of a village and map an integrated design procedure for building a smart village.

Smartpur is an inisiative of DEF
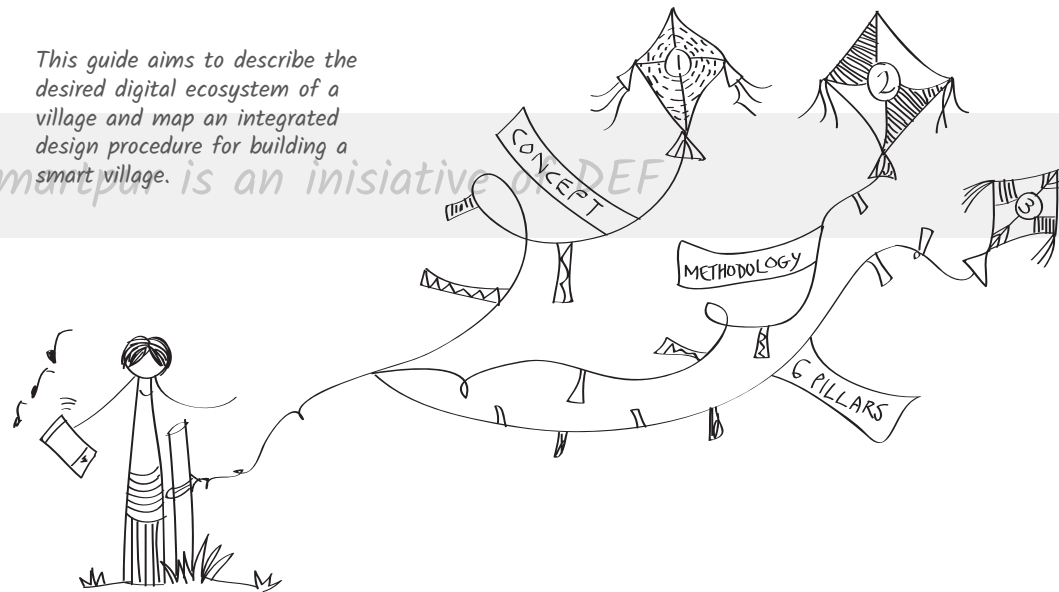
The guide has been divided into 3 modules to give a detailed understanding of the processes starting right from conceptualisation, recruitment and infrastructure installation to mobilisation of communities and delivery of services.
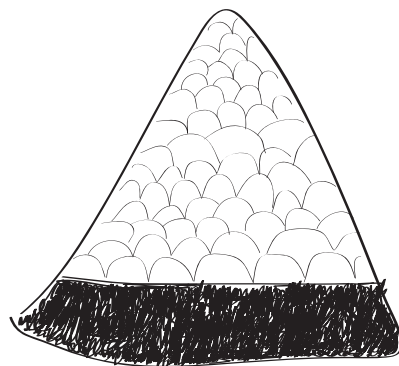
Smartpur is an inisiative of DEF

MODULE 1
talks about the concept behind a digital village ecosystem, its vision, mission and scope of work.
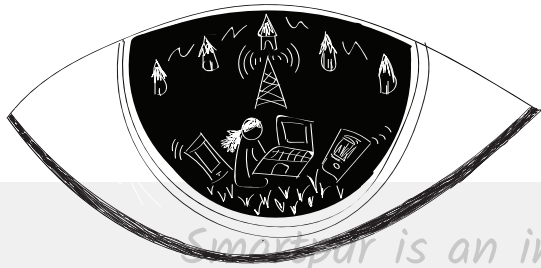
MODULE 2
gives a detailed description of the methodology of setting up a digital village ecosystem.

MODULE 3
explains the types of digital services that can be delivered across the six development pillars.

Each module is focused on an aspect of
the implementation process, and hopes to
handhold the readers in their journey of
creating sustainable digital village ecosystems.

VISION	⭐ To end information poverty, social backwardness and economic exclusion by creating information-empowered and equitable communities through self-sustainable ICT-enabled hubs in the village economy.
MISSION	⭐ To create sustainable digital ecosystems, led by young entrepreneurs, in the most backward districts of India to solve the problem of lack of information access and connectivity through innovative ICT interventions.
VALUES	⭐ Promoting diversity, inclusivity and sustainability ⭐ Protecting environment, heritage and culture ⭐ Nurturing innovation and entrepreneurship ⭐ Working towards a socially just and liberal society ⭐ Respecting local ecosystem and promoting community practices

Smartpur is an initiative of DEF

CONCEPT

This section creat the foundation of smartpur, and the route it takes to creat holistic smart villages.

Smartpur is an initiative of DEF

HUB CENTRE

SPOKE CENTRE
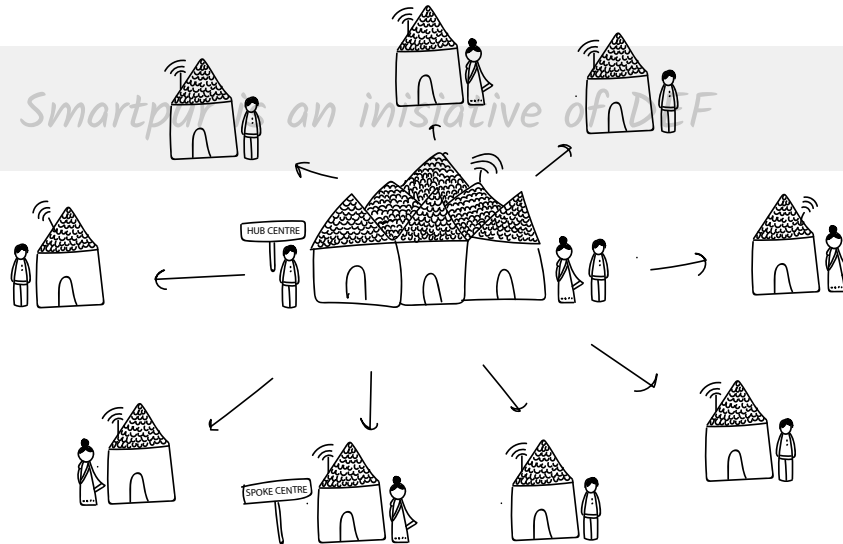
SMARTPUR

A Digital Village Ecosystem is a concept designed for a sampoorna gaon (holistic village) or a digitally-integrated ecosystem where people leverage digital tools to bring efficiency in daily lives, transparency in governance, economic prosperity for households, and ease of access to various kinds of services and information.

The ecosystem is built to provide services under six development pillars — Education, Health, Governance, Finance, Livelihood and Entertainment. It provide an array of services like digital literacy, digital and information services, government entitlements, training and skill building programmes, thus serving as a central point of connectivity for local institutions.

The concept of Smartpur emerges from the underlying idea of integrating technology, promoting entrepreneurship and empowering the communities. The model is complete only when each of the three components functions in tandem with each other.

"Connectivity is productivity, whether it's in a modern office or an underdeveloped village "

TECHNOLOGY

Integrating technology in the existing practices, processes and enabling the people of the community to make their lives better and contribute to the overall well-being of the village forms the basis of the model. The digital tools and connectivity are only seen as a means to an end and not an end in itself. It is a medium to acquire knowledge as a consumer and disseminate information as a producer, thus serving as tool for empowerment, innovation and communication for the larger community.
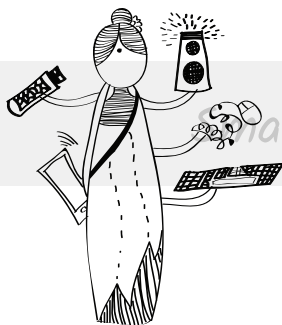
SOCIAL ENTREPRENEURSHIP

The ability to recognise social problems and achieve social change by employing entrepreneurial or business principles and processes is fundamental to design, develop and operate Smartpur. The entrepreneurial attitude will inculcate high ownership among the stakeholders and ensure long-term sustainability of the model.

COMMUNITY EMPOWERMENT

The goal is to end information poverty, social backwardness and economic exclusion by creating information-empowered and equitable communities. The multi-development pillar approach helps create a holistic push to bring social change among the communities.
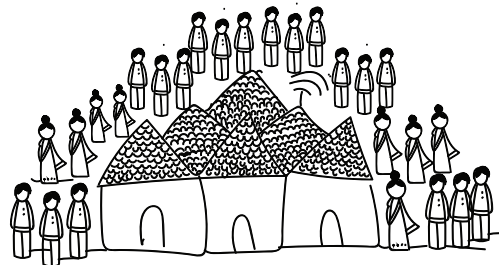
MERE AVAILABILITY OF DIGITAL
TOOLS AND INTERNET CONNECTIVITY
ALONE DOES NOT MAKE A VILLAGE
SMART. RATHER, IT IS THE
INTEGRATION AND OPTIMUM
UTILISATION OF THESE RESOURCES
FOR SOCIAL, ECOLOGICAL AND
ECONOMIC IMPACT THAT TRULY
MAKES A SMART VILLAGE.

Smartpur is an inisiative of DEF
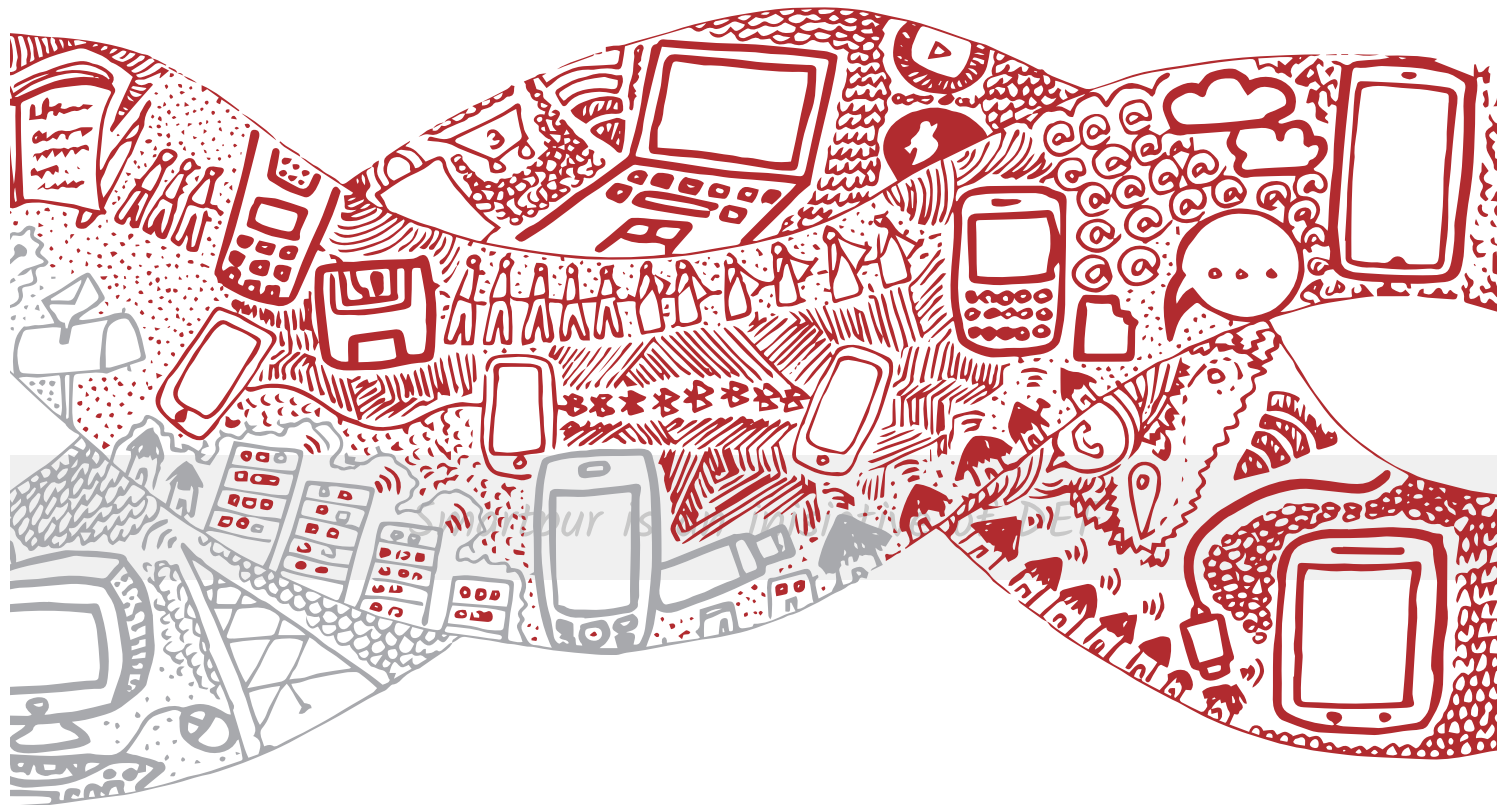
ECOSYSTEM

The Smartpur ecosystem comprises the community stakeholders that are responsible in its functioning; the resources needed to run the village; the services required to be rendered; and the service delivery technologies and mechanisms necessary for its smooth functioning. In short, the ecosystem is a description of the WHO, WHAT and HOW of creating a Smartpur.

➡ *The Stakeholders include the marginalised and backward communities; the children, women and men; the teachers and students; the small and medium enterprises, farmers and labourers; the local, state and central governments; the industrial, social and political organisations responsible for the overall functioning of the community.*

➡ *The Resources include the natural, financial and skilled human resources with connections and knowledge to provide the services for the village.*

➡ *The Services include the educational opportunities, affordable health care, access to information, vocational training, employment prospects, entertainment spaces and financial services offered to the rural communities required to achieve inclusive and equitable village development.*

➡ *The Service Delivery technologies and mechanisms include road transportation, internet connectivity, digital infrastructure and methodology and approach of implementation.*
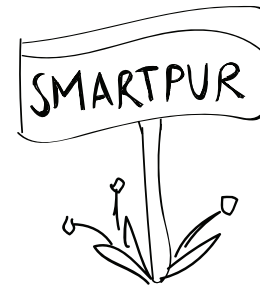
SMARTPUR

MODEL

The Smartpur implementation has been designed around a hub-and-spoke model to incorporate diversity in services, scalability and large-scale impact.

The hub and spokes will be physical centres equipped with digital tools and connectivity to serve as a central location for services across each of the six pillars. The Hub centre will be larger and equipped with more tools and Every Hub and spoke will be located in a different village, in close proximity, within a range of 2-10 kilometres from each other.

The hub will be operated by a team of local entrepreneurs, each entrepreneur skilful and trained in delivering and performing activities under the six key areas. While rural entrepreneurs at the hub centres provide primary services, rural entrepreneurs at the spoke centres will further redistribute these services in their respective villages. Together, the hub and the spoke entrepreneurs aim to create digitally-equipped and information-rich communities, thereby setting an example of model smart villages in India. There will be a constant flow of services, people and ideas between the hub and spoke centres, thus creating an inter-linkage between five to 10 villages.

STAKEHOLDERS

The Smartpur ecosystem comprises the community stakeholders that are responsible in its functioning; the resources needed to run the village; the services required to be rendered; and the service delivery technologies and mechanisms necessary for its smooth functioning. In short, the ecosystem is a description of the WHO, WHAT and HOW of creating a Smartpur.

Smartpur is an inisiative of DEF
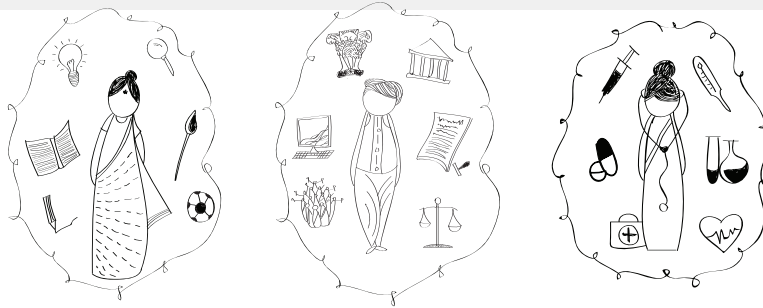
Public health centres, community health centres, aanganwadi kendra, private and public hospitals, doctors and other health officials under the HEALTH pillar

Public and private schools, colleges, libraries, teachers, principals and students under the EDUCATION pillar

Training institutes and government master trainers, artisans, crafsmen, nano and micro enterprises under the LIVELIHOOD pillar

Panchayat representatives, block office staff and government officials under the GOVERNANCE pillar

Public and private banks, regional banking kiosks and banking correspondents under the FINANCE pillar

Men, women, children and youth in the community under the ENTERTAINMENT pillar

METHODOLOGY

Smartpur will be established in a phased manner to achieve the expected outcomes. key steps to be taken for the successful implementation of the model are listed here.

PLANNING

IDENTIFYING
HUMAN RESOURCES

ESTABLISHING
THE CENTRES

IDENTIFYING THE
PROBLEMS & NEEDS

...iative of DEF

TRAINING &
CAPACITY
BUILDING

SERVICE DELIVERY

COMMUNITY
ENGAGEMENT

DOCUMENTATION
& REPORTING

➥ IDENTIFY the social problem and community needs through research, wireless network feasibility study and baseline survey

➥ PLAN for the timeline, resources and outcomes of Smartpur in accordance with the needs assessment

➥ IDENTIFY human resource with qualities of a social entrepreneur

➥ ESTABLISH the physical centre, procure infrastructure, set up infrastructure and create communication design and branding

➥ BUILD CAPACITIES of human resource through trainings

Smartpur is an inisiative of DEF

➥ CREATE REPORTS through a comprehensive system of documentation and reporting

➥ ENGAGE THE COMMUNITY through various mobilisation techniques and activities

➥ DELIVER THE SERVICE to the community as mapped through needs assessment

**NOTE: READ MODULE 1 FOR A DETAILED UNDERSTANDING OF THE METHODOLOGY.**

"Connecting the unconnected through an innovative approach to learning and living"

IMPACT

Smartpur has the potential to make a significant, positive change in the village community. The outcomes and impact of the project is multi-pronged and far-reaching. When implemented efficiently, it will bring social, psychological, economic and cultural changes in the village community.
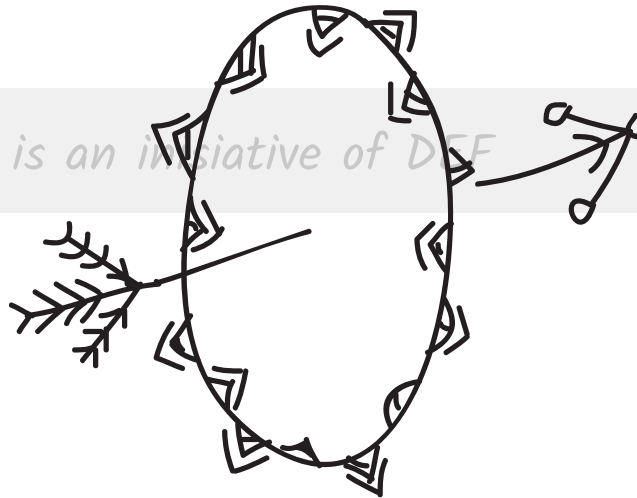
Smartpur is an inisiative of DEF
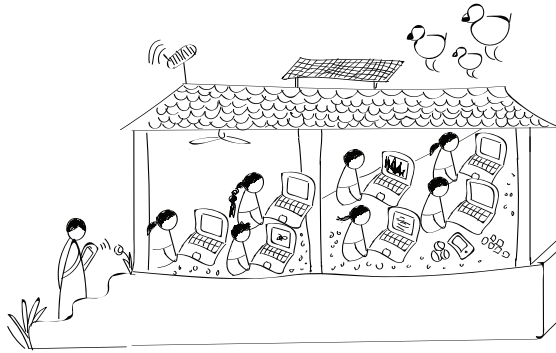
EDUCATION

A digitally-enabled environment in community centres to enhance creativity, innovation and exposure to the online knowledge hub

Children and adults digitally trained in functional skills to access, consume and produce content on digital platforms

Teachers and relevant stakeholders skilled in using basic digital tools to deliver digital literacy along with school curriculum, administrative work and data management

Increased exposure and learning outcomes among students through access to wider teaching and learning content
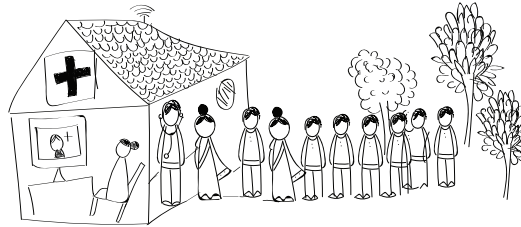
HEALTH

⭐ Increased savings in health care cost and improved patients' health and safety

⭐ Access to virtual specialty care services and improved delivery of health care services among the government machinery

⭐ Electronically maintained patient database that is accessible to connected medical professionals remotely

⭐ Digitally skilled and trained rural professionals in medical care and usage of telemedicine equipment

⭐ Increased awareness about diseases, remedies, preventive health care, hygiene and tele-health in the community members

GOVERNANCE

▸ Improved access channels to avail information services, citizen services, financial services, digital services at affordable prices for community members

▸ Increased economic advantages through entitlement gains among community households after availing information on public schemes related to livelihood (poverty & employment avenues), financial inclusion and social security measures

▸ Connected Digital Panchayats where individuals, government officials, local organisations and institutions are empowered by the access to digital tools and connectivity

▸ Increased awareness about rights and entitlements, thus encouraging greater participation in governance

▸ Strengthened e-governance system and increased participation between local government machinery and citizens

▸ Increased accountability and transparency in the local government bodies

▸ Digitised content and resources for ease of access and consumption of the local communities

▸ Established virtual link between the local community and global world

FINANCE

▷ Improved access and awareness of conventional and digital financial services

▷ Increased number of aware citizenry adopting conventional methods of banking and connected to the banking system

▷ Increased use of banking products and services like online transfers, passbook checking, withdrawal and deposits and conducting money transfers for shopping

▷ Improved financial inclusion of the community members
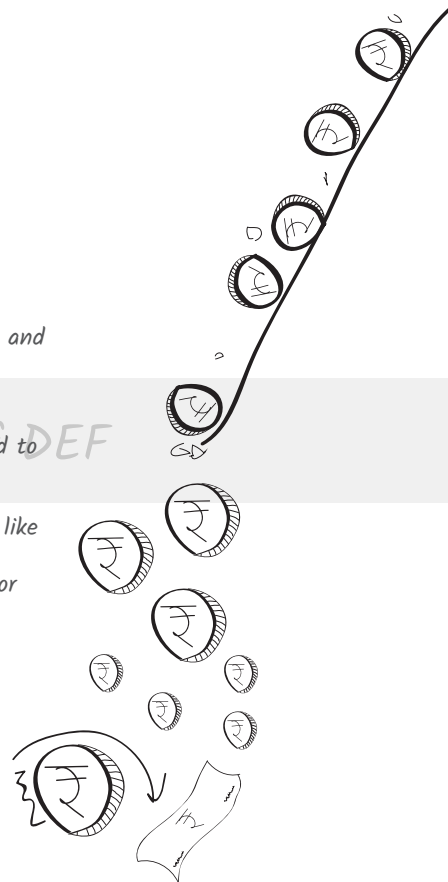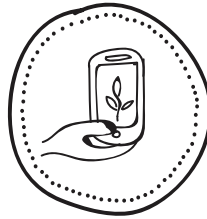
LIVELIHOOD

★ Increased household incomes and better livelihood opportunities for the artisans, thus making handicraft a profitable occupation in region.

★ Increased youth engagement to avoid migration to other occupations; and improved vocational skills in the aras of hospitality and tourism encourage entrepreneurial spirit

★ Creation of rich archive and documentation of local art, craft and cultures in the physical and digital forms for local, national and international promotion

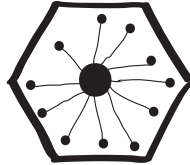★ Increased sensitivity, pride and appreciation for the artisans, and the local art and culture
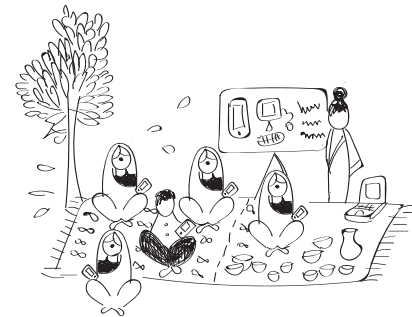
ENTERTAINMENT

⭐ Increased access to alternate means of recreational activities

⭐ Increased interest and exposure in music, drama, films and dance and other forms of entertainment

⭐ Increased social cohesion among women and other groups in the community

CONNECTIVITY

▷ Improved collaboration, knowledge sharing and partnerships between an interconnected network of local institutions of the government machinery

▷ Improved employment and livelihood opportunities for individuals with basic technical knowledge and organisations in need of connectivity

▷ Increased access to resources in health, education, governance, art and culture to disseminate, circulate and utilise for the holistic development of the village

▷ Increased efficiency in delivery of health care services, government entitlements and maintenance of electronic data through availability of telemedicine, e-governance, e-commerce and e-administration services

▷ Improved access to entertainment resources and tools for enjoyment and leisure activities
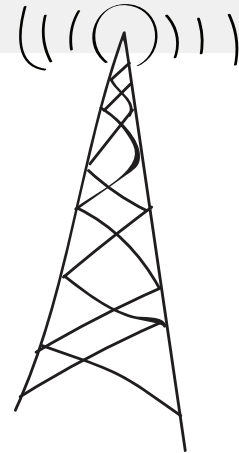
LET'S RECOLLECT

Smartpur has the potential to make a significant, positive change in the village community. The outcomes and impact of the project is multi-pronged and far-reaching. When implemented efficiently, it will bring social, psychological, economic and cultural changes in the village community.

- DEF has left its footprints in more than 397 locations across 121 districts in 23 Indian states, impacting over 5 million rural and marginalised lives.

- The vision of the organisation is to end information poverty, social backwardness and economic exclusion by creating information-empowered and equitable communities through self-sustainable ICT-enabled hubs in the village economy.

- The mission of the organisation is to create sustainable digital ecosystems, led by young entrepreneurs, in the most backward and marginalised districts of India to solve the problem of lack of information access and connectivity through innovative ICT interventions.

- Smartpur is a concept designed for a sampoorna gaon (holistic village) or a digitally-integrated ecosystem where people leverage digital tools to bring efficiency in daily lives, transparency in governance, economic prosperity for households, and ease of access to various kinds of services and information.

- Smartpur works across six development pillars — Education, Health, Governance, Finance, Livelihood and Entertainment.

- Smartpur concept has been designed around a hub-and-spoke model to incorporate diversity in services, scalability and large-scale impact.

- The ecosystem will work in collaboration with all relevant community stakeholders under each pillar to instil ownership and oneness among the community.

- The methodology should follow the steps to identify problems, make a plan, hire human resources, establish physical centres, build capacities of human resources, create regular reports, engage the community and deliver the services.

- When implemented effectively, Smartpur will bring social, psychological, economic and cultural changes in the village community through work across the six development pillars.

Smartpur is an inisiative of DEF

Smartpur is an inisiative of DEF