

MICROLAND[®]
FOUNDATION

MLF Annual Report

Together for A Better Tomorrow

CSR arm of Microland Ltd.



Vision

“

We aim to work with vulnerable communities to partner and incubate sustainable transformations towards a better quality of life

”

FROM THE CHAIRMAN'S DESK

At Microland Foundation (MLF), people are our priority. From our employees to our partners and the stakeholders we work with, our approach to business has always been one of creating shared value. This approach defines our Corporate Social Responsibility initiatives as well. MLF was established as a dedicated institution committed to enabling social change.

In recent years, the Foundation has achieved notable progress in enhancing education, health, livelihoods and environment within targeted communities in Karnataka and the Nilgiris. These accomplishments have been made possible through valuable partnerships with local organizations and the Foundation's close collaboration with community members. While it is still early days, I am encouraged by the way MLF's efforts have touched the lives of vulnerable and marginalized communities over the past 5 years. MLF has adopted a Corporate Social Responsibility (CSR) policy as per the requirements of the Section 135 of the Companies Act 2013, and its CSR board comprising distinguished professionals brings deep cross-sectoral expertise and digital inventiveness, and its team of committed and passionate individuals brings rigour and professionalism.

MLF's vision is to design programs with a view of impacting at scale, while maintaining a good corporate constitution. The last few years have been very challenging, with COVID, and other natural and man-made disasters. Managing complex challenges and addressing them in a sustainable way is only possible when people with diverse skills come together to solve them. We believe digital technologies are the biggest enabler of ensuring that vision gets translated on the ground. A combination of strong community engagement and technology-enabled interventions is the pivot through which we will be able to touch and transform the lives of the most vulnerable and marginalized.

Through our contributions to the communities in areas of the Nilgiris, Bengaluru, and other parts of India, we have taken the first big strides in creating improved access to health for diverse groups and communities. We have also given a special thrust to enabling communities to be more resilient to climate change through several initiatives, especially in the Nilgiris, that can preserve and improve the delicate ecosystem of the region.

I am particularly encouraged by the collaborative approach MLF has adopted, and we have a very committed and engaged set of partners, as well as employee volunteers who



are passionate about improving the quality of lives for the most vulnerable, ensuring a gender-equitable society. At MLF, the community is at the center of all our initiatives and our approach and priorities are reflective of this.

”

With Warm Regards,

Pradeep Kar,

Chairman & Managing Director,
MICROLAND

OUR APPROACH TO CORPORATE SOCIAL RESPONSIBILITY

COMMITTED TO CHAMPIONING SOCIAL CHANGE

Microland Foundation is deeply committed to its values and policies which are founded on the principles of inclusivity, sustainability, and community ownership. We are mission-driven to ensure accountability to our stakeholders and have expanded our social footprint from a small beginning around Bengaluru to other locations and states in India over the past few years. Our approach towards enabling social change has been to determine the best set of solutions that are not just sustainable and contextual to the communities we work with but have the potential for replicability and scalability. We collaborate in this endeavour with a diverse set of public, private, NGO, and community partners who share our vision and sense of accountability. On behalf of the MLF team and employees who are also key stakeholders in this journey, I would like to thank each one of our partners for their consistent and relentless support.

At MLF, we don't shy away from experimenting with innovative approaches to solve complex challenges impacting our society. Our endeavor to implement a Climate Smart curriculum in government schools in the Nilgiris is one such example. This intervention has the potential to

channelise change agents in the community to respond to climate change through affirmative action.

The team at MLF is deeply conscious of the importance of preserving and leveraging cultural and traditional knowledge that resides within communities. Our fellowship model of change has enabled community youth and collectives to pursue locally relevant and sustainable livelihoods. The successful implementation of a multi-stakeholder waste management project in the Nilgiris fills us with the hope that we can expand and replicate similar projects in other delicate biospheres.

We firmly believe in bringing social change through initiatives using technology as a core element of intervention. From MLF's "digipreneurs" who are leveraging technology to improve the quality of life of their community members, to digital gamification of language comprehension for improving learning outcomes, we believe technology can enable transformation in the most inclusive way.

In the coming years, we hope to deepen our engagements with our partners and expand



our footprint in our quest to improve the quality of life for the most vulnerable, and stay committed to championing transformative and sustainable social change.

”

Kalpana Kar, Trustee

MICROLAND®
FOUNDATION

ABOUT MICROLAND

We create a world where technology is an enabler to do more and intrude less. We make it easier for our stakeholders to adopt NextGen Digital infrastructure. Incorporated in 1989 and headquartered in Bengaluru, India, Microland has more than 4,500 digital specialists across offices and delivery centers in Asia, Australia, Europe, Middle East, and North America. We are making Digital Happen by using our expertise in Cloud and Data Centers, Networks, digital workplaces, Cybersecurity, and Industrial IoT. We have collaborated with like-minded partners leading to improved strategic thinking, rapid product and service innovation, and customer delight

A GLIMPSE OF OUR CSR COMMITTEE MEMBERS - A robust team of CSR committee members who lend us support, and guidance with their experience and expertise in bringing solutions to complex problems.



Srinivasan T. R.
Chief People Officer
BENGALURU, INDIA



**Kumaran
Rangaswamy**
Vice President & Global
Head of Marketing
BENGALURU, INDIA



Raja Gopalan S
Advisor to MD & Non
Executive Director,
BENGALURU, INDIA



Satish Sukumar
Senior Vice President &
Global Head – Platforms
BENGALURU, INDIA



**Rajesh
Kharidehal**
Chief Financial Officer
BENGALURU, INDIA

OUR JOURNEY UNTIL NOW

In our journey to champion social impact, we have built our theory of change around four **thrust areas – Employability, Health, Education and Environment**. In each of these thrust areas we have identified the intended impacts which are reflective of the needs of the communities we work with in the specific thrust areas and the geographies of our initiatives. **Our projects and the initiatives we support in each of these thrust areas are not in silos but intersect with one another.** We have chosen to follow program models where we can incubate new ideas and determine the best fit in the context of the geography and community. **The idea of promoting a fellowship model to implement initiatives focused on livelihoods and health is hinged on the Foundation's commitment to creating lasting change and self-reliance in the communities we serve.** They are also rooted in building capacities of the communities to contribute to climate action. Similarly, our initiatives in health and education sector are aimed beyond access to basic services making them a means to enable communities to have better opportunities through digitalized technologically driven interventions, contributing to address vulnerabilities of communities in the sustainable future. **We constantly seek collaborative partners, across the government, industry and civil society and work actively with the communities to find engagement models that could be replicable and scalable.**

“

“At MLF, our passionate community of problem solvers work with the most committed and experienced in the development sector to combine real-world experience with innovation and management. We are committed to improving the status quo at the grassroots and believe when people and technology come together, we will be able to catalyse change that can help overcome some key societal challenges of our times collaboratively.

”



Srinivasan T.R.
Chief People Officer

“

“Ethics and prioritizing community needs are at the core of everything that Microland Foundation does. We have worked hard to build a transparent system of governance that aligns not just with the established laws of the land but goes a step forward and makes a difference by creating sustained outcomes that drive value whilst strengthening our environment and societies.

”



Raja Gopalan S
Advisor to MD & Non
Executive Director

The theory of change that guides us in the journey to create social impact is shared below.

NEED

- Youth from vulnerable marginalised communities lack access to economic opportunities and skill development
- Women have limited access to sustainable income opportunities
- Patriarchal norms and practices restrict women from taking leadership roles and initiatives
- Persons with Disabilities (PwDs) have limited access to primary services and access to skills
- Lack of mainstream income opportunities for PwDs

INTENDED IMPACT

Youth, women and PwDs from vulnerable communities are able to increase their incomes by way of alternative livelihoods

INTENDED IMPACT

Communities are empowered and enabled to take initiatives on climate resilience and environmental sustainability

NEED

- Lack of skills and education to address climate change and environment induced disasters
- Better awareness among the communities toward climate resilience
- Livelihood opportunities addressing the environmental needs and sustainable lifestyle
- Better preparedness of vulnerable communities and marginalized groups to effects of climate change

NEED

- People from vulnerable communities have limited access to both primary and quality health facilities
- Lack of infrastructure in rural areas for access to quality health services

INTENDED IMPACT

Vulnerable communities are aware about health schemes and can access quality health services

INTENDED IMPACT

Children from marginalized communities have access to tech-enabled education and are sensitized to climate resilience

NEED

- Lack of access to tech-enabled skills and education for youth and children from marginalized communities
- Gaps in curriculum addressing climate change and sensitize the students with ethos of active citizenship



UNIQUENESS OF OUR APPROACH

At Microland Foundation, our approach to enabling social change is built on four values – Incubation, Ownership, Replicability and Scalability. Every project is conceived and implemented through the lens of one or more values, as we believe they will guide us to have a long term perspective for change.



Incubation

We want to remain nimble, agile and open to innovation for change. We believe we have to give time to try out innovative ideas on the ground, be open to learnings from the field and build on the knowledge that local communities have. **Incubating these ideas will help us determine the best set of solutions to address some of the most complex challenges we have chosen to address.** The best fit solutions can then be replicated and scaled in similar demographic and geographical situations. Most of our projects leverage technology that builds inclusion and enables design for scale. Building capacities of communities to access and leverage technology is therefore a key outcome, as it will enable them to become independent actors and agents of change in the long run. **We have incubated several ideas that create a sense of the community, enable sustainable use of resources and creativity, and enable collaboration between different actors to change.**



Catalysts

We have aimed to galvanise local community leadership and nurture change agents who are embedded in the communities and restore their agency for enabling change. **These community leaders or fellows as we call them, own the process as well as the outcome, and are provided the space and support for developing innovative ideas to address local challenges.** We have chosen to focus on building capacities for these fellows and provide them with mentorship and networks, which will enable them to have the skill sets and ability to be future ready and also become change agents in the communities, thereby becoming force multipliers in the future. **We also view this fellowship model intersecting with technology adoption as a significant enabler to improve community access to government schemes and services in the short, and long term.**



Replicability and Scalability

In all our initiatives, our approach is to create the resources and means to replicate the learnings and impact in other similar contexts and for communities with similar vulnerabilities. Our ongoing mission to foster replicability and foster scalable capabilities has been a collective endeavor, undertaken in collaboration with numerous partners. Their dedicated involvement with communities and successful implementation of interventions, as well as the tangible impact witnessed on the ground, have provided invaluable guidance for expanding and duplicating projects. Moving forward, we are committed to documenting the insights gained from our on-the-ground efforts and actively engaging with partners from various sectors to enhance outcomes in the years ahead.

EMPLOYABILITY



CREATING LIVELIHOOD OPPORTUNITIES FOR YOUTH,
WOMEN AND PEOPLE WITH DISABILITIES (PWDs)

A LIFE OF DIGNITY FOR ALL

India's rapid economic expansion has been skewed to a large extent for rural populations, especially where rain-fed agriculture is the primary source of income, and inequitable access to productive resources such as land, water, improved inputs and technologies, have benefitted only to a limited extent. Low literacy and limited skills have restricted income generation for all, but especially so for women and other marginalized communities like PwDs. In a large number of cases, even if communities have knowledge and skill, there aren't enough opportunities or market access to apply these skills and earn incomes that will enable a dignified quality of life.

Microland Foundation (MLF) has aimed to develop a comprehensive program to create alternative livelihood opportunities that are inclusive and embedded in the contextual realities of communities for most sustainable results.

The model aims to help communities develop skills and abilities that not only enable them to pursue jobs that generate income, but also turn them into leaders who can transform their community over time.

This approach involves selecting capable youth, including women and People with Disabilities, and training them in digital and technology-based livelihood initiatives that are most suitable to pursue in their local area.



Economic and Environment Justice (EEJ) Fellows attending business plan and marketing training session

“

The initiatives and partnerships forged to create better employment opportunities for youth, especially women, and access to financial services resonates with the national goals of Samagra Bharat Saksham Bharat that aim to 'leave no one behind'.

”

Karishma Bhuyan

Senior Manager - CSR
Microland Foundation



► Creating community change agents

In the past three years, MLF has sought to partner with organisations that have a deep community connect and a shared vision to build inclusive and sustainable livelihood models. Our partnership with South Asia Women Foundation (SAWF-IN) and Technology Informatics Design Endeavour (TIDE) has made significant progress in developing the capacities of fellows, who have been chosen from within the community. The initiatives have resulted in several encouraging results that makes us believe that we are on the right path to create sustainable and transformative change.



► Space to ideate and experiment

The construct of the fellowship model that MLF supports with its partners enables the creation of locally relevant and environmentally sustainable livelihood opportunities within their communities like organic farming, production of vermicompost, poultry farming, art, and handicrafts. Providing the opportunity for fellows to incubate diverse livelihood ideas improves ownership and organically encourages development of locally relevant best practices.



► Building skills and strengthening social capital

Fellows have gained exposure through developing capacities specific to their needs and initiative, building networks and connections, and accumulating the necessary social capital which they can transfer to the community. Mentorship, peer-to-peer networks, personalized capacity training has built an integrated leadership opportunity for all the fellows in both TIDE and SWAFIN fellowship projects.



► Building self-reliance

MLF has incubated initiatives for championing innovative business models with Mitti Café creating the space and resources for PwDs to manage self-employment initiatives and become self-reliant.



► Including the most marginalised

MLF in partnership with Biswa Gouri Charitable Trust has created opportunities for contextual skilling of individuals with autism and intellectual disabilities in Bangalore. In partnership with Kinder Trust, MLF has launched project Tarvi for people with visual disabilities in the Nilgiris. The programs under the partnership has adapted tried and tested skilling models to contextually suit the local communities



► Leveraging traditional knowledge to build sustainable livelihoods

In partnership with Astitva Trust, MLF is supporting livelihood opportunities for the Kurumba Tribal women who are one of India's Particularly Vulnerable Tribal Groups by helping them leverage their traditional knowledge to build capacities and improving incomes.

MLF's employability initiatives - Intersection with SDG and national goals



The initiatives of Microland in the thrust area of employability through the fellowship programs like DigiPreneurs and Environment and Economic Justice are small but firm strides in the quest to achieve equal rights to economic resources and access to basic services for all, intersecting with SDG 1.4.



Digipreneur providing services to the community members at the digital kiosk



Kurumbadi hamlet women in tailoring training centre



The MLF goals and vision of creating opportunities and employability contribute to SDG 5 on gender equality through the Environment and Economic Justice Fellowship program. Our special focus on improving financial independence for women, girls and transpeople, specifically intersects with SDG 5.1 that aims at ending all forms of discrimination against women and girls everywhere, and SDG 5.5, that aims at ensuring women's full and effective participation and opportunities for leadership.



MLF's employability-enhancing initiatives also correspond to SDG 8. Our work contributes to SDG 8.3 through our initiatives for People with Disabilities and tribal women collectives leading to decent job creation, entrepreneurship, and providing access to financial services for the most marginalized and SDG 8.6, which aims to promote skill enhancement and employment for youth, women and People with Disabilities.



PwDs undergoing experiential training at a Mitti Cafe Outlet

Microland Foundation Digital Kiosk

Bringing doorstep services to every citizen through a community-led entrepreneurship model

Partner:



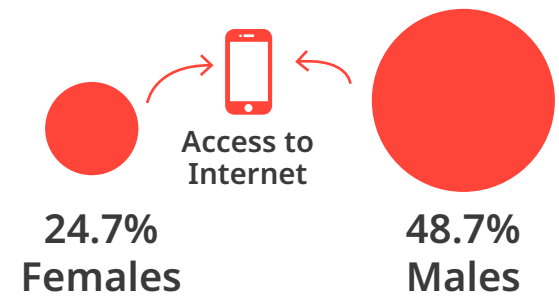
Technology Informatics Design
Endeavour

Introduction

The Indian government's Digital India umbrella program has transformed the way citizens in India access government schemes and services. From Aadhar to services like DigiLocker, and engagement platforms like eGov, technology and accessible internet has really enabled the government to come closer to the citizen. However, this access has not been uniform.

The adoption of mobile enabled digital technologies is growing at a fast pace in rural India but access to digital services in rural India is still limited in terms of infrastructure and reach.

This gap is especially heightened for women in rural geographies with only 24.7% of females accessing the internet as opposed to 48.7% of males. (Source)



Digipreneurs group attending training

Need

During the lockdowns in 2020 owing to COVID-19, a significant number of youth and migrant workers returned back to their villages from the cities in which they worked across India.

In Tumkur district of Karnataka, where more than 50% of the households do not own land and 98.24% of people live below the poverty line, the lack of access to digital services and citizen-benefitting schemes that the government was providing was particularly challenging, as it meant travelling long distances at considerable expense to the citizen service centres or the nearest town to access the schemes digitally.

“

MLF and TIDE realized the importance of not just addressing the immediate need but also one of building sustainable community access to digital services that can enable Digipreneurs to be more self-reliant and create new opportunities through digital literacy and easy access to digital services.

”

K Ravichandran

Consultant - TIDE

98.24%

people living
below the poverty
line in Tumkur,
Karnataka

Image Source:
<https://hindi.nativeplanet.com/travel-guide/top-5-places-to-visit-in-tumkur-karnataka-003586.html>

Outcomes

In partnership with TIDE, MLF identified and trained 20 aspiring youth from the community in digital and computer technology and through a fellowship model, supported them to create digital kiosks, where they could provide information and access to government schemes to communities right at their door step. These Digipreneurs were supported to pursue this endeavour as a sustainable entrepreneurial model, in three ways:



Building capacity to improve engagement with the community



Institutional arrangements & infrastructural facilities for setting up Digital kiosks and running them independently



Maximizing the livelihood potential of the Digipreneurs for retention & sustenance of outcomes

The program's key objective was to enable communities in over 100 villages in Tumkur to discover, apply and benefit from welfare schemes at the lowest cost and maximum ease of access.

The Digipreneur program is also a step in the direction of addressing the aspiration of promising youth to keep pace with the opportunities provided by the accelerated pace of digital transformation in India and actively include vulnerable groups to participate in this transformation, aiming

"to leave no one behind by leaving no one offline."



The program has been running for over a year as a proof of concept in Tumkur with the commitment to strengthen Digipreneurs' capacity to enable them to address priorities for and of the community and inspire local support to secure sustenance in the long run.

Kiran B, Senior Manager, TIDE



TIDE fellows in a training session.



The State facilities are really useful, but they need to be provided at the least cost to the last citizen. Otherwise, at the bottom layer, the last person in the chain might find the system too complicated to be useful. Today, these entrepreneurs are handheld with a feedback loop mechanism, which collects regular performance data, covering services, incomes, challenges, and new opportunities. The support framework helps the entrepreneurs with a business plan, maintains sales and expense data, provides marketing support, and introduces them to new schemes along with giving hardware service support and mid-way refresher courses. At many Kiosks, the spirit of entrepreneurship has helped the entrepreneurs multiply auxiliary income opportunity.



Kalpana Kar, Trustee
Microland Foundation

Mapping community needs for better and contextual access to schemes

To ensure relevance and sustainability of the initiative, community needs were mapped as a first step, and over 69 most relevant services that serve the communities covering the villages, were identified. The identified fellows were trained and equipped with digital skills, including usage of computers and digital tools. The mapping of needs and the training has equipped the Digipreneurs to respond to the specific needs of the community within their villages, and enable active adoption of these services by communities.

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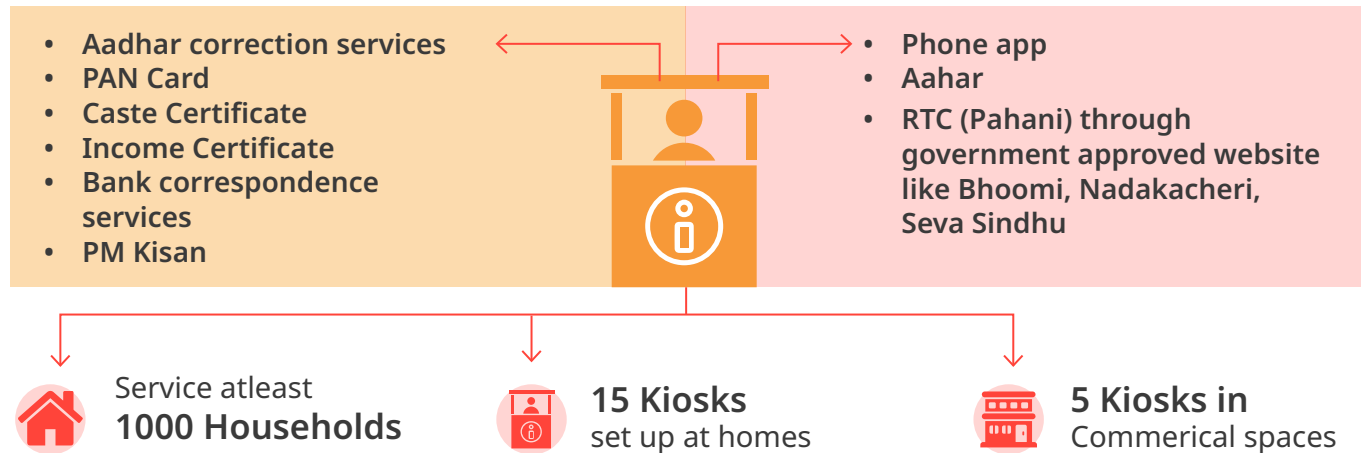
I was not aware of computers at all but now I have set up my own kiosk and live independently
Soumya, a Digipreneur

”



Resource support for community access to diverse range of schemes

The locations of the digital kiosks have been planned such that each fellow is able to cater to at least 1000 households on an average. To ensure active engagement with the community and timely access to information, 15 kiosks have been set up at homes of the fellows and 5 in commercial spaces that are actively visited by community members. The fellows have successfully helped the community access a range of critical government schemes including



On an average each fellow has helped access over 78 schemes, with every village showing a diverse pattern of access based on the needs of the communities.

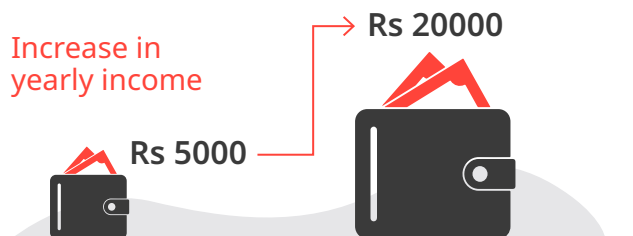


TIDE fellows with MLF team in Digipreneurs Conclave

Building relationships and capacities

To build the credibility and ownership of the fellows in the region, they are encouraged to build relationships with key stakeholders such as Panchayat, Taluk officers, District officials etc. through structured outreach programs. These programs create the relevant exposure and help in sustainable access to information. In addition, systematic training and mentoring support has been provided to pass the common service centre (CSC) ID exam which enables them to unlock the state and central government schemes for the community, thereby also increasing their income opportunity.

80% of the fellows cleared the Common service centre exam in the year 2022-23, a digital access initiative by the Indian Government under the Digital India program and 12 fellows cleared the final exam and got a CSC certificate. These have enabled the fellows to increase their yearly income from Rs 5000 to Rs 20000 in many cases. A cumulative earning of Rs 17,05,000 was made by 20 fellows over the last 11 months.



“Today, the central and state governments run hundreds of schemes to benefit the needy. However, community access to these schemes is extremely limited. The rural beneficiaries travel multiple times to access schemes, lose out on daily wages, and end up paying middlemen. By the time the benefits arrive, if they do at all, the spirit of the beneficiary is almost broken.”

Santosh, a Digipreneur

Maximizing potential through mentorship

All fellows have been introduced to veteran Digipreneurs for peer-to-peer learning and mentorship. They have already started embedding the best practices learnt in their program. These opportunities have helped the fellows achieve personal and community goals at the same time making the fellowship a win-win model for all.

“We are trained in digital services, and we help the community with key information that helps them access government entitlements. Most of the community members live in information darkness. Our Digital Kiosks help community members claim benefits in the critical areas of health, education, social and financial inclusion, livelihood, and employment. Now, we are also earning a stable monthly income of Rs. 6,000 - Rs.8,000.”

Salma, a Digipreneur



TIDE fellows attending a training session

On the road to establishing self-respect and identity – Pushpa's journey

Pushpa, a 25-year-old graduate, She aspired to become independent but was married at a young age and soon became a mother, which added to her other responsibilities. Pushpa's identity and decision making was restricted within and outside the household because of her lack of financial independence.



Kuching village of Tumkur district in Karnataka where **4.5 lakh households** belong to daily wage labourers or to those who earn their livelihood from agriculture related activities.

TIDE Digital Kiosk



Training of Digipreneur



OUTCOMES - Pushpa has been providing digital services to the local community members of her and adjoining villages. Based on the digital training and response from the community to access the service, Pushpa has invested in her own lamination machines indicating an important outcome of the program. **She is now earning between 6000-8000 rupees in a month**, which has helped her gain confidence and a sense of identity. "DigiPreneur" Pushpa is inspiring many others in her village to acquire digital skills and use that to access government schemes and explore livelihood options that were not considered before.



Rs 6000-8000

Monthly Income



Transforming Grassroots Sheroes into Ecopreneurs

Partner:

SAWF IN
South Asia Women Foundation India

South Asia Women Foundation India

Introduction

Gender inequality is a well-documented and persistent issue that has existed across different cultures and societies throughout history. In India, cultural influences have traditionally put women, and especially trans individuals at a disadvantage, economically and socially rooted patriarchy. For example, women, who typically handle the food security and livestock of any average household, are often not included in the planning or decision making in the management of these resources. Their work often goes unrecognized and underpaid, both in agriculture and non agriculture related employment. Trans individuals face exclusion from mainstream employment and society to an extent that in many geographies, even to healthcare and other basic services access is difficult for them.

Need

There is a need therefore to create livelihood opportunities through a model that can achieve economic justice outcomes for women and trans individuals in our society with interventions and strategies rooted in intersectionality that have the best potential to address pre-existing inequalities and socio-economic challenges faced by them.

Outcomes

To ensure that the livelihood opportunities are sustainable, MLF strongly felt the need to incubate livelihood intervention ideas aligned with the contextual realities by leveraging locally available resources. **MLF in partnership with SAWFIN developed the fellowship model and approach that can build and strengthen the capacities of women and trans individuals to become change agents within the community. The model will create a transformative and sustainable impact in the long term in improving the economic status of the fellows and helping them build a dignified life for themselves and the communities with whom they are working.**



MLF partnered with SAWF-IN to address the needs of women like Bujji and similar leaders from trans individual communities with the goal to achieve gender inclusiveness through a model that establishes connections between economic opportunities and ecological sustainability. **In this program, 5 fellows located in remote geographies of four states in India are supported to work on interventions that are building economic resilience in an ecologically sustainable manner.** The fellowship model aims to enhance the leadership, agency, visibility and skills of women and trans people from marginalized communities. Presently the fellowship program is designed to support an individual's initiative and efforts for three years. This would mean a focused effort towards assessing and supporting each fellow based on mutually identifies goals and needs.

The MLF's focus in this program has been to:

Create holistic program design aimed at measurable impact

The program design includes gender inclusive impact assessments, program management, qualitative research, and monitoring & evaluation of interventions conducted with the 5 fellows who are supported through this Equality and Economic Justice (EEJ) program.

The socio-economic profile of the participants in each of the fellow's project areas was mapped in the baseline study to understand their needs and work out a contextualized plan to support their initiatives. These work plans and subsequent trainings have deepened the understanding of fellows to monitor and capture change effectively.

So far, the fellows have impacted 217 direct and 5450 indirect beneficiaries.



Manisha, EEJ fellow creating new handicraft products with her group

Build capacities of microentrepreneurs to enable self-reliance

SAWF-IN supported by MLF organized a training session on "Business Plan and Marketing Strategy" delivered by Swayam Shikshan Prayog (SSP) in Latur, Maharashtra. The need and importance

The Fellows' Initiative

An intersection of economic justice outcomes with environmentally sound strategies



MANISHA

Kangra
Himanchal Pradesh

has mobilised 20 women earlier working as field labour

to create Bargat Collective engaged in making and selling handicrafts through Green India Company, Creative Dignity, Giri Foundation, Roots community, NIFT Kangra, and online marketing.

Women have started earning approximately Rs. 2,500 every month and in months of festivities the income rises to about Rs. 3,500.

of leveraging funds at the local level, and networking with other organizations or individuals working in their area to look upon chances of collaboration was discussed in the session.

Through this practice-oriented capacity building initiative, the earning potential of women has grown from negligible amounts to around INR 4000 per month.



EEJ fellows during a workshop

Facilitate Mentoring support

The EEJ fellowship program recognizes the importance of mentorship in achieving its objective of empowering women and transgender change-makers to enhance economic and ecological resilience in their communities. **To provide effective**

mentorship support, MLF's partner SAWF-IN has developed a mentorship guideline through the expertise of social scientists and SMEs. These guidelines provide a clear direction for mentors to assist fellows in their entrepreneurial journey offering a method to evaluate the success of mentorship engagements. Each fellow has been assigned a mentor who provides support and guidance in their entrepreneurial journey.

Fortnightly mentorship sessions which are designed as a critically reflective exercise has been initiated with three fellows. The mentorship sessions have guided the fellows to work on immediate goals and intermediary goals and structure short term targets like setting up their social media handles and marketing profiles.



EEJ fellows attending a session on "strengthen your network"

The Fellows' Initiative



BUJJI

Nandigam
Andhra Pradesh

has persuaded 50 women to practise kitchen gardening and 10 women to produce vermicompost.

Both the groups are able to earn income through the activities.



REHENA MOLLA

Sunderbans
West Bengal

has a cohort of 60 women who have become poultry producers and 38 of these women are earning incomes through the activity.

Creating a shared vision of change

“ A peer-to-peer learning meet aimed at building shared vision and enhancing ownership was designed and executed. The first such meet, organized in Kolkata, showed how powerful this tool could be in creating a reflective, learning environment, where the fellows reviewed their projects critically, came up with collective learnings and identified ways of working together.

Anuradha Rajan, Executive Director, Sawf In

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[Click to Play Video](#)

The Fellows' Initiative



RAINA RAY
Dhapa
West Bengal

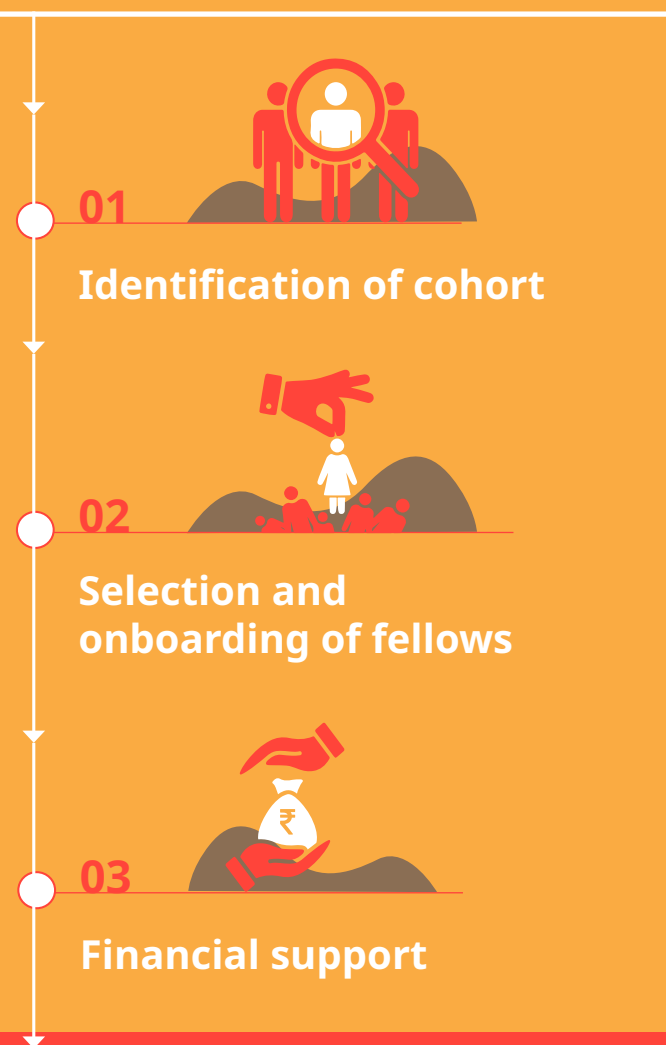
and her cohort of 25 transpeople
has managed to lease land for organic farming, initiated 3 SHGs and are pursuing with authorities for a shelter home for the community.



KIRTI VARTHA
Palgarh,
Maharashtra

has mobilised a group of 120 DHAVALERI women
to form a collective for creating warli art and handicrafts.

MLF ENVIRONMENT AND ECONOMIC JUSTICE FELLOWSHIP: **HOLISTIC APPROACH TO BUILDING COMMUNITY CHANGE AGENTS**



Sheroes of Change

“

I have had the pleasure of witnessing Kirti's amazing work within the Warli community over the past year. She has been relentless in her efforts to promote traditional livelihood practices led by Warli women, and her advocacy for the rights of Dhavaleri women to perform rites during Warli marriages is truly inspiring. Kirti's dedication to consciousness-raising within the Adivasi community, especially women, is a testament to her commitment to preserving the rich cultural heritage of our region. I am pleased to see that her efforts have resulted in 36 marriages already being solemnized by Dhavaleri women. Kirti's work is a step towards a more equitable and sustainable future for the Warli community, and we are proud to support her in this journey.

”

*Panchayat member from Kirti's Village
(Palgarh, Maharashtra)*

“

I was rejected by my family, and I work with what people reject in the name of waste. I run a collective of Transgender Waste Collectors (TWC) in the Dhapa garbage dumping ground near Kolkata to build awareness of safe waste management processes and develop sustainable livelihood opportunities for the group. My work is very intense, as is my life. Amidst all this firefighting, I have never had time to pause and relax. I kept doing what I was meant to do. When I visited another MLF ecopreneur, Manisha,

04



One-to-one mentorship

05



Networking opportunities for fellows

06



Capacity development

07



Ecosystem building

in the mountains of Himachal Pradesh, I felt healed by nature. Seeing other women work on the ground and finding a way for themselves sent me back charged. This cross-learning and sharing is the beauty of MLF fellowship model.

Raina, Fellow

”

“

Being a part of BARGAT has been a life-changing experience for me. As a member of this collective, I have not only gained new skills in making innovative handicraft products using pine needles, but I have also been able to contribute to the sustainability of my community through a more reliable source of income. Working with more than 20 women in this organization has been inspiring, as we come together to create beautiful products that not only benefit ourselves but also promote sustainability. I am grateful for the opportunity to be a part of BARGAT and to work towards a more sustainable future for my community.

Community Member

”

Bujji's Struggle and the Need to Support her initiative

A young widowed woman, mother to two daughters, Bujji has raised her daughters, fighting the odds of society. Her zeal and motivation to provide a better life to her daughter, pushed her to look for work and that is how she became associated with social development work in her village. **She soon became part of the Internet Sathi as part of the Society of Women and Technology, funded by Tata Trust.**

The experience helped her gain the skills and confidence to support more disadvantaged women like her. Soon **she got associated with many community-based organisations to support their work in her village around health, sanitation, and skill development**, and also gained considerable rapport with government officials, and elected and influential leaders through her work. Bujji aspires to work on solid waste management in two villages of Andhra Pradesh. The domestic solid waste in her village is not collected and managed well. **Changes in lifestyles have resulted in increasing usage of plastics, tetra packs, and electric and electronic products** in villages and added to the problems of solid waste management in rural areas.

Though solid waste generated in rural areas is mostly organic and biodegradable, it is becoming a major problem as the waste generated is not segregated.

She has a model for converting the waste to vermicompost by involving 70 other women in this initiative.

The potential that women like Bujji show through their leadership skills and idea for a sustainable initiative needs to be supported to strengthen responses promoting women's and trans* individuals' economic participation, environmental concerns, and access to entitlements. It also calls for support to initiatives that strengthen women's and trans* individuals' collective struggles against inequality and discriminatory practices.



Bujji, EEJ Fellow with members of her group showcasing the vermicompost bags produced and sold by them

Building an inclusive ecosystem for People with Disabilities to realize their full potential

Partner:



Biswa Gauri
Charitable Trust



Mitti Café



Kinder Trust

Introduction

In India, there are 30 million individuals with disabilities, many of whom lack skills or have only basic skills, limiting their ability to fulfill their potential and live a dignified life. Even among the small percentage of disabled individuals who have graduated in engineering, computer science, and related fields, only a few are able to secure employment and reach their full potential. ([Source](#))

Need

There is a crying need to create an inclusive ecosystem that allows People with Disabilities to live and work without discrimination. MLF along with its partners envisions to address the need for skill development and creating livelihood opportunities for them in a holistic manner.



Outcomes

In partnership with **Kinder Trust in the Nilgiris, MLF has rolled out diverse models in uncharted areas** and that enhance livelihood opportunities for People with Visual disabilities by catalysing contextual training initiatives that map trainees' interests, level of ability with the needs of the market.

With Mitti Café, MLF incubates innovative business models that not only employs People with Disabilities but provides a space for creating visible awareness of their capabilities and creating a sense of dignity.

MLF has collaborated with Biswa Gowri Charitable Trust to create skill-based opportunities for children with autism who are often the most marginalized and vulnerable, with limited schemes and supportive initiatives to shape them into empowered individuals.



Creating Possibilities through New Avenues

An innovative model housed in the Nilgiris has been initiated for the first time that aims to enhance livelihood opportunities for People with Disabilities.

The journey has begun with the initiation of TARVI (A Training and Resource Centre for People with Visual Disabilities).

In partnership with Kinder Trust, TARVI aims to equip People with Visual Disabilities with relevant digital skills to enhance their employability. **The 4-month digital training course is designed by National Association of the Blind Karnataka (NABK) as the technical partner and orients the trainees on MS Office, operating systems, accessibility devices, social apps, etc.**



Click to Play Video

The course structure, duration & selection of the cohort has been contextualised to the needs of the community keeping in view their educational backgrounds, diversity & aspirations along with the ideal trainer-trainee ratio. Since introduction of the course, 400 applications have been received to enroll in the digital training course, suggesting the critical demand and need for such programs in the Nilgiris.

The program has received support from the other stakeholders like local administration, with Mr. S.P. Amrith, IAS Collector, The Nilgiris District appreciating the model as the first of its kind in region.



Contextualizing Skilling and Livelihood for Individuals with Autism

MLF in partnership with Biswa Gauri Charitable Trust (BGCT) recognizes the need for early intervention for individuals with Autism and other Intellectual Disabilities and creates support strategies at each stage in their educational, social, emotional and communicative development. The partnership has created an inclusive production unit that will employ young adults with Autism and other Intellectual Disabilities, as a way of providing them with the requisite employment-linked skilling.

The focus of this project is to accommodate adults with a wide spectrum of skills where a role can be found based on their proficiency levels.

The design and implementation plan of the program situates the strengths, needs, and comfort of individuals with Autism Spectrum Disorder at the center. This is backed by research showing that typical autistic characteristics such as attention to detail, affinity for repetitive tasks, etc. are traits that work well in workplaces where these skills are of value.



A group of autistic children in a session



People with Disabilities learning to make products

Championing Inclusive Business Opportunities – on the Road to Dignity

With the commitment to champion inclusive business models, **Microland Foundation** has **partnered with Mitti Café to set up a café managed by People with Disabilities (PWD)** in a bustling IT business hub in Bengaluru, Karnataka with the twin benefit of generating sustainable livelihoods and creating awareness about inclusion with every meal served. **The Café will cater to 500 people on a daily basis.**

“

Employment linked experiential training is also an integral part of the program and 50 People with Disabilities have been trained so far and being placed in various Mitti Café outlets in Bangalore.

”

Alina Alan, Founder, Mitti Cafe



PwDs undergoing classroom training on soft skills



PwDs undergoing experiential training on F&B production

Leveraging traditional knowledge to enable tribal communities to be self reliant

Partner:



Astitva

Astitva

a project of MSDS Trust

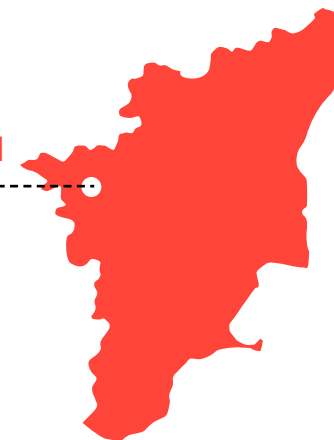
Introduction

Microland Foundation has an established presence in the Nilgiris where we are committed towards the progress of the region in a comprehensive and holistic way that leaves no one behind. The Coonoor district of Nilgiris has a population of which 27,032 are tribals from six tribes that are listed in India's particularly vulnerable tribal groups. [\(Source\)](#)

The development pattern of the region along with rapid growth in tourism has not benefitted the tribal communities of the region. **The roads, highways and power stations built in the region, while important for the economic growth of the region, has taken up a large part of the forest land, forcing many tribal communities to leave traditional occupations and dependency on forest and become agriculturists producing potatoes, vegetables and even tea.**

Several tribes, including the Kurumbas have become dependent on daily wage work in agriculture, construction and other means of informal employment. Such changes in lifestyle and occupation has impacted the tribal women where they have meagre to no employment opportunities, limited mobility, lack of access to technologies and social service schemes and a sharp decline in their health status.

Coonoor,
Tamil Nadu



POPULATION

7,20,000



Tribal Population

27,032



Tribes

6



The current socio-economic challenges faced by the tribes of the Nilgiris and especially by their women, call for breaking the cycle of marginalization through a sustainable socio-economic intervention and a prompt resumption of economic activities facilitating better income security and improved health and nutritional needs of these communities.

The Kurumba tribe, with their rich cultural heritage of traditional arts and crafts, are also affected by the changing socio-economic patterns in the Nilgiris. With the changing times and influx of modernization, Kurumba art is on the decline, with the community struggling to make their ends meet and have a sustainable livelihood.

Based on an analysis of the current situation of the tribal groups and women in the Nilgiris, MLF recognizes the urgent need to revive their traditional knowledge and art forms, and help them economically uplift themselves through setting up production units, conducting training and market research, producing a line of products, and marketing them online and in local markets.



Products developed by Kurumba collective

Outcomes

MLF has partnered with Astitiva in the Nilgiris to support the Kurumba collective consisting of tribal women from

- Pudukadu
- Kozhikarai
- Periya Kurumbadi
- Chinna Kurumbadi

tribal hamlets with a goal to equip the women's enterprise group in necessary skills and knowledge to sustainably manage the project on their own. The aim, in the long run, is to make them independent and enable them through technological interventions like digital marketing, to have a secure livelihood as well as revive their traditional Kurumba art forms.



Women at work

The initiative's focus is to give skills-based training to the Kurumba women that will further build their existing capacities. Therefore, the focused skills in which these women are being trained are tailoring, embroidery and the use of modern machinery.

Based on the training, these women are now specializing in making tote bags, pouches, wallets and bottle holders enhancing their income by 2000-5000 rupees in a month.



Women in the tailoring centre



Health



EMPOWERING COMMUNITIES THROUGH ACCESS TO
QUALITY HEALTHCARE FACILITIES

Healthcare needs in India have rapidly grown owing to population growth and greater awareness of the importance of quality health. The government of India enables free public healthcare to all, however, accessibility of quality healthcare facilities for diverse groups living in remote parts of India has been a fundamental challenge in both public and private healthcare systems. It is not uncommon for communities living in rural areas to travel over 100 km to access healthcare facilities which puts an enormous burden on them economically. India currently has almost 50% fewer community health centers than the stated requirement, and poor health indicators in remote rural communities are a direct consequence of lack of timely access to quality healthcare. [\(Source\)](#)

The health accessibility needs of communities living in rural and urban areas got further accentuated with the COVID-19 pandemic. In the two years between 2019-2021, it became apparent that our healthcare needs were disproportionately higher than the capacity of both the public and private healthcare systems. **At present a single allopathic doctor caters to the need of 10926 persons in India which makes it extremely difficult for doctors to address all types of concerns and needs of their patients.** [\(Source\)](#)

Given this context of the overall healthcare needs in the country, along with the increased burden on India's healthcare system owing to the pandemic, **Microland Foundation (MLF) aimed to contribute to improving healthcare outcomes through infrastructure upgradation, process upgradation through tech deployment and above all facilitate quality healthcare accessible for communities living in geographies that have difficult terrains, like the Nilgiris.**



MLF Team engaging with patients undergoing treatment in newly constructed Dialysis Unit

“

We focus on outreach health programs that reduce the discovery-delivery disconnect by bringing health education and health screening services directly to community members. The outreach services directly provide closer surveillance of the population, improve the continuum of care, and make collecting, retrieving and disseminating health information more efficient and comprehensive

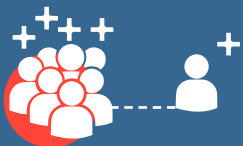
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Kalpana Kar, Trustee
Microland Foundation



► Building Community Healthcare through a Public-Private Partnership (PPP) Model

MLF's strategy in the healthcare sector endeavors to deliver cutting-edge medical services to the inhabitants of the Nilgiris. The organization employs an approach that is intricately woven into the local context and takes into account the unique geographical characteristics of the region. MLF has formed a partnership with the Rotary Club (Coonoor) to prioritize and enhance healthcare accessibility for all demographics residing in the Nilgiris. Adopting a public-private partnership (PPP) model, MLF is dedicated to addressing the challenges in the healthcare sector and alleviating the increasing demand for quality medical services. This collaborative approach aims to bring effective solutions and mitigate the burden associated with accessing healthcare.



► Inclusive Vision Towards Improved Healthcare for the Marginalized

Through the public-private model, the Government Lawley Hospital has undergone a

tech-enabled infrastructure upgrade, resulting in improved community outreach for healthcare accessibility. This initiative is rooted in the values of dignity and respect for various groups, including People with Disabilities (PWDs), women, and senior citizens, among others. The overarching vision is to establish healthcare systems and enhance their accessibility for marginalized tribal communities residing within a 10-20 km radius of the Coonoor district, who primarily rely on public healthcare services. Microland Foundation's healthcare initiatives are designed to address the specific challenges faced by these marginalized groups in the region, promoting inclusivity as a core principle.



► Harnessing Technology to Address Evolving Healthcare Requirements

MLF recognizes the existing and future need for technology-driven interventions in sectors like health for a prompt and adequate response to expanding community needs. MLF has partnered with charitable local institutions like Kotagiri Medical Fellowship Hospital along with public hospitals like Government Lawley Hospital to incorporate the latest technology-based equipment like dialysis machines, tech-enabled Out-Patient Department (OPD), and cardio neuro

ambulance service delivering quality health service to over 15000 villagers conducive to the unique demography and geography of the Nilgiris region.

These interventions have enabled the linking of health sub-centers, Primary Health Centers (PHCs) on one end with the district hospitals on the other end enabling the entire health ecosystem to function in a seamless manner as shown in the figure.

Healthcare Services



- Healthcare sub centers
- Primary Health Centers (PHCs)

MLF INITIATIVES



01
Lawley Hospital upgradation with Rotary

02
Setting up a dialysis unit at the hospital

03
Cardio Neuro Ambulance with KMF

Healthcare Services



- District government Hospitals
- Private Hospitals

MLF's health initiatives - Intersection with SDG and national goals

MLF's initiatives like the upgradation of infrastructure in Lawley government hospital and the life-saving ambulance service have not only helped in contributing to SDG 3 towards good health and well-being but also to SDG 10 working to reduce inequalities in terms of having access to health and other services, especially in the Nilgiris.



**GOOD
HEALTH AND
WELL-BEING**



**REDUCED
INEQUALITIES**

Aligned with the national goal of universal health coverage, accessible, affordable, and quality health care under the Ayushman Bharat and Pradhan Mantri Jan Arogya Yojana scheme, the MLF-funded healthcare infrastructure specifically contributed to SDG 3.8 by enabling access to quality and coverage of essential health services and SDG 10.2 by empowering and promoting social and economic inclusion of all.



COMMUNITY HEALTH

Upgradation and restoration of Lawley Hospital

Partner:



Rotary Club Coonoor



Government of Tamil Nadu

Introduction

India has made several strides in improving the public healthcare system, but acute differences remain in quality between rural and urban areas, as well as between government and private healthcare. **The NITI Aayog report 2021 titled 'Reimagining Healthcare in India through Blended Finance' highlights that 50 percent of India's population has access to 35 percent of hospital beds. This issue gets further accentuated in the case of communities living in remote and rural areas.** Moreover, the unaffordable medical access of private health facilities makes them inaccessible for the rural marginalized groups. Under the circumstances, the government referral hospital and the quality of healthcare in these hospitals are of real significance to the communities connecting them to tertiary hospitals. ([Source](#))

Need

The limited availability of essential healthcare facilities in the Nilgiris poses significant challenges for local communities. As a result, even treatable health conditions such as anemia, dengue, nutritional deficiencies in children and women, prenatal and postnatal issues, as well as other communicable diseases, can become life-threatening.

COVID-19 led to a significant rise in Non-Communicable Diseases (NCDs). In 2022 alone, the number of patients diagnosed with hypertension and diabetes in referral hospitals like Lawley Government Hospital in Coonoor has gone up manifold.

MLF realized the need for a sustainable approach to meeting the challenges of an ever-growing need for healthcare infrastructure that can address the unique needs of the communities in Nilgiris. MLF entered into a Public Private Partnership model with the Rotary Club of Coonoor and the Lawley Government Hospital to upgrade the hospital infrastructure to enable it to become the 'first choice' of healthcare seekers in the region. MLF's intervention for upgradation is with an aim to make Lawley Government Hospital, a Model Taluka Hospital as defined by National Quality Assurance Standards.

Outcomes

Approach to Creating an inclusive healthcare infrastructure

A two-pronged approach was followed in enabling the infrastructure to be inclusive and relevant to the needs of the communities. **First, was to build state-of-the-art infrastructure which catered to the needs of all groups and communities, especially women and People with Disabilities (PwDs). Second, was to create and facilitate systems that can address the needs of patients with specific NCD and conditions like diabetes, hypertension, kidney ailments, etc.**

The Lawley Government Hospital, as a result of this initiative, was converted into a 134-capacity bedded Taluk hospital and the first referral unit for six Primary Health Care Centers that can now meet the needs of communities across the district. A first-of-its-kind dialysis unit was set up in the hospital, for patients living within 150 km radius of the hospital. There is currently 100% utilization of the dialysis unit in three shifts with trained technicians.



OPD entrance at the time of renovation

A multistakeholder participatory process

The process adopted for upgrading the infrastructure was based on consultations with multiple stakeholders within the community. MLF initially began with meetings with Rotary Club and Lawley Hospital Management. The next step was to include other stakeholders like corporates and like-minded individuals from the community to obtain suggestions and recommendations. The Lawley Government Hospital is also a heritage building having a rich cultural significance to the communities living in the region. Therefore, architects and contractors were encouraged to study the building and determine the upgradation design keeping in view the contextual reality of the building's cultural importance. **A core committee was constituted of the various stakeholders to implement the process of upgradation.**



Interaction with Lawley Hospital Doctors and Staff to discuss project milestones

Creating access to healthcare with a high outreach impact



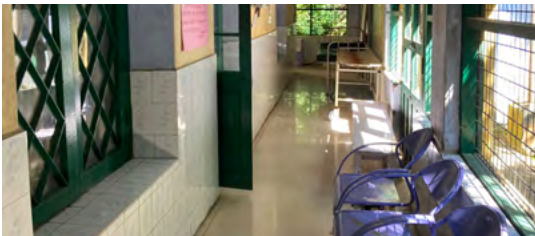


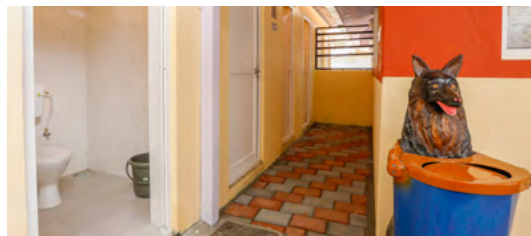




The upgradation of the hospital has provided an opportunity to reach the wider community and raise awareness and has helped in increasing the out-patient access from 200 per day to 600 per day. The Information, Education, and Communication (IEC) boards setup in the hospital have helped in raising awareness which has further resulted in increasing the patient footprint.

The improved infrastructure has facilities inclusive for various age groups, is weather-resilient (given the unique weather in the Nilgiris) with waiting areas for patients, ramps for accessibility, and other disabled-friendly facilities.

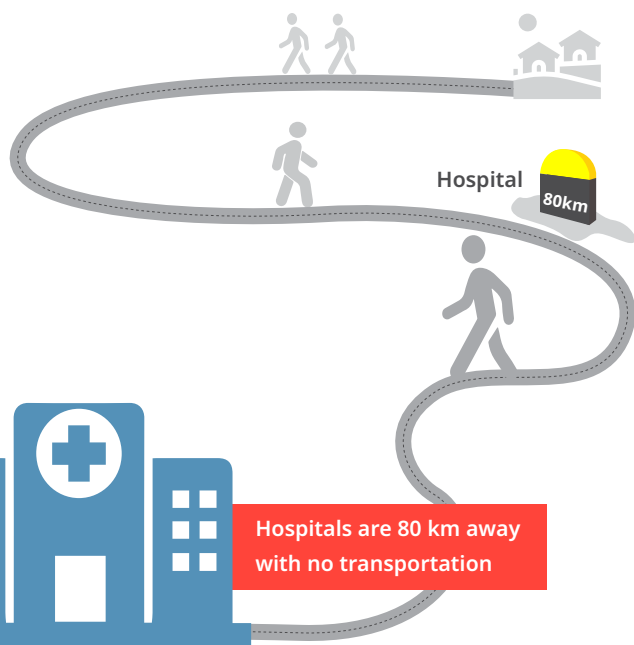


IEC boards setup in the hospital

Upgradation of Lawley Hospital at a glance

Areas	Before	After
1 Reception desk Reception desk with a nurse appointed to guide the patients and a single touchpoint registration system		
2 Waiting area A waiting area with messages to raise awareness on health priorities for the district.		
3 Toilets State-of-the-Art facility is now providing easy access to all especially the Elderly & PwD		
4 Consultation room 6 private consultation chambers established with a capacity of 400 out-patients a day		
5 Dialysis facility A free dialysis centre created and daily sessions provided this year		

Previously, the residents of Nilgiris district had to travel about 80 kms to Ooty or Coimbatore for dialysis treatment. To address this issue, a dialysis facility was established at Lawley government hospital. The center provides a modern and fully equipped facility free of cost to the community, specifically for individuals with renal conditions. Currently, the dialysis unit is operating at full capacity in 3 shifts, with over 7500 sessions delivered this year.



“

The hospital has an important role as the First Referral Unit in providing emergency obstetrics care and neonatal care and is critical in bringing down the Maternal Mortality and Infant Mortality rates. The newly inaugurated OPD facility would accentuate the infrastructure and would form an important link between the sub-centres (SCs), Primary Health Centres (PHCs) on one end and the district hospital at the other end. The commute of residents would be shortened, having a facility nearby would add to their confidence of getting medical aid sooner and will considerably reduce the load on district hospitals.

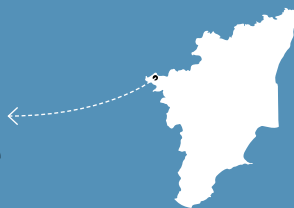
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Dr C. A. Vishwanathan
MS, Chief Medical Officer,
Government Lawley Hospital



Hope to live

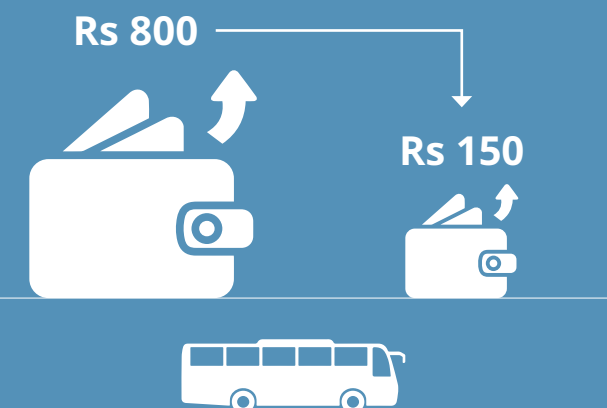
62-year-old Laxmi from Arungad village of Nilgris District



is suffering from Hypertension, Kidney ailment and is totally dependent on her sons for her survival. Her husband is old and has to take her for dialysis. She doesn't want her children to spend on her dialysis and medication as they have to look after their own families.

Microland's Free Dialysis at Lawley came as a blessing in disguise during this time for Laxmi. Through the Lawley Dialysis unit supported by Microland, she gets free dialysis and medication and her total expenditure presently is Rs. 150/- incurred towards both ways travel against Rs. 800 incurred earlier.

Travel Expense decreased from



“

I have no money to call my own. We depend on our children for survival. My joints hurt, hands shiver and I can no longer work or even cook said a distraught Laxmi.

”



FACILITATING A CONTEXTUAL AMBULANCE SYSTEM

Partner:



Kotagiri Medical Fellowship
Hospital

Introduction

Emergency response is a very important aspect of timely and effective healthcare services. Ambulance services play a critical role in the delivery of emergency response services. In most states in India, the number of available ambulance services is more than the prescribed numbers as per the World Health Organization (WHO) standards. For example, in Tamil Nadu, 829 ambulance services are available for a population of 754.6 lakh against 755 prescribed by the WHO. However, these numbers do not automatically determine the accessibility and usability of the ambulance services. This needs to be contextualized based on the quality of the ambulance service, the facilities required for patients to be transported, and the operationality of the service in the based on geographical terrain. **Additionally, the effectiveness of ambulance services is dependent on the nature and quality of equipment and facilities such as defibrillators, ventilators, and drugs required for use in critical or trauma-related cases.** A majority of these ambulances are just white vans with stretchers available to transport the patient. Therefore, the number of ambulances available does not get automatically translated to the quality of available life-support and emergency services. ([Source](#))

Need

These challenges get further accentuated in hilly terrains like the Nilgiris. The region already has inadequate health infrastructure which was stretched further by the onset of the COVID-19 pandemic. The Kotagiri district in the Nilgiris has one of the most difficult terrains in the region and has some of the most remote villages nestled in thickly forested areas. **The residing tribal communities in this area, like the Badagas, Kotas, Todas, etc., are also among the marginalized communities of the region.** The topography of the area with narrow lanes and untarred roads also proves to be a big deterrent for providing adequate and timely support to these communities.



Ambulance provided by Microland to KMF Hospital

Outcomes

Given the above context, MLF collaborated with Kotagiri Medical Fellowship Hospital, to provide and facilitate a state-of-the-art cardio-neuro ambulance to service communities living in 41 villages within the 10 km radius of Kotagiri. The ambulance service, with a 24*7 emergency helpline, and remodeled with a smaller body for easier mobility in the region has become a lifeline for the region by serving the dual purpose of delivering timely care as well as transporting patients to hospitals in Coimbatore for specialized treatment which may not be available at Kotagiri Medical Fellowship Hospital. The service has been deliberate in ensuring the last mile access through its contextual design and equipment to maximise the benefit for the community.



Inside view of fully equipped Ambulance

“

It is the spirit of community service, partnership, and dedication that drew MLF to support this COVID-19 health infrastructure upgradation and access project. The ambulance is additionally planned to assist the outreach clinics and be used for home visits, ensuring full and effective utilization and positive community health outcomes.

”









Sanu Mathew,
Senior Manager, MLF

AMBULANCE INFRASTRUCTURE

- Foldable stretcher with safety belt
- Oxygen cylinder
- Water service
- First aid service and model suitable for the hilly terrain

Beneficiaries

Outcomes achieved (Oct 21-Sept 22)

- | | |
|---|---|
| 1 Local population living in the area
 | 
358 people over 216 trips covering 14,887 kms |
| 2 Doctors and staff for community outreach
 | 
107 trips |
| 3 Critical patients living outside the area
 | 
40 critical patients availed the service |
| 4 Disadvantaged groups like tribals, daily wage earners
 | 
149 trips completed free of cost |



Nagrani, a 60-year-old daily wage worker had a critical lower limb problem that required medical attention. **However, her journey from home to the hospital was painful and uneconomical, because the terrain that people like Nagrani live in is not conducive for easy access for a door-to-door ambulance service.** The roads are narrow and uneven for any type of vehicular movement. When Nagrani had to undergo tests and seek treatment, the specialised ambulance facilitated by this partnership between MLF and KMF has provided her a safe, comfortable and economical option, that enabled her to seek timely healthcare and prevent further injury or complication.



The availability of emergency oxygen facility in the ambulance was life-saving for children like Ashok, an 8-year-old who developed an asthmatic condition, frequently requiring intensive care support. His transport from his home in the hills to Coimbatore was supported by high flow oxygen, nebulization and monitoring, ensuring his safety during the long journey.



The impact of the service created through a partnership between MLF and KMF has meant that the community members in the area who cannot afford health facilities are able to access it in a timely and effective manner, despite the inaccessible terrain and lack of adequate tertiary medical facilities in the Nilgiris.

“

Twenty of us from my village in Maharashtra had come to the south on a temple tour. We went to Rameshwaram and on our way back we went to Ooty and there I became sick and was told to go to KMF. At KMF, the support from doctors helped me get better. I wanted to get back home once I felt better and the transport service arranged at a reasonable price was the best solution for a very comfortable 14 hour journey back home. I began to feel so much better as I reached home. Thank you KMF staff.

”

Ananda Ramusarang R

Education



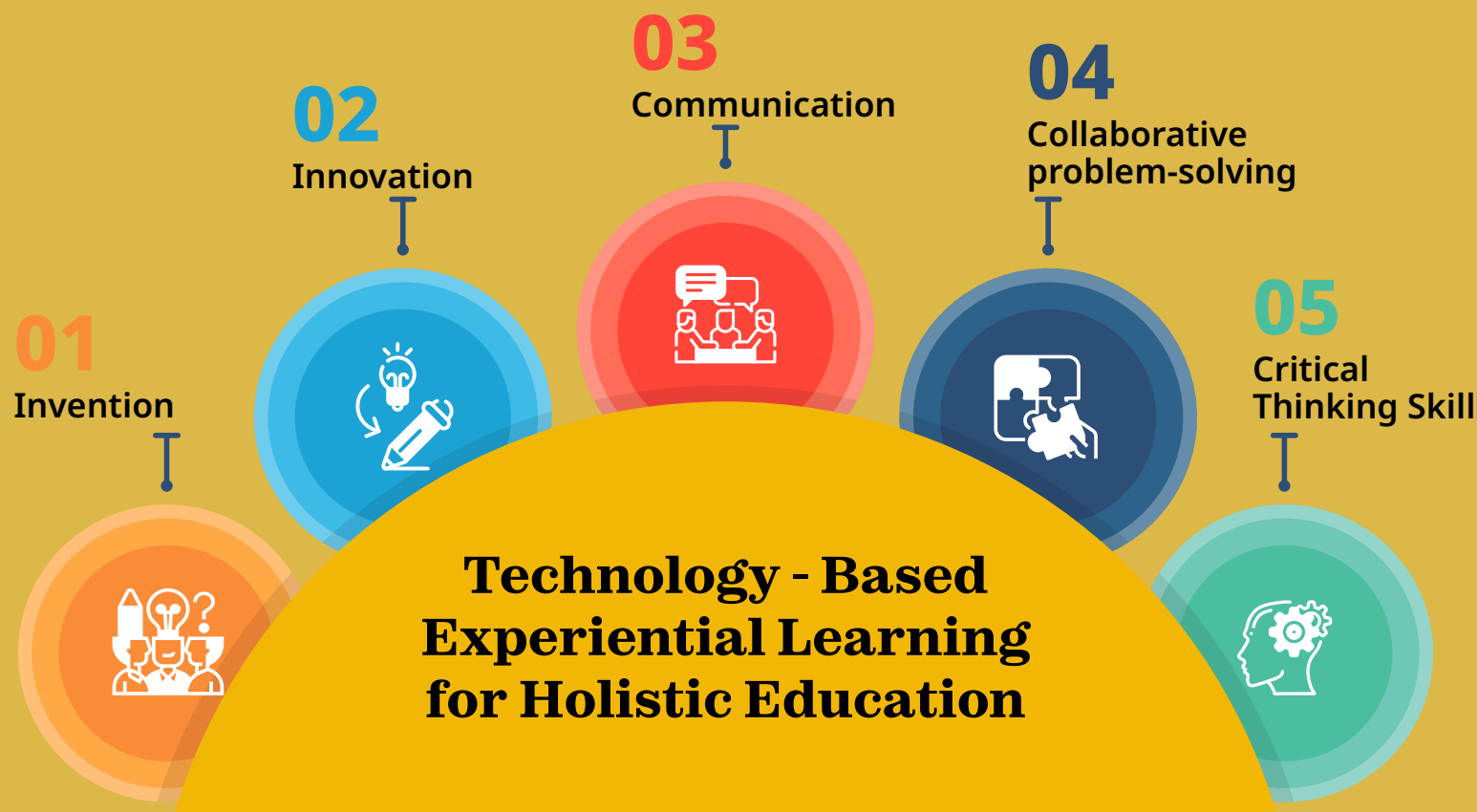
Building Future-Ready Skills

MLF's Tech-Driven Experiential Learning in Education Sector

India possesses the world's largest and youngest workforce, but faces significant skill gaps, with only around 5% considered formally skilled. This disparity arises from limited access to suitable training opportunities, hindered by geographical and financial barriers. The current education system fails to meet the needs of the youth, preventing them from fulfilling their aspirations. Additionally, rapid technological advancements render many

traditional jobs obsolete, necessitating updated skill training. It is crucial to ensure that education and skills training keep pace with technology, enabling sustainable and future-ready communities. Moreover, addressing climate change and promoting sustainable choices must be integrated into the curriculum. Ultimately, education and skills development should provide opportunities to combat socio-economic marginalization.

MLF prioritizes technology-based experiential learning focused on invention, innovation, communication, and collaborative problem-solving. It partners with organizations to develop future-ready skills and provide access to quality education, particularly for marginalized children and youth. MLF's projects aim to equip future generations with sustainable decision-making abilities and climate resilience skills.





Technology-enabled experiential learning – developing skills for future readiness

MLF has collaborated with **Learning Matters and the State Education Departments of Karnataka and Tamil Nadu** to develop experiential training programs that **enhance English language proficiency skills for children**. The initiative aims to ensure that every child is included, starting with a short orientation bridge course to assess students' proficiency levels and bridge skill gaps before entering the TARA class. Through gamification, students are motivated to participate, improving their communication skills and fostering confidence in interactions with peers, teachers, and the community. The intervention's design also empowers teachers and facilitators by showcasing student progress and effective teaching methods employed.

In collaboration with **Learning Links**, MLF has developed a program aimed at nurturing children's interest in science and technology during their formative years. The program emphasizes creating a conducive environment and providing hands-on experiences to inspire innovation and foster scientific curiosity. Its primary focus is to make learning engaging, fueling a passion for science and technology.

By making digital devices accessible to all children, the program encourages innovation and creates a learning environment centered around practical experiences..



Fostering Contextually Relevant Climate Action Education for Sustainable Living Opportunities

MLF strongly believes that any education can be holistic and sustainable only if it incorporates a deeper understanding of one's local realities. For communities in the Nilgiris, understanding their unique biosphere they live in and the climate change impact by way of frequent landslides, floods, and water shortages is critical. **MLF in partnership with Keystone Foundation and Tamil Nadu State Department of Education has introduced a contextually relevant Climate Smart curriculum that allows children of government schools in the district to be more aware of their local realities and be equipped with the knowledge and skills to be responsible citizens of the region.** The teachers' and facilitators' capacity has also substantially been built through this intervention to create a range of stakeholders who can take responsibility for future climate action. MLF's partnership with the Earth Trust and establishment of eco-clubs in government

schools aims at creating opportunities for children to understand the importance of environmental hygiene and build the necessary requisite skills for enabling a sustainable future life.

These initiatives are an example of how a collaborative approach through public-private-civil society partnership models can address the huge challenge we face in bridging the skill gap, especially amongst the most marginalized Indian youth.



Embracing Diversity: A Comprehensive and Holistic Model for Education

MLF envisions education as a way of improving both the mental and physical skills of children from diverse contexts and realities. **Furthering this belief, it has partnered with the Reaching Hand Foundation to support children from disadvantaged socio-economic backgrounds and create a holistic and responsive model of education.** The intervention specifically engages with children in foster care and leverages sports to build their mental and physical capacities. The program focuses on equipping them with tools to address any psychological trauma they face in the foster care institution.

MLFs initiatives in education - Intersections with SDG and national goals



4

QUALITY
EDUCATION



13

CLIMATE
ACTION

MLF is committed to aligning and contributing to the National Education Policy (NEP) and the Integrated Child Development Services (ICDS) schemes as we believe early interventions in education and creating an enabling environment for learning will significantly impact education outcomes. MLF proactively contributes to meeting **SDG 4.1** goals of ensuring free and quality education across gender, and **SDG 4.4** that aims to **substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship**. Education as a thrust area of MLF also intersects with **SDG 13** on Climate Action with programs like Climate Smart curriculum for government school children to take urgent action to combat climate change and its impacts. Such interventions bring out a cross section between SDG 4 and SDG 13 and through quality education seek to build capacities for climate crisis preparedness.



MLF EMBRACES TARA TO ILLUMINATE THE FUTURE OF YOUNG INDIA

Partner:



Education Department Tamil
Nadu and Karnataka

Introduction

English plays a vital role in India, serving as the language of business, education, the internet, travel, and cultural exchange. It remains an aspirational language for most Indians, offering career advancement, international prospects, networking, and social mobility. However, statistics reveal that fluent English usage predominantly exists among the urban elite, with rural areas experiencing limited proficiency. The lack of an English-speaking environment hinders language acquisition, exacerbating the urban-rural divide. **Currently, communities bear hefty expenses for coaching classes to acquire English skills necessary for success in all-India professional courses, further straining their finances. Efforts are needed to bridge this divide and provide equal access and opportunities for all.**

Need

In the state of Tamil Nadu, though English is taught as a second language in its 37,211 government and 8403 government-aided schools, as per the education policy in the state from Class II to XII, even after successfully completing their schooling, students are unable to communicate in English. **In Karnataka a large number of English medium schools do not have teachers and they struggle to teach in English as a language. Moreover an assessment of the spoken English capability of these students suggests that 90% of them don't have the required English communication skills. The Annual Status of Education Report 2018 suggests a 9% reduction from 53% in 2008 to 44% in 2018 ([Source](#)) in the number of grade V students in government schools who can read a grade II text in English. ([Source](#))** This is primarily because the teachers facilitating the English Language classes are under-confident in English communication themselves, which in turn, affects the students' learning outcomes. In tribal regions of the Nilgiris where communities' mother tongue is not Tamil but their own native language based on their tribal identity, learning English in a traditional way is even less effective.



Students in a TARA assisted reading session.

Outcomes

Towards improving English language proficiency in students in Tamil Nadu and Karnataka, **MLF partnered with Learning Matters and the State Education Departments to launch a unique English proficiency program in 18 schools in April 2022.** The program is run through a digitally enabled software - TARA, an intelligent combination of a voice-enabled, Alexa-based device and content developed by academic experts. The learning experience includes workbooks, activities, evaluations, and regular exercises. **TARA teaches students to communicate effectively in English through a combination of listening, speaking, reading, and writing lessons.** It has been received with a sense of deep assurance by various school communities.

MLF, as an incubator, has supported and nurtured the English proficiency program, and has helped to scale up the intervention. The TARA software has been a pilot initiative in the 18 schools where, through the future vision of MLF, the app will be integrated with the system to train teachers and act as an assistant for the teachers.

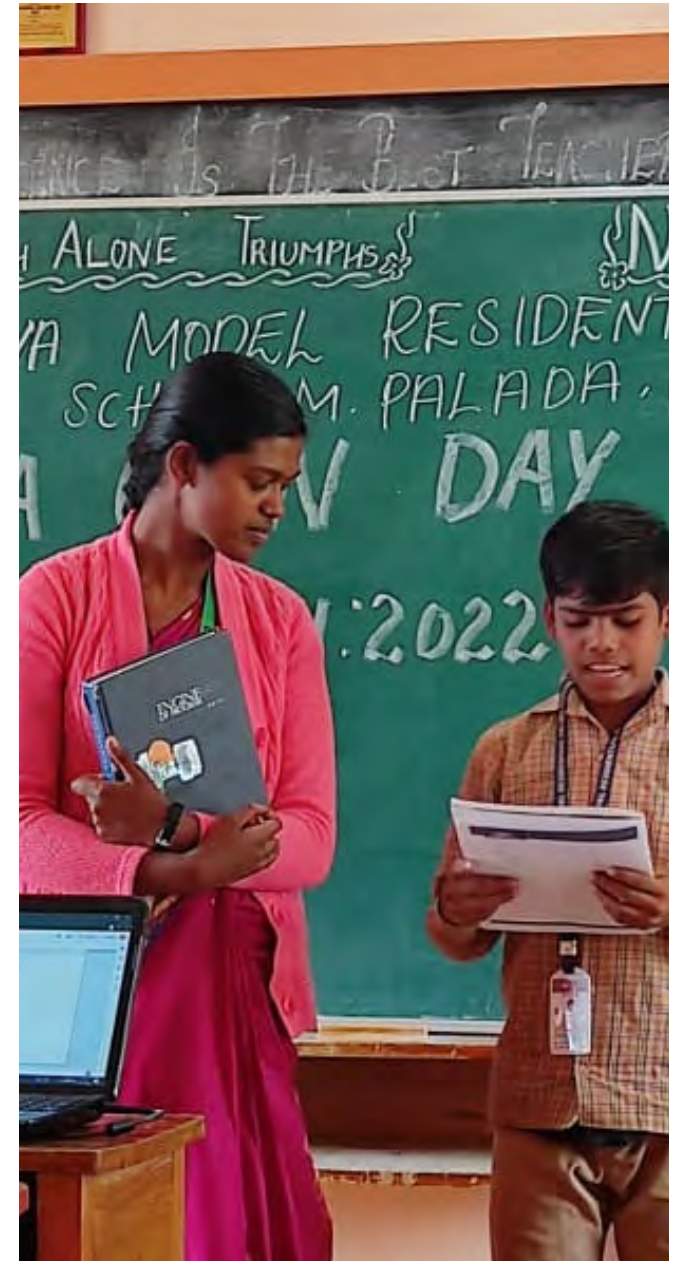
“

It is an important Private Public Partnership. We are thankful to MLF for implementing Tara for our students' benefit and for its commitment to making Tara a resounding success.

The program is improving fluency and confidence in spoken English among 1000+ students in schools across the Kotagiri, Coonoor and Ooty blocks. The charm of Tara is the conversational style of learning with a simple device powered by AI and the activity-based teaching by the facilitators,

”

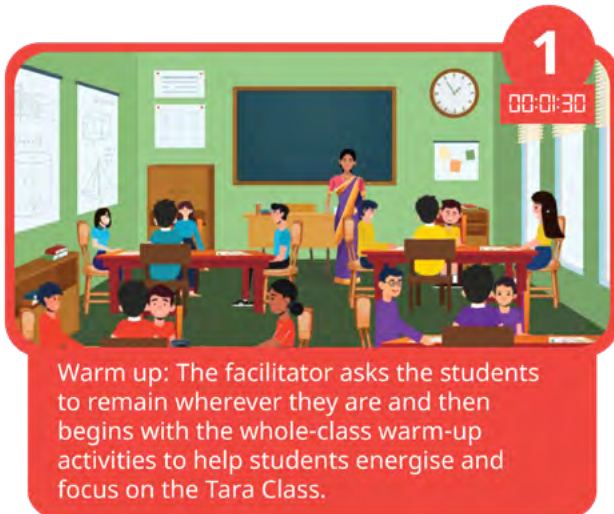
says **Anthoniammal**, Teacher



TARA assisted teaching session in school

How TARA helps students become proficient in English Language?

The Tara English Language Lab app revolutionizes English learning through voice technology, interactive books, and engaging activities. Students enjoy a personalized and judgment-free experience to gain Native English fluency. Individualized assessments track progress, fostering higher student engagement and proficiency. Students have a lot of flexibility in adapting themselves based on their aptitude and increased instruction time to learn the language. There are six steps adopted in the process of making the students proficient in English which are visually depicted below:



Warm up: The facilitator asks the students to remain wherever they are and then begins with the whole-class warm-up activities to help students energise and focus on the Tara Class.



Read and repeat with Tara: Students, while seated in their groups, follow along with Tara and the language diaries and familiarise themselves with the words in the lesson.



Speak up: The facilitator then conducts a spoken English activity while the students are in groups.

“

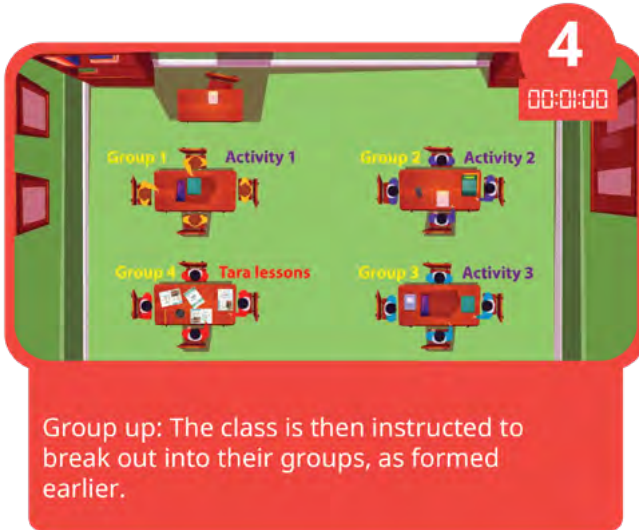
My child can read and explain to me the English messages I receive on my phone. I don't feel helpless with the lack of information anymore. I used to feel ashamed interacting with English-speaking children who visited the retail store I work at. I am glad my child won't share my shame.

”

says **Srinivas**

a father whose child is part of the Tara program.





4
00:01:00

Group 1 Activity 1 Group 2 Activity 2
Group 4 Tara lessons Group 3 Activity 3

Group up: The class is then instructed to break out into their groups, as formed earlier.



6
00:01:30

Wrap up: Students share what they have learnt in the class. The teacher then wraps up the session by summarising what each group has learnt.



5
00:25:00

TARA ACTIVITIES

Activities: Each group has the opportunity to practise on Tara as well as practise what they have learnt offline, by way of engaging activities.

The intervention utilizes technology to enhance students' comprehension, but its success stems from a holistic approach. MLF and the Department of Education engage all stakeholders, including the community, to build confidence among students and their families. The assessment system combines quantitative and qualitative measures, allowing for corrective actions and promoting transparency and replication of best practices. A bridge program supports students with lower proficiency, fostering inclusivity. The intervention employs a neutral accent, enabling students from diverse backgrounds to relate to the program. **These processes have been implemented in all 18 government schools in Nilgiris and Bangalore, benefiting 2419 students through approximately 80 planned sessions per batch.**

“

In Bangalore, the headmaster of the Doddabarahalli Government High School (GHS), Mr Manjunath, works enthusiastically with the Tara team on the ground to create slots and space for Tara in the school curriculum and campus. “There are two major reasons I support Tara. Firstly, these programs have nearly doubled the number of students. Secondly, I grew up with my grandparents. Whenever I returned from school, everyone in the neighbourhood welcomed me as their own. I want to carry forward the same warmth and love I received from my community.

”

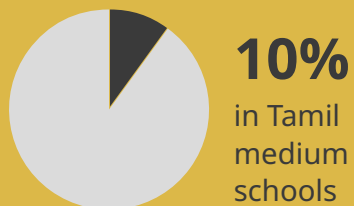
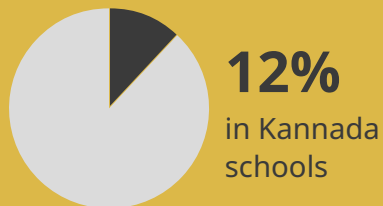
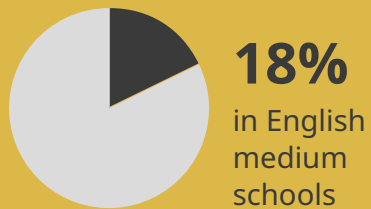
Mr Manjunath

Headmaster,
Doddabarahalli Government High School
(GHS), Bangalore

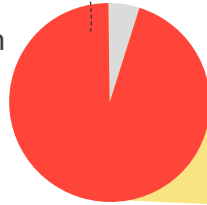
OUTCOMES

18 schools in Bangalore and Nilgiris

Overall improvement
in English proficiency
amongst children

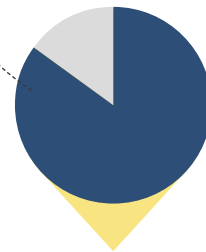


91%
of the students
are able to
accurately
identify the
images in English



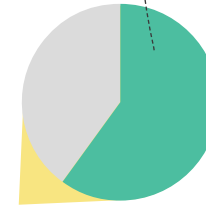
85%

students are able to
identify insight words



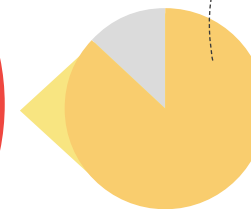
60%

students can
confidently
introduce
themselves in
English

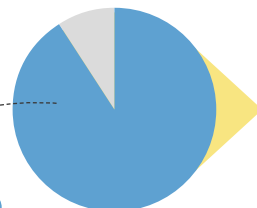


87%

students who
have benefitted
from TARA
are from
economically
disadvantaged
communities

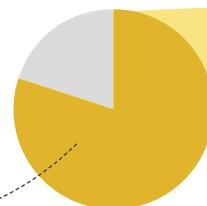


95%
of students
are able to
identify colors
accurately in
English



80%

students are able
to identify CVC
words



MLF vision through this program is to work in tandem with the existing system to demonstrate the effectiveness address the gap in the number of English-proficient teachers. Therefore, through TARA, MLF not only hopes to create better outcomes for students who are part of the intervention but also support the teachers in the process and make them better facilitators.

They are humming, buzzing and eventually roaring

A regular school day for Sindhu and her classmates



However, something unusual is about to unfold in the lives of these middle-school students of a government school in rural India. There is a new yet warm person in Sindhu's classroom today. This person briefly explains who she is and why she is here. She takes out a small, circular device from her bag, the same way gnomes or fairies present wonders in fairytales. Sindhu's name is keyed into the system for a trial. A voice comes from the device,

"Welcome to Tara, Sindhu."

No one has ever before greeted Sindhu in the English language. She feels joy, and a sense of prestige appears on her face. Her classmates breathe in all the confusion and breathe out curious bubbles of questions. After all, English does play a critical role in defining one's economic and social status in India.



This is precisely why TARA, an AI-powered teacher helping students and teachers learn communicative English, is received with a sense of deep assurance by various school communities. It promises a better tomorrow to the many Sindhus of India. While English fluency is a visible output of Tara, the program is simultaneously solving a more subtle problem - the fear of technology amongst both students and teachers. Right from research, science, tech, and instruction to adaptation, every bit of digital tech has used the English language as a vehicle to penetrate our lives. Today, the route to future employability winds its way through English and tech proficiency.



INTEGRATED CLIMATE CURRICULUM WITH AN INTER- DISCIPLINARY LIVE LAB APPROACH

Partner:



Department of Education of
Karnataka, Kerala and Tamil Nadu

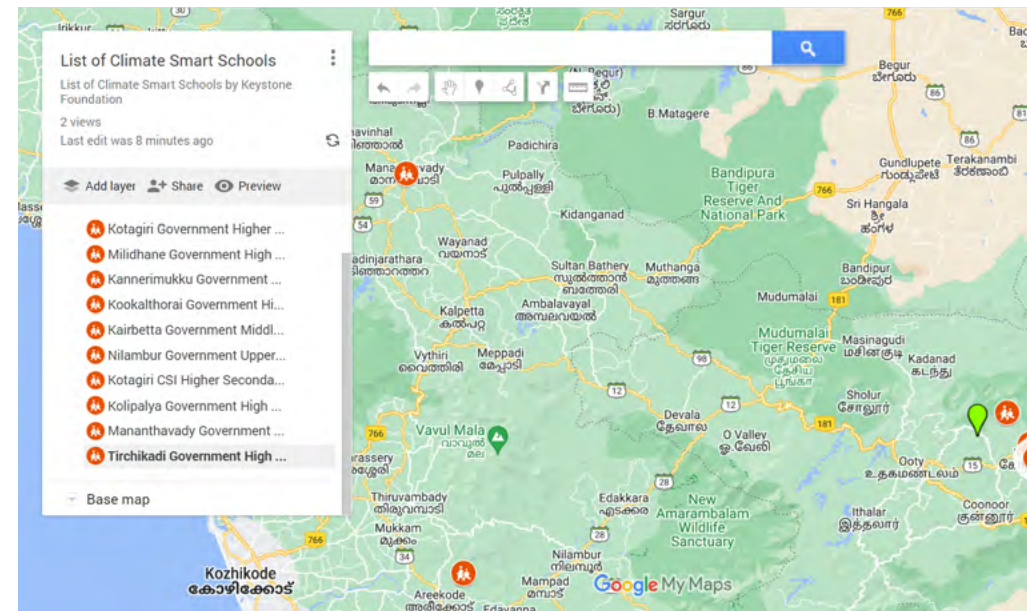
Introduction

India, in the last few decades, has been facing various climate-induced disasters which are a warning sign for the occurrences of such disasters in the future. A large majority of these disasters occur in coastal and hilly geographies of the country making them more vulnerable to climate change catastrophes. Despite facing multiple climate change-induced disasters and tragedies, climate ignorance is as widespread among the youth as it is among the older generation. According to UNESCO, there is no mention of climate change in the education curriculum in half of its member countries. **While 95% of 58,000 primary and secondary teachers in 2021 felt that teaching climate change is important, just 32% felt they can explain climate change only in their local context.**

Climate Change education, according to UNESCO, helps students “understand and the address the impacts of the climate crisis, empowering them with the knowledge, skills, values, and attitudes needed to act as agents of change.”

Need

There is a need to have an innovative curriculum to build 21st-century skills required for students to think mindfully about the crisis and come up with innovative sustainable solutions. This is why there's a need to address the increasing relevance of climate education, especially in a sensitive biosphere like the Nilgiris.



Outcomes

MLF has collaborated with the Keystone Foundation and the State Department of Education of Tamil Nadu, Karnataka and Kerala to build capacity and empower the local youth to build climate resilience.

The intervention has been initiated in 10 government schools in the Nilgiris benefitting 1059 students where an integrated climate curriculum has been developed with Keystone Foundation and is being implemented through an inter-disciplinary Live Lab Approach.

Contextually developed curriculum in tandem with local needs and realities

The program acknowledges the complexity of climate change and the challenges it presents to educators. It employs an experiential learning approach, integrating practical and theoretical concepts through outdoor-based activities. Two classes per week are dedicated to weather and food systems comprehension. **The program incorporates the expertise of 10 Barefoot Ecologist Educators from the local Nilgiris community, who contribute traditional ecological knowledge to develop age-appropriate content and support students and facilitators during outdoor activities.** These educators collaborate with

selected schools, utilizing weather stations as demonstrable models for teaching climate-related concepts. As a result, 10 government schools have transformed into knowledge hubs on climate change and resilience, serving as potential resource centers. **Additionally, 10 changepreneurs have been identified and mentored through workshops, driving climate action forward.** The program integrates automated weather stations, kitchen gardens, energy-efficient devices, and water conservation tools to facilitate experiential learning and foster climate conversations among students, encouraging them to monitor weather patterns and engage with their elders and parents. Over 1000 students have embraced water conservation practices, demonstrating their commitment to environmental stewardship.

The multistakeholder approach in implementing Climate Smart Curriculum

The program adopts a multistakeholder approach, considering diverse perspectives while introducing sustainable concepts to students. Dialogue and environmental stewardship are emphasized, facilitating the sharing and replication of best practices. Lessons, challenges, and the Climate-smart school roadmap are periodically discussed within the wider Nilgiris ecosystem. **Moving**

forward, the program aims to collaborate with academic institutions, small micro-enterprises, tribal communities, and NGOs to develop innovative field learning approaches for understanding and addressing current issues.

“

At Mobitech, our work revolves around wireless solutions for farmers with sustainable innovative infrastructure & for the current project we have installed weather stations at 10 schools which are monitored through a Mobile app. We are excited to be a part of this project to embed technology to tell stories and use data as evidence for change and demonstrate the need for proactive actions.

”

K. Dhevendhiran

Human Resource Manager, Mobitech Wireless Solution Pvt. Ltd.,

Weather Stations as Knowledge Resource Centres and a Learning Opportunity for Multiple Stakeholders

The Weather Stations in the 10 schools provide accurate data on temperature, rain forecasts, wind pressure/speed, and humidity within a 1.5 km - 3 km radius.

With solar backup, they ensure sustainability. The data is accessible on up to 10 mobile numbers and synchronized every 3 seconds with the sensors and every 10 seconds with the mobile app. The true impact lies in utilizing this data as a knowledge resource center and learning opportunity for communities and stakeholders.



Weather Station equipment at participating schools



Students and Teachers

The program offers hands-on learning experiences for children to comprehend the impact of climate change on regional weather patterns. Alongside regular curriculum, students engage in practical activities like energy and water audits and nurturing kitchen gardens. The collected data, including pre and post-audit records and weather forecasts, enables students to analyze subtle weather changes and connect them with the curriculum. Climate Champions initiative fosters youth participation, empowering students from Climate Smart Schools to develop innovative solutions. Additionally, the climate change curriculum supports teachers in adapting pedagogy for more engaging, sustainable learning.

Farmers

Accurate weather forecasts offer significant benefits to farmers, enabling them to mitigate weather-related risks, minimize losses, enhance productivity, and increase incomes. Technology-driven interventions, such as the agromet advisory system pioneered by WOTR, have proven beneficial for farming communities in Maharashtra. The system utilizes crop and location-specific mobile advisories sent through SMS, based on data from India's national weather service. Currently operational in Maharashtra, Madhya Pradesh, and Telangana since December 2012, the service provides weather advisories in the form of wallpapers. Considering this evidence, weather stations hold future potential for specific use by farmers.



Community

Community Climate Centre is envisioned to act as a Climate Change knowledge hub for the community. Through the provision of timely weather forecasts and knowledge dissemination on Climate-smart solutions and Climate resilience by demonstration models in School, it will engage the communities around the School in Climate talks. Schools as a Community Climate Centre would cross-link the education and actions with the concerned and relevant line agencies of the Government like Panchayats. The goal would be to empower people to act on Climate change and build a community of committed Climate aware citizens.

ACCESS TO DIGITAL AND ENVIRONMENTAL EDUCATION IN RESOURCE DEFICIT SCHOOLS

Partner:



Earth Trust Foundation

Need

Digital literacy is crucial for the future of children, aligning with UNICEF's framework for their preparedness in education, work, and life. However, many schools, particularly in rural areas, lack resources and infrastructure for digital literacy and environment-inclusive curriculum.

Outcome

To address these needs, MLF has partnered with Earth Trust Foundation to equip Killoor Kokkalada Government School with resources for digital literacy. MLF has provided a financial grant for basic computer skills training for 30 students and an Eco-Club Program. Local trainees have been trained to teach the curriculum for six months, ensuring digital training for the students.



Student using computer provided for the Digital literacy training

Our eco-club program promotes holistic ecological awareness through engaging activities.

- ❖ By establishing eco-clubs in schools, we impart life skills and knowledge on organic agriculture, environmental hygiene, and health, nurturing children as agents of change.
- ❖ Each eco-club includes a food garden, providing practical farming experience and fostering awareness of nutrition and food security.
- ❖ The program, launched in February 2023, receives support from Earth Trust and local stakeholders. Children receive booklets on organic farming practices in the local language to enhance their awareness and curiosity. The Earth Trust team trains the local resource team to take ownership of eco-club activities.



DEVELOPING LIFE SKILLS OF CHILDREN THROUGH SPORTS

Partner:



Bangalore Youth
Football League



Lighthouse
International
Academy

Introduction

Inclusive education recognizes the diverse backgrounds of children, with varying needs influenced by factors like family, socioeconomic status, culture, and experiences. Each child is unique, requiring personalized support. **A holistic and responsive approach, encompassing various interventions, is crucial to meet their diverse needs.** In order to create a holistic and responsive approach to meeting the diverse needs of children different kinds of interventions are needed. Inclusive education is a movement to empower vulnerable and marginalized groups to overcome the disadvantages of unequal socialization and have a curriculum that approaches learning curves to be non-linear.

Need

Marginalized children in foster care face numerous traumas and disruptions, such as abuse, multiple home placements, and educational instability. These experiences result in psychological trauma and lack of confidence, impacting their emotional and social development. **With limited access to resources and education, these vulnerable children require specialized inclusive teaching and support.** Their diverse backgrounds call for improved physical and mental well-being, preparing them for real-world challenges. A holistic and contextualized curriculum is essential, addressing their unique needs and incorporating sports and activity-based learning to nurture both their minds and physical health.



Outcomes

It is with this motive of having an inclusive education framework for foster care children that MLF has partnered with Reaching Hand which runs a foster educational institution called Lighthouse International Academy (LIA). **The institution with the help of devoted educationists, impart excellent learning experiences to foster children.** The institute follows a home-schooling method of learning, following the National Institute of Open Learning (NIOS) curriculum. **The school currently has 86 students.** The focus is on the holistic development of students in every way possible.

Given the need to build an overall development of these children, the intervention focuses on physical development in addition to the academics. MLF in partnership with Reaching Hand and Bangalore Youth Football League (BYFL), academy to provide sports coaching conceived of the **Kreedashala intervention, to develop physical & mental well-being of children through sports as a medium.** BYFL's experience in imparting physical fitness & life skills through sports and Reaching Hand's understanding of the needs of the foster children make this collaboration a recipe for success in improving the lives of underprivileged children.



Click to Play Video

“

Since the BYFL Coach has started coming in, I am enjoying sports more. He makes it so much fun and engaging for all of us. I have learned many new physical training exercises and techniques in just a month's time. He has helped me overcome my fear of playing in front of others and now I look forward to the sports period every day.

”

Student



The project was launched with an event to bring stakeholders together, generate excitement among students, encourage participation, and emphasize holistic education. The perspectives of the children availing the football coaching are suggestive of the need to emphasize on holistic education and what this intervention means to them.



Children in the football field

The intervention fosters teamwork, resilience, problem-solving, time management, communication, and goal-setting skills in students. Engaging in team sports helps develop leadership qualities and the ability to learn from failures and overcome disappointments. These skills gained through sports have practical applications in various aspects of life, including academics, careers, relationships, and community engagement.



“

The students who were previously shy and reluctant to participate in sports activities are now showing enthusiasm and excitement towards sports. Coach's approach to coaching is unique and effective. He uses various innovative techniques to engage all the students, regardless of their skill level or interest. His focus on individual student and personalized coaching has helped the students become more friendly to him and thus they look forward to their sport period every day.

”

Principal, Lighthouse International Academy

DEVELOPING 21ST CENTURY LIFE SKILLS THROUGH LEARNING LAB AS MODEL OF EXCELLENCE

Partner:



Learning Links Foundation

Need

In the era of technology and AI, countries must prioritize an education system that equips children with 21st-century skills. With India's education system undergoing reforms, there is a need to move away from rote learning and textbook-centric approaches. Science education is shifting towards engaging children through experiential learning, invention, and collaborative problem-solving. **However, this change must be inclusive, ensuring all children benefit regardless of their identity and background.** The implementation of the New Education Policy, 2020, highlights the importance of developing skills like design thinking, computational thinking, problem-solving, and innovation to prepare children for the future.

Outcomes

Learning Links Foundation with the support of Microland Foundation aims to bring **systemic and sustainable change to the school ecosystem.** The program focuses on developing the interest of students in science and technology from early years to combat stereotyped thinking in STEM. The program aims to inspire students to take an interest in STEM-based skills by enabling a conducive environment and providing them with hands-on learning to promote an innovation mind-set and scientific temperament. This collaborative program is currently being implemented at the Government Girls Higher Secondary School Rayakottai, Kelamngalam in Tamil Nadu. The centerpiece of this initiative is the establishment of a STEAM Studio, equipped with a variety of resources such as DIY kits, hardware, laptops, printers, projectors, and speakers. The studio environment has been

“

I am very much excited to explore the new teaching strategy that will encourage my students to learn in an innovative environment understanding the concept of 21st-century skills that will make them future-ready

”

Principal Govt. Girls Higher Secondary School, Royakotta, Tamil Nadu

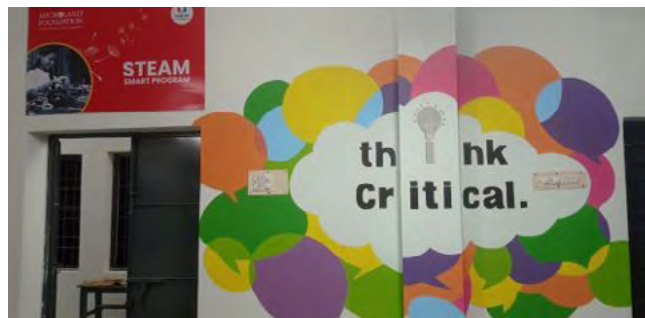
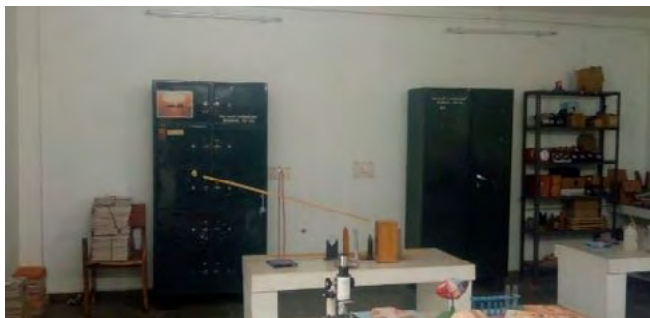
designed to create an immersive learning space, with walls adorned with STEM-related topics. The primary objective of the studio is to inspire students to go beyond their textbooks, apply STEM concepts to real-world situations, identify problems, and devise innovative solutions. Additionally, the program offers exclusive sessions on career guidance, interactions with STEM experts, and exposure visits to further motivate and engage the students. **MLF aims to create exemplary models through these STEAM Studios that can be replicated by the government.** The establishment of the studio and curriculum design were based on

a thorough analysis of the school's existing infrastructure, teaching methodologies, and the understanding of students and parents regarding the significance of the studio. **Orientation sessions were conducted for teachers and the school principal to ensure their understanding and alignment with the program's goals and objectives.** As the next steps, capacity-building sessions for teachers and student engagement activities will be conducted within the STEAM Studio. Additionally, community awareness initiatives and a STEAM fair are planned, where students can showcase their talents and potential in the field of STEM.

Before



After



“

The objective is to leverage the school infrastructure and turn it into a live learning lab. The goal of setting up the studio is to inspire, encourage and motivate students to go beyond their textbooks, understand the application of STEM concepts, observe & identify problems and solve them by coming up with solutions. Exclusive sessions like career guidance, interaction with STEM experts, and exposure visits organized to encourage and motivate students.

”

Agnes Nathan

Trustee and Principal Partner
Learning Links Foundation

Environment



CREATING SUSTAINABLE, COMMUNITY-LED SOLUTIONS
TO ADDRESS ENVIRONMENTAL CHALLENGES

Amongst the various challenges posed to the environment in India, waste management is perhaps the most complex. The infrastructure for waste collection, transportation, treatment, and disposal is inadequate, and the systems and processes to manage waste are not streamlined leading to sub optimal practice. **The sheer volume of waste generation, estimated to be 62 million tonnes every year, makes existing systems and practices elsewhere in the world unsustainable in the Indian context.** The government has been addressing this issue on a war footing with the Swachh Bharat Abhiyan for several years now, but the magnitude and complexity of the issue require a more collaborative effort from all sections of society.

The management of waste in delicate biospheres like the Nilgiris have some additional complexities. **The hilly terrain, unpredictable weather conditions, remoteness of the region, and the demography comprising primarily of tribal populations require a different approach to address this challenge holistically.**

In a small town like Coonoor in the Nilgiris with a population of 45,000, nearly 16 tonnes of waste is produced on a daily basis. The influx of tourists during the peak season leads to a significant increase in waste generation. The Municipal Corporation of Coonoor, thanks to shortage of recycling units in the vicinity, and complexity in transporting waste over

long distances, was simply **dumping the trash collected at the 12.35-acre dumpsite at Ottupattarai in Coonoor.** This has led to increasing health and environmental hazards, with a potential to hamper the tourism economy, which eventually created health and other environmental hazards.



Microland Foundation's (MLF) approach to waste management- A collaborative Public-private-citizen model

Based on previous experiences, MLF believes that a complex environmental issue like waste management needs to be addressed leveraging local participation and systems, especially in a unique ecosystem like the Nilgiris. **A human-centric design that engages frontend stakeholders like the municipal administration, district officials, private agencies, NGOs, as well as waste collectors and community members is key to building a sustainable system of waste management.** MLF entered into a strategic partnership with Clean Coonoor, an NGO that is deep rooted in the local community, to build a collaborative model with several stakeholders having specific roles in implementing a holistic waste



MLF team at the Waste Handling Facility

Program Design and Partner Structure for Clean Coonoor Project

The program design includes a mechanized solution to process wet and dry waste, that was developed after several trial-and-error processes, that actively engaged community members.

The NGO Clean Coonoor has the implementation role in the initiative, the Municipal Corporation gives much-needed administrative support and private agencies like MLF have lent infrastructural, knowledge and strategic support to the initiative making this Public Private Partnership a success.

“

Coonoor has taken the lead, thanks to its cosmopolitan and active civil society, which contributes readily to the public good. But we will try our best to replicate the success in the rest of the district.

”

District Collector, Coonoor



The waste management initiative in Coonoor has impacted and changed the lives of many citizens like Charles, a small café owner, who have dedicated their time by volunteering to make their town clean and create a sustainable system. He jumped on the opportunity to do something about the waste management issue that had plagued the small hill station ever since it became a tourist destination. Over the years, he has continued to volunteer his time, energy and money to conduct awareness campaigns amongst communities. Today, he is a voluntary advisor to the movement-turned-organisation.



Inauguration of wet waste processing facility by IAS Ms. Supriya Sahu



MLFs initiatives in environment - Intersection with SDG and national goals



9

INDUSTRY, INNOVATION
AND INFRASTRUCTURE



11

SUSTAINABLE CITIES
AND COMMUNITIES



13

CLIMATE
ACTION

Creating safe, resilient, and sustainable spaces for communities to live and work is a key focus area for MLF. Our interventions in waste management in the Nilgiris that is beginning to contribute to air quality improvement in the region, intersect with SDG 11.6. We are committed to contributing to SDG 9.1 by continuing to develop and support quality, reliable, sustainable and resilient infrastructure with a focus on affordable and equitable access for all. We are aligned with the national goal of a comprehensive Smart Cities Mission (SCM) in all the geographies we work in.



Waste handling team at site

“

We are on a quest of continuous improvement in the way we work and operate. Establishing a culture of evaluation and designing systems and processes that enable us to collaboratively collect and analyze data from our work with communities is an ongoing endeavour at MLF. We are hoping to build and grow as a learning organisation that is always seeking to improve, adaptable and resilient to change, and open to improvement and corrections.

”

Karishma Bhuyan, Senior
Manager, Microland Foundation

A MOVEMENT THAT DID NOT GET WASTED !

The challenge of waste management and the need for a sustainable system

Partner:



Clean Coonoor

Municipal Corporation, Coonoor

Introduction

Coonoor is a small town located in the Nilgiris and a popular tourist destination. For the last two decades, it has been witnessing an environmental crisis in the form of shortage of drinking water, lowering groundwater levels due to rampant construction, and contamination of water bodies due to untreated effluents. In 2017, Wildlife Fund (WWF) India report suggested that the Coonoor town discharges 5 Minimal Liquid Discharge (MLD) of untreated sewage into the Kallar River on daily basis, leading to pollutants and harmful microorganisms contaminating the river. Several volunteer groups along with the NGO, Clean Coonoor came together to lead a community initiative to clean the rivers flowing through Coonoor. However, the problems of the town did not get resolved with the cleaning of the river alone. **Coonoor and the Nilgiri ecosystem were facing acute challenges in managing their waste owing to a limited and constrained Solid Waste Management system.** The waste comes from a range of sources like households, markets, factories, hospitals, commercial establishments, tourist spots, and other sources. Around 9-10 tonnes of waste is generated every day from food, plastic wrappers, plastic vessels, papers,



cardboard, cotton or plastic bags, packaging, clothes, and small quantities of metal or electronic waste. Even though there was a Solid Waste Management ([Source](#)) system in place led by the Municipal Corporation of the town, it faced administrative challenges, lack of awareness of waste disposal amongst the people, problems in proper segregation of waste at the source, and various stages. The Municipal Corporation to manage the

large quantities of waste in the town solely depended on the informal sector comprising of waste sorters, waste traders, and inherent buyers to get rid of the dumped waste.

| Need

An evaluation of the process of waste disposal and management in the town indicated the need for creating a more scientifically backed appropriately defined process of waste management. The existing partnership between Municipal Corporation and Clean Coonoor led to the processing of degradable waste, collected from butcher's and vegetable markets, households, and garden waste, into compost along with recycling 85% of non-degradable waste. However, it was soon realized that this process was not sustainable in the long run with the proportion of waste generation and waste collection to the processing was a time taking process MLF seized an opportunity to collaborate with Clean Coonoor, aiming to enhance the waste management process by incorporating scientific, efficient, sustainable, and replicable practices. **In this program, MLF played a vital role in establishing Standardized Operating Procedures (SOP) based on technical and process-oriented approaches.** This allowed for a better understanding of waste generation and enabled the development of methods for waste processing, upcycling, and recycling to create value from waste materials. MLF also

provided essential infrastructure support, resulting in significant improvements in the waste management system. The ultimate vision of MLF in this initiative is to transform the town into a model for sustainable waste management, encompassing urban, rural, and tourist areas through active community engagement. The Micro Composting Centre was set up near the Farmer's Market in 2019 to treat the 8.4 tonnes of wet waste produced by Coonoor every day. However, the Micro Composting Centre was not equipped to deal with certain types of waste like those produced in slaughterhouses and fibrous waste which accounted for nearly two tonnes of daily waste. **The challenge was to convert organic waste into compost in an effective way to address the environmental and resource challenges associated with organic waste disposal while promoting sustainable agriculture and a healthier ecosystem.** However, the conversion of segregated organic wet waste into compost at high altitudes and varying temperatures is difficult.



“

Despite the cold, wet, rainy conditions that prevail in the Nilgiris, we have managed, through a trial-and-error process, to establish and convert organic waste into organic manure

”

Kalpana Kar, Trustee, MLF

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As a gardener, I was just growing the plants. Now, the compost I create here helps plants grow strong and well. When I saw all the educated people working on this, I felt no shame in joining this initiative

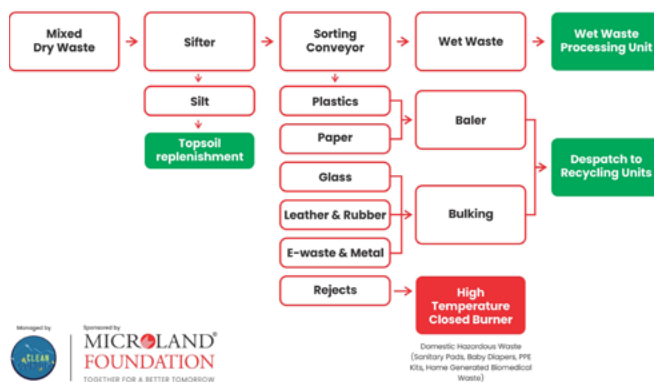
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Ramadeva, a wet waste unit worker at the Clean Coonoor processing unit

Outcomes

To address this challenge, MLF and Clean Coonoor collaborated to establish the feasibility of this process through the development of technical Standard Operating Procedures (SOPs).

DRY WASTE MANAGEMENT & PROCESSING – FLOW CHART



Strengthening the Wet Waste Management System

The focus has been on achieving a thorough understanding of the composting process and providing suitable equipment, training, and supplements to ensure the production of high-quality Grade A compost from organic waste. This involved modernizing infrastructure, equipment, and processes.

THE FACILITY WHICH EARLIER WAS ABLE TO PROCESS ONLY 4 TONNES, IS NOW SCIENTIFICALLY MANAGING 6 TONNES WITH AN ENHANCED CAPACITY TO MANAGE UP TO 11.2 TONNES OF WET WASTE.

The upgraded facility has enabled 100% handling of all wet waste delivered. Scientifically transforming the wet waste into Grade A certified quality compost, which the government is buying back from the unit, is a unique symbiotic exchange, adding more revenue to Clean Coonoor's financial sustainability journey. **The machines and technology brought in by MLF have given the waste workers on the ground a sense of dignity and empowerment.** The program and the initiative also has created several welfare measures for the employees like the construction of a pantry, toilets, and office space that has helped in retaining and motivating the employees to work relentlessly in waste processing units and source collection

By supporting the development of the facility, MLF is building an eco-system for technical mentoring and creating systems and processes for replicability. The focus is to improve productivity and in the last year between April 2022 to March 2023, a total of 1426 tonnes of waste has been processed. The mission is to accomplish zero waste and decentralization of waste, focusing on improving productivity, efficiency, transparency, and sustainability.



Waste collection vehicles



Separation of impurities

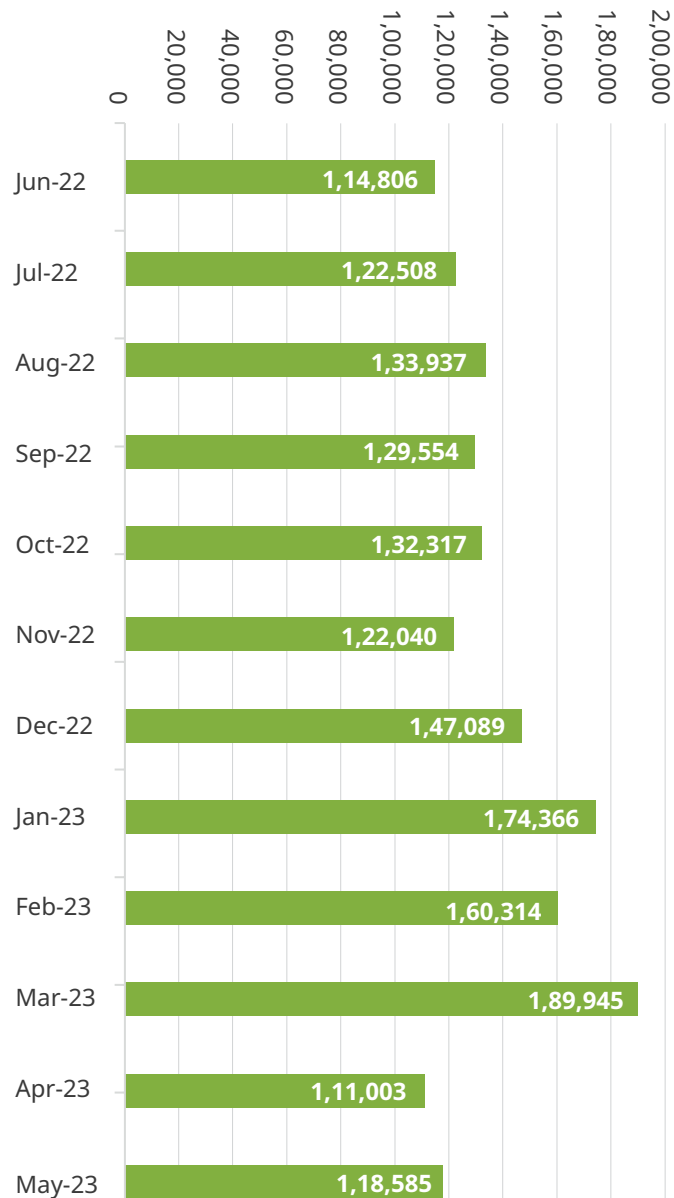


Plastic Bailing



Compost filling station

Monthwise wet waste handled (in kgs)



Building an Efficient System in Dry Waste Management Enhancing the Resource Recovery Center (RRC)

A Resource Recovery Centre (RRC) was established in 2019 for creating a robust dry waste management system through the public-private partnership model between Clean Coonoor, Municipal Corporation, and MLF along with contributions from other interested individuals. Identifying the challenge of the accumulation of waste in landfills and on the mountains, MLF worked with Clean Coonoor to work set up the amenities for dealing with the dry waste at the RRC and proposed the need for a sustainable solution involving prominent stakeholders to address the existing issues effectively. Stress was laid on the co-processing, recycling and upcycling of the waste and thus efficient resorting at the RRC resulted in higher sales proceeds which also incentivized sanitation workers. The RRC has indirectly created livelihoods for scrap vendors, aggregators, transporters, and porters. This partnership has also freed the municipality of 48 man-years which have been diverted to other sanitation fronts. The waste which cannot be recycled is incinerated in order to avoid accumulating in landfills.

MLF played a significant role in the enhancement of infrastructure and processes under this collaborative public-private partnership model. The infrastructure support

and upgradation have enabled in processing 1249 tonnes of waste between April 2022 – March 2023 in the RRC. This enabled the RRC to effectively manage ~5.7 tonnes per day (TPD) of dry waste. Overall, the facility has helped prevent 3,089 tonnes of unprocessed



Segregation at the RRC



Burner at RRC



Kitchen for employees

Dry Waste Processing

The dry waste collected door to door comes to RRC and tipped over to the sorting area where it is segregated into recyclable and non-recyclable streams. Then the recyclable waste is sold to the recyclers as per commodity i.e., e-Waste, furniture etc. This creates a circular economy and saves valuable natural resources. Non-marketable trash such as sanitary napkins, pads etc. are incinerated. Non-Recyclables are sent mostly to cement kilns for co-processing as fuel.

50-55 %

Segregation rate
last 6 month

97 %

Waste
handling
rate

51 %

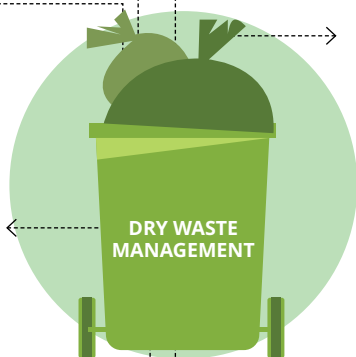
Recyclables
Recovery
Rate

5.5 l

Income
for sale of
compost

95.8 %

Recyclable
dispatch
rate



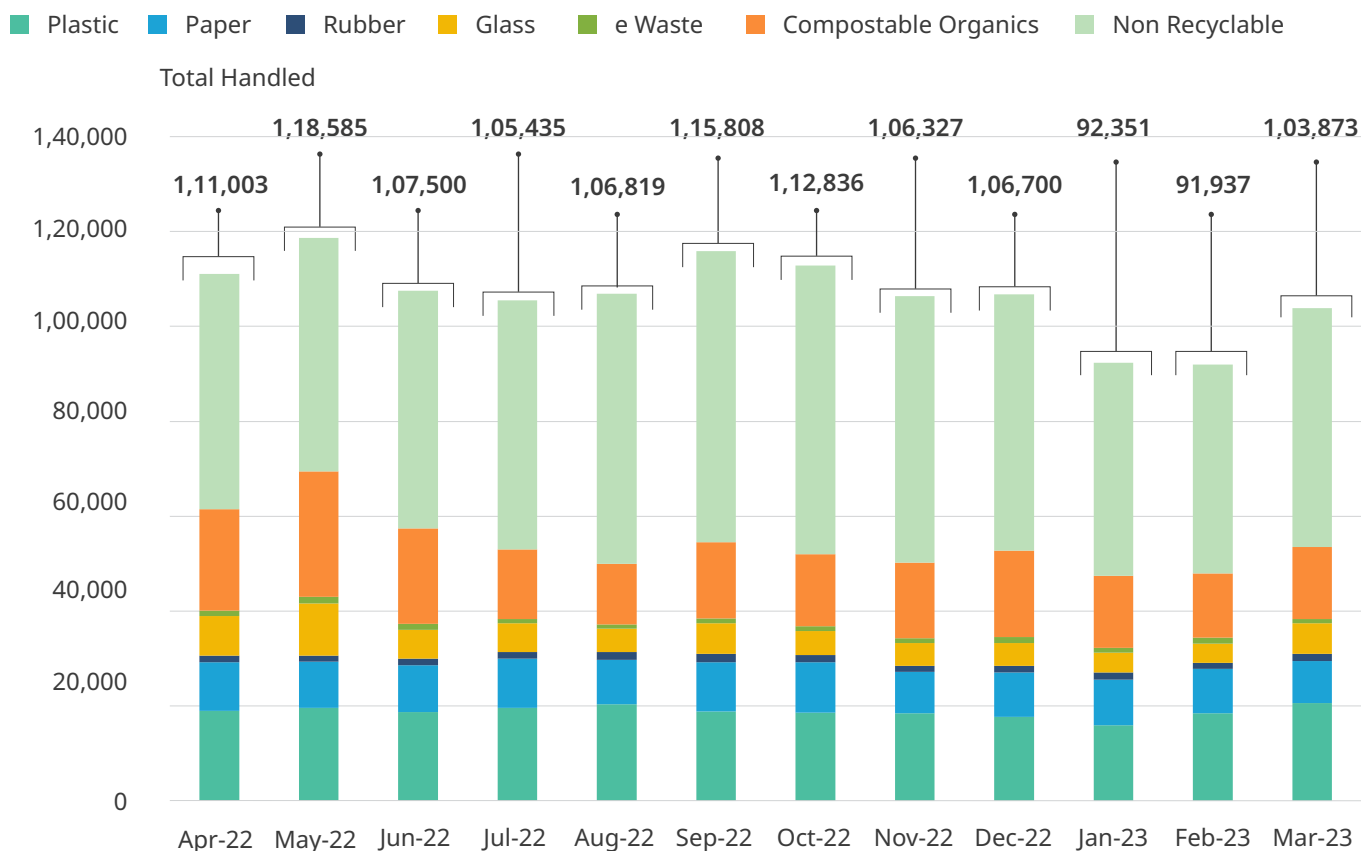
92,587 kg

Qty of compost sold
in last 10 months

74,762 Kg

Windrow batches
bagged & tested
for quality

Monthwise dry waste handled (in kgs)



In addition to creating an effective process, the waste management process is strengthened through advocacy drives and awareness programs to engage the community members. Kitchen for employees has helped in improving waste segregation at the source by 50-55%. 6 volunteer driven clean-up drives have been conducted at the waste-accumulation locations. Consultation services have been initiated for community waste generators making the process streamlined and participatory. Therefore, the success of this initiative is based on a holistic approach that takes all the stakeholders together.

Together for a Better tomorrow



India has steadily advanced in its ability to deliver development and resilience at scale in the past few decades. There have been significant watershed moments in India's journey here, especially in the transformation of the social welfare system and financial safety nets, underpinned by a robust growth in the digital public infrastructure. But, there are still several areas of improvement, especially considering the vast and diverse demographics of the country, including a youth population that is much larger in comparison to similar economies around the world.

Our own biggest learnings from the last few years of working closely with communities and our community-focused partners are that,



firstly, there is a cause-effect relationship between different societal challenges, be it related to livelihoods, health, or education



secondly, technology can be the biggest catalyst for inclusion and change



thirdly, the most effective way to tackle poverty and build resilience amongst vulnerable populations is to empower them to find local and sustainable solutions to the complex challenges they face.

Microland Foundation welcomes the signing of the Government of India - United Nations Sustainable Development Cooperation Framework (GoI-UNSDCF) 2023-2027, which is expected to be the principal planning and implementation instrument at the country level. The focus areas that Microland Foundation has been working on in the past few years finds resonance in a number of tenets that GoI-UNSDCF 2023-2027 are built on. This includes the pillars of People, Prosperity, Planet, and Participation; and the strategic outcomes around Health & Wellbeing, Nutrition & Food Security, Quality Education, Economic Growth & Decent Work, Environment and Climate Change Resilience, and Empowerment of Communities and Institutions. We continue to be committed to an innovation driven, inclusive, resilient, and sustainable development agenda.

The intersectional lens with which we look at challenges and the collaborative philosophy we have followed to find solutions along with our partners will continue to drive our agenda to find replicable pathways to scaling. The strategic pivot for transitioning from our existing portfolio is built on the following guiding principles:



Enable systemic impact



Catalyze sustainable program outcomes



Build depth and replicability to enable scale

Building on the four pillars of focus that we have currently, namely Employability, Education, Environment and Health, we are seamlessly pivoting to a new categorization to improve accessibility to Health, Social and Economic Justice; build Climate resilient and Sustainable habitats, digitize access to Quality education and Enable Vulnerable communities and groups to take action. This approach will build on the versatility and diversity of projects that is the strength of Microland Foundation's existing portfolio, enable an intersectional ecosystem approach towards project selection and implementation, and rely on data driven methodologies to incubate solutions & catalyse transformational and sustainable change.



Accessibility to Health, Social and Economic Justice



Climate resilient and sustainable habitats



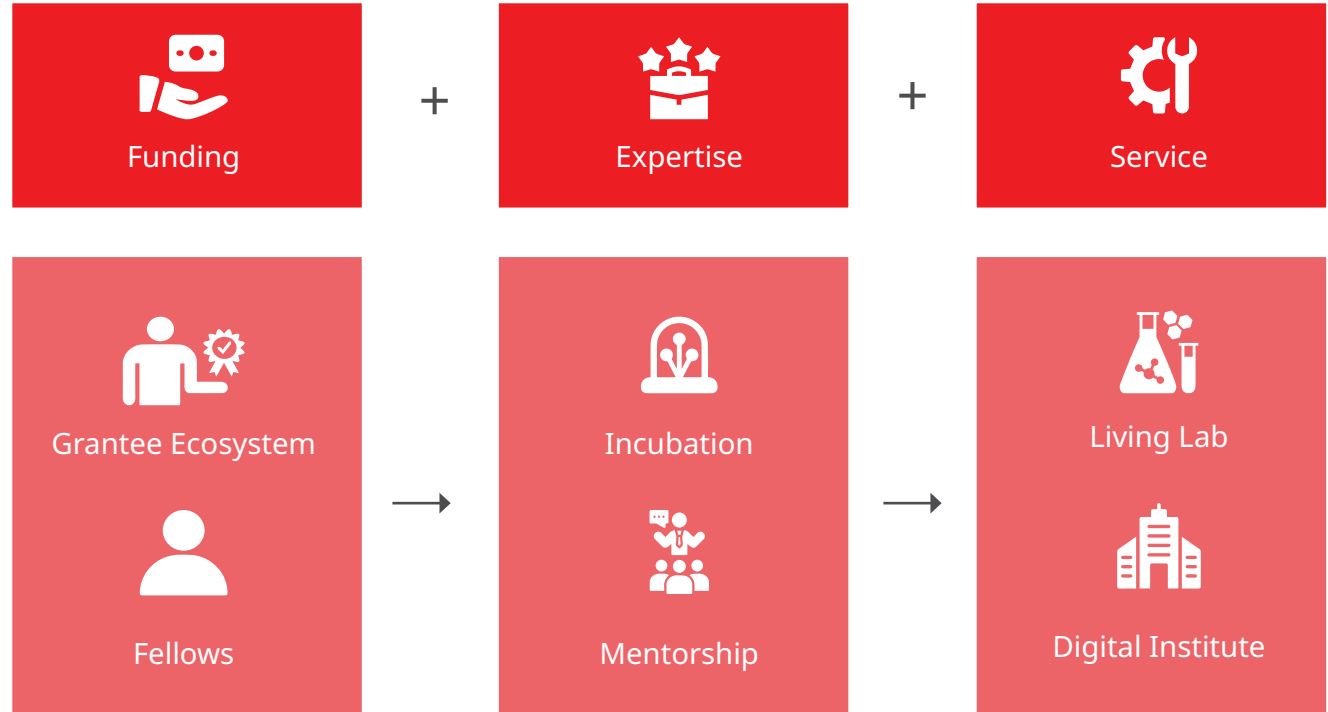
Digitalizing access to quality education



Enabling Vulnerable Communities and Groups

We firmly believe that this intersectional and integrated approach to social change through a circular and interlinked set of programs with other collaborators and implementation partners with a view to create a “Living Lab” model will significantly contribute to improving environmental and social conditions for the communities we work with. A Living Lab model enables multiple partners working in different areas towards a common goal to collaborate, and document evidence for sustainable social change.

Over the next few years, we hope to focus our efforts in the Nilgiris, and follow a model that consists of nested programs functioning at three different levels that foster innovation, institutionalization and ecosystem development through funding, expertise, and service delivery. This is a unique model that aims to develop a functioning ecosystem of government agencies, academic institutions, active citizens, community collectives, businesses, and development organizations in the Nilgiris and making it a hub for experiments in sustainable and equitable development. Microland Foundation aims to be a catalyst for deep ecosystemic change that can be replicable and scalable.



Microland Foundation has demonstrated strengths over the past few years that give us the confidence that we have a solid foundation for our future endeavours. One primary strength is our digital expertise, which enable innovation and bringing cutting-edge technology solutions to social impact programs. Our active presence in the Nilgiris region, provides us with a deep understanding of the local context. Strong relationships with local communities have earned the Foundation goodwill and respect from local stakeholders and has built access to critical networks within the community. This is evidenced through the influence Microland Foundation has been able to have in advocating for issues such as waste management in the Nilgiris.

Converging our learnings and experiences from current and previous projects focusing on improving lives and ecosystem in the Nilgiris has strengthened our relationships with implementation partners, and creating paths for future collaborations with co-funders and the government.

Aligned with the motto of the Digital India Mission, “Power to Empower”, Microland Foundation will strive to build a digital core around all its interventions, be it through digital infrastructure, delivery of services, and digital literacy for improved learning outcomes, develop experiential STEAM education content and delivery or creating future-ready skilled youth. One of the key pillars of the clarion call to build a self-reliant India, Atmanirbhar Bharat Abhiyan, is the agricultural sector, where the aim is to promote sustainable agriculture practices, increase farmers’ income, and reduce dependence on imports. Over the coming years, through our integrated approach, we hope to significantly contribute to the initiative by future skilling youth in climate-resilient livelihoods and creating an ecosystem of community-based entrepreneurs aligned with the national goal of a self-reliant Bharat.

Microland Foundation has always adopted a collaborative philosophy and worked with multiple stakeholders to drive community-led interventions. This partner-led approach will continue to drive our agenda of enabling communities to benefit from economic development while preserving the natural environment and ensuring social well-being.

The next few years will also focus on deepening our reach and strengthening our portfolio. Based on our trend analysis and experience in working in the Nilgiris region, we have identified clusters of some of the most vulnerable communities that are strategically placed to be the best impact multipliers within the ecosphere. We believe deepening our projects through community-based champions will ensure maximum impact and bridging the widest gaps in development.

Microland Foundation sees itself as an organization that engages first and foremost with communities, not just as a donor, but also as a key stakeholder in the ecosystem of change – an approach that we believe enables long term commitment to one community rather than a more typical grant giving CSR model. In the coming years, we have narrowed down on a few key enablers, on the foundation of which we hope to build a sustainable model for change.

Microland Foundation recognizes the alignment and effectiveness of leveraging our digital expertise as a valuable contribution to the community through its projects in the last few years. Building on its strength, all future projects will continue to be developed around a digital core. We will leverage technology to strengthen, catalyze and accelerate holistic development while leveraging digital penetration to inform, and document best practices.



Digital Focus

Microland Foundation hopes to pivot existing projects and initiate new ones to drive community-led interventions that address their needs holistically and provide an opportunity to reflect and document best practices that will enable replicability in similar ecosystems. We hope to focus concerted efforts to identify and strengthen intersectionality between program interventions that can be used to improve outcomes by building on synergies.



Building intersectionality and focus on holistic development



Key Enablers



Community-led interventions

The heart of Microland Foundation's current approach has been to develop capacity within the community and ecosystems through a Fellowship - Incubation - Living Lab model. In the coming years, we hope to strengthen this unique model that aims to develop a functioning ecosystem of government agencies, academic institutions, active citizens, community collectives, businesses, and development organizations in the Nilgiris and making it a hub for community-led experiments, that lead to sustainable and equitable development.



Collaboration for scale and sustainability

Being a small CSR organization with big dreams, Microland Foundation understands that it cannot achieve its goals alone. The approach in the coming years is to build on the partnerships of the past and collaborate actively with like-minded organisations and individuals that will amplify the impact, and improve efficiency, thereby creating a sustainable model of change and transformation.

Microland Foundation believes that combining skills and understanding of business and technology can be effective in developing inclusive, relevant, and sustainable solutions for the larger environment and the beneficiary segments we work with. Our experience in co-creating and incubating innovative solutions with our partners, entrepreneurs, subject experts, and the community we work with, has helped us slowly and steadily build an integrated and circular program design that accelerates community-led innovation.

Microland Foundation is committed to creating a better tomorrow together with our partners, employees, and the local communities, and contributing to a blueprint for sustainable development, especially in unique and delicate ecosystems in India and the world.



