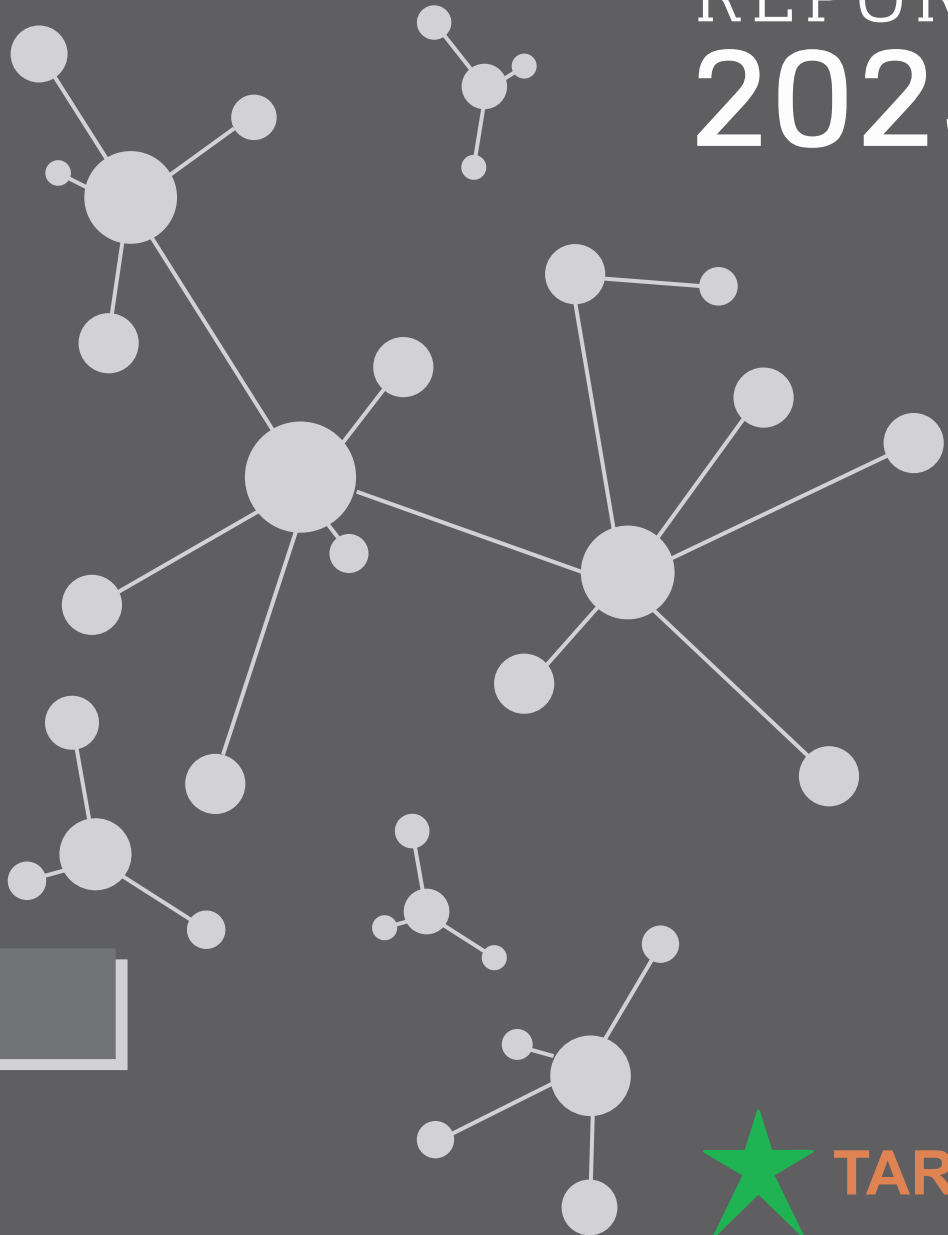


ANNUAL REPORT 2023



ORGANISATION AT A GLANCE

Vision	:	A world where every citizen can live a secure, healthy and fulfilling life, in harmony with nature
Mission	:	To create sustainable livelihoods at scale
Strategy	:	Build capacities and incubate business models for widespread and accelerated creation of economic, social and environmental value

Society Registration : Societies Registration Act, XXI of 1860; Registration No. S/15240

FCRA : Section 6 (1) (a) of the Foreign Contribution (Regulation) Act 1976 (FCRA Reg. No. 231650722)

Society for Technology and Action for Rural Advancement

B-32, Tara Crescent, Qutub Institutional Area
New Delhi 110 016, India
Tel: +91 11 2654 4100, 2654 4200
Email: tara@devalt.org, Website: www.tara.in

Production, Design & Layout: Bharti Kapoor, Pritam Poddar

Photographs: TARA

© TARA
December, 2023

Abbreviations

ADB	Asian Development Bank	LCA	Life Cycle Analysis
ATC	Aggregate Technical and Commercial	M&E	Monitoring and Evaluation
ARPU	Average Revenue per User	MAC	Multi Stakeholder Advisory Committee
C&D Waste	Construction and Demolition Waste	MFA	Material Flow Analysis
CCDR	Country Climate and Development Report	MoEF&CC	Ministry of Environment, Forest, and Climate Change
CII	Confederation of Indian Industries	MSME	Micro, Small and Medium Enterprise
CPL	Cement Products Limited	NbS	Nature-based Solutions
CRISIL	Credit Rating Information Services of India Limited	NCMA	Nepal Cement Manufacturers Association
CSR	Corporate Social Responsibility	NECTAR	North East Centre for Technology Application and Reach
DPR	Detailed Project Report	PEFCoM	Promotion of an Environmentally Friendly Building Material Sector in Malawi
EIA	Environmental Impact Assessment	PwC	PricewaterhouseCoopers
EPR	Extended Producer Responsibility	RIPA	Rural Industrial Parks
GEC	Green Economy Coalition	SCP	Sustainable Consumption and Production
GHG	Green House Gases	SDG	Sustainable Development Goals
GIS	Geographic Information System	SFURTI	Scheme of Fund for Regeneration of Traditional Industries
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit	SIDBI	Small Industries Development Bank of India
ICT	Information and Communication Technology	SME	Small and Medium sized Enterprises
IIDS	Institute of Integrated Development Studies	SPI	Smart Power India
IITM	Indian Institute of Technology Madras	SPRD	Smart Power for Rural Development
IMEDF	Indian Micro Enterprises Development Foundation	TARC	TARA Applied Research Centre
IUCN	International Union for Conservation of Nature	TSS	Taisei Soil System
KGMSDC	Karnataka German Multi Skill Development Centre	UNEP	United Nations Environment Programme
KGTTI	Karnataka German Technical Training Institute	UPPCL	Uttar Pradesh Power for Rural Development
LC3	Limestone Calcined Clay Cement	VAM	Value Assessment Methodology

Contents

CHAIRPERSON'S MESSAGE	5
-----------------------	---

MESSAGE from the COO	7
----------------------	---

IMPACT	8
--------	---

PARTNERS AND COLLABORATORS	11
----------------------------	----

FOCUS 2022-23	12
---------------	----

- a. Technology Solution
- b. Business Models
- c. Advisory Services
- d. Capacity Building
- e. Business Affiliates

COMPLIANCE	34
------------	----

- a. Board of Directors
- b. Auditors' Report

Chairperson's Message

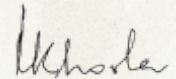


As the incubation wing of the Development Alternatives Group, TARA has worked on taking the Group's laboratory innovations into the market through productionising, testing and licensing them to other businesses. TARA's primary approach is to create and customise eco-solutions (as products and integrated solution packages) for delivery to community groups, micro, small, and medium enterprises, industries, governments, and international organisations in India and around the world.

During the year, for example,

- TARA used AI tool GeoAI to detect brick kilns in Bihar, speeding up regulatory processes.
- TARA installed low-maintenance wastewater treatment plants in Bundelkhand in collaboration with IIT-M.
- TARA partnered with IIT-M for a media event on reducing emissions with Limestone Calcined Clay Cement.
- TARA launched Blue Concrete Initiative, a partnership with the Government of Fiji for sustainable construction.
- TARA conducted water quality mapping and awareness drive in semi-arid regions of India.
- TARA evolved new business models : Technology driven and innovation based business models for social change i.e. empowering women and youth, and providing solutions for waste water and renewable energy
- Roof-top solar initiative across 7 states reaching out to over 3000 rural entrepreneurs leading to a cumulative 150 kW of solar installations.
- 12 rural micro enterprises adopted solar energy resulting in cost savings of up to 60% and mitigation of 240 tons of carbon emissions annually.

- 2 TSS Pilot Sites i.e. Varanasi and Muzaffarnagar handed over to municipal corporation
- TARA as a Consultant to IMEDF, supported over 3,500 individuals (including 23% women) who adopted nature-based solutions in 4 SFURTI clusters
- TARA, partnership with DA, set up 30 women run e-Rickshaws mitigating 5 tons of carbon emissions per annum while enabling 15,000+ women access safe mobility, education and healthcare facilities
- TARA provided extensive Advisory Services to government agencies, businesses and NGOs: Innovating pathways for an inclusive, just, and green economic transition in India through interventions towards policy, finance, technology, research, and dialogue to help transition to a circular economy in the plastics, building sector, agriculture, and advocating for smooth access to sustainable finance in India.
- TARA built capacities of 170 Vidyut Sakhis in four selected Electricity Distribution Divisions in Barabanki, Meerut, Kosi, and Varanasi and helped CRISIL in reaching out to 3,42,900+ individuals about responsible energy consumption.
- Through our project on Monitoring and Evaluating Climate Communication and Education, funded by the University of Saskatch, the project documented the case of climate change communication through community radio programmes (broadcasting and narrowcasting) in the form of documentary video and narrative reports. The videos are on the functioning of radio Bundelkhand and the listener's and experts' experiences and learnings from the Radio,
- Capacity Building : The capacity building programs implemented over the previous year were meticulously designed to address the unique needs of diverse stakeholders. We recognised that to achieve sustainable development goals and adapt to emerging challenges, organisations must nurture their human resources, leverage technology, and optimise operational processes.
- TARA helped build the capacities of Vidyut Sakhis and made aware on technical and nontechnical aspects of the use of the Vidyut Sakhi App, which is developed by Uar Pradesh Power Corporation Limited (UPPCL) for facilitation in electricity bill collection and other aspects such as financial literacy, basic life skills and aspiration building, etc. 3,42,962 consumers were reached and made aware of how to adopt efficient use of electricity and the need for timely payment of electricity bills.



Dr Ashok Khosla
Chairperson

Message From The Chief Operating Officer



In keeping with our resolve to make a positive difference to people, planet, and prosperity we strived hard the last year. In the pursuit of achieving our goals, we actively collaborated with the Governments, Corporates, and people in our march to make the Planet a better place to live especially so for the future generations. We continue to play an important role in measuring and reducing carbon footprints by encouraging circular economy models. We stand committed to regenerating biodiversity and in stepping up our efforts in Water Conservation as also in working towards Zero based agriculture. We are also steadfast in encouraging and helping setting up of non-traditional enterprises supported by green energy solutions to promote livelihood security.

We must continue to strive to reduce the damage to Planet Earth so as to rescue a better future for the coming generations

A handwritten signature in black ink, reading "Bhardwaj" with a stylized flourish at the end.

Maj Gen Rahul Bhardwaj
VSM (Retd)



The Year at a Glance

Development Alternatives Group continues to prioritise sectors of the economy in which green and inclusive businesses have the potential to create significant social and environmental impact. So far, through our work across various geographies, we have touched more than 20 million lives.

Development Alternatives Group - Impact

Year 2022-2023

Livelihood Security and Inclusive Entrepreneurship

₹59.8 million income through jobs

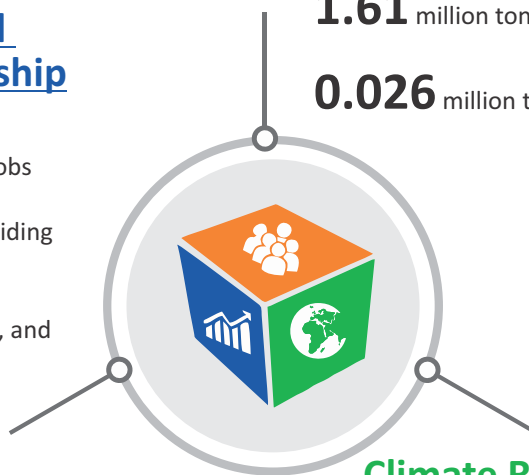
₹65 million to entrepreneurs providing access to enterprise finance

22,000 artisans, crafts persons, and farmers supported

5,176 enterprises setup and supported, creating **10,370** jobs

3,200 people trained with employability and vocational skills

33,950 households accessed basic needs services such as WASH, clean energy, housing, and literacy



Resource Efficiency and Circular Economy

446.5 MWh green electricity generated

1.61 million tonnes of Natural Resources were saved

0.026 million tonnes of CO₂ emissions mitigated

Climate Resilience and Ecosystem Restoration

4,500 people empowered on local governance

2,960 farmers trained on water management, sustainable agriculture, and climate change adaptation planning

186.7 million liters of water conserved

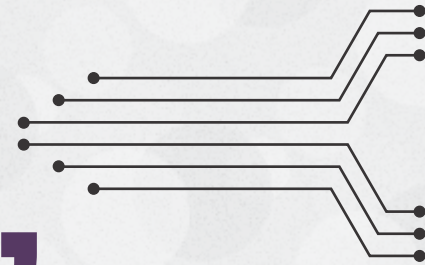
0.48 million tonnes of top soil saved



Partners and Collaborators



TECHNOLOGY SOLUTION



Create and customise eco-solutions (as products and integrated solution packages) for delivery to community groups, micro, small, and medium enterprises, industries, governments, and international organisations in India and around the world.



TARA's technology incubation team broadened its offerings in 2022-23, solidifying its stance as a pioneer in innovative solutions. Emphasising technology, knowledge, and skill transfer, TARA formed strategic incubation partnerships with various institutions and heightened collaborations with major corporations. Central to its mission, the organisation worked extensively with Small and Medium Sized Enterprises (SMEs) in the Global South, notably Sub-Saharan Africa and the Middle East. Their objective was promoting low-carbon cement technology adoption, curbing Green House Gases (GHG) emissions, and bolstering resource efficiency.

In parallel, TARA made significant strides in water quality research, turning waste plastic into value-added commodities and refining Geographic Information System (GIS) Mapping technologies. To facilitate these advancements, TARA's Delhi and Datia facilities in Madhya Pradesh became crucial hubs for research and pilot projects. A remarkable collaboration was also forged between TARA, the University of Nottingham, and the United Nations Development Programme, Accelerator Lab, India. Their joint initiative focused on employing the GeoAI tool for mapping and verifying brick kilns across India.

MoU with Cement Products Limited

TARA signed an MOU in reducing the carbon emissions of Cement Products Limited (CPL), Malawi by introducing and disseminating the LC³ technology. It can potentially boost local and greener



KEY INITIATIVES



Dr Soumen Maity, Chief Technology Officer and Mr. Akbar Gaffar, MD, CPL Malawi signing the MOU at Njereza, Mangochi

cement production and accelerate Malawi's independence from imports.

The signing of the MoU attracted the highest support to gain momentum in bringing together different stakeholders to work closely.

The successful implementation of the MoU would imply that CPL Malawi will be one of the first where this innovative cement production can begin. This would also inspire all cement producers in Malawi within the context of the GIZ-funded project based on a Private Public Partnership for the Promotion of an Environmentally Friendly Building Material Sector in Malawi (PEFCoM).

LC3 Info Day in Nepal

On 24th November, On behalf of LC³ Project Team, TARA (Technology and Action for Rural Advancement), New Delhi organised Information Day event in Kathmandu, with strong support from Nepal Cement Manufacturers Association (NCMA), MinErgy and Institute for Integrated Development Studies (IIDS).

Technical Interventions in Pottery sector in Northeast Region

Terracotta-based potteries are produced in the Northeast region in age-old traditional methods using manual/ traditional methods of mixing clay, making on manually operated wheels and burning in conventional kilns. The methods are very inefficient.

Traditional kilns produce high smoke/emissions that spread into the environment. In addition, manual processing clays have high health hazards and are manually tiring. High time for processing clay consumes time and reduces productivity. Despite coming from potter families, the younger generation is shifting to a more lucrative income.

TARA has made interventions in Dhubri district, Assam mainly in two key areas. These were, namely mechanised processing of clay and firing of green products.



Potter families in discussion with the project team



LC³ Info Day in Nepal

The objective of the workshop was to communicate the technical, environmental, operational, and financial advantages of an innovative ternary cement made with a combination of clinker, calcined clays and limestone (LC³). With the participation from officials of Department of Mines and Geology, Department of Industry, Nepal Bureau of Standards and Meteorology, Cement companies and other multi-laterals organisations, the event shared the progress of LC³ in India and other countries.

TARA at COP27

On the side lines of Decarbonisation Day at the COP27, TARA organised the side event titled “Low Carbon Cement: Showcasing Indian Cement Industry's Initiatives towards sustainability and net zero” on the Day 6 (11th November 2022) at the India Pavilion.


The side event showcased the leadership of India to the global community in setting path breaking trends of reducing carbon emissions and developing a roadmap for sustainable construction sector.

The session involved the presentation by Prof. Karen Srivener (EPFL, Switzerland) on “Limestone Calcined Clay Cement (LC³) and its potential in mitigating climate change”. Dr Soumen Maity, TARA shared his insights on the “Implementation and adoption of low carbon cement in India”. Following this, Ms. Ruchika Drall (MoEF&CC) spoke about the importance of Decarbonising the Indian Cement Sector following a public-private partnership approach.



LC³ Cube presented to Ms. Ruchika Drall, Deputy Director, MoEF&CC

HIGHLIGHTS



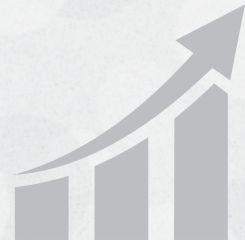
TARA used AI tool GeoAI to detect brick kilns in Bihar, speeding up regulatory processes.

- TARA installed low-maintenance wastewater treatment plants in Bundelkhand with IIT-M.
- TARA partnered with IITM for a media event on reducing emissions with Limestone Calcined Clay Cement.
- Fiji launched Blue Concrete Initiative, a partnership by TARA for sustainable construction.
- TARA conducted water quality mapping and awareness drive in semi-arid regions of India.

WAY FORWARD

- The LC³ Nepal project demonstrates a robust public-private partnership in Nepal and is expected to set an example to be replicated across all sectors. The project outcomes will strengthen the Department of Mines and Geology, Govt. of Nepal, to disseminate information on different types of clays as a resource to the Nepal Cement Industry.
- The GeoAI tool for red brick mapping was first tested in Bihar. Now it will be taken to two more states - Odisha and Chattisgarh - in association with the United Nations Development Programme, Odisha State Pollution Control Board, and the University of Nottingham for mapping and ground truthing of red brick kilns in the States to analyse the technology, production capacity and process, type of fuel for existing kilns and social aspects of the brick kilns.
- Under the NECTAR technology intervention, the project will undertake more experimental firing in the wood fired and dual fuel shuttle kiln to understand the business economics. It will promote product diversification and improvement in quality including introduction of studio potteries, glazed potteries, black potteries etc.
- Waterbody revival and rejuvenation in rural and peri-urban areas is mainly significant from a public health standpoint since they provide numerous ecosystem services required to control microclimate, biodiversity, and nutrient cycling. Since many government programmes are linked with the revival and rejuvenation of water bodies, TARA will take the initiative to develop technical water bodies revival and rejuvenation DPR and build a monitoring and evaluation (M&E) framework to analyse the impact after revival and rejuvenation.
- TARA is seeking to address the gaps in the construction sector value chain to assist in transforming the supply and demand side bottlenecks and transition to low-carbon pathways for the sector by developing a sustainable building materials market in Indian states, like Maharashtra.

BUSINESS MODELS



Technology driven and innovation based business models for social change i.e. empowering women and youth, and providing solutions for waste water and renewable energy



TARA focuses on promotion of micro and small enterprises through strengthening the stakeholder ecosystem and empowering individuals. Our range of services include product and technology validation, business modelling, as well as, linkages for market access. In response to emerging needs of entrepreneurs, TARA has structured its work in the following thrust areas:

- **Green and Inclusive Entrepreneurship:** Development and expansion of micro and small enterprises through information and capacity building, aggregation and market development and provision of enterprise support services – technology packaging and procurement, credit access support and market linkages.
- **Market Validation:** Business model innovation for ensuring doorstep provision of basic need products and green solutions through validation of alternative delivery mechanisms and creation of market ecosystem.
- **Amplification:** Delivery of enterprise support services at scale, through platforms and strategic partnerships.



KEY INITIATIVES



Rooftop solar system installed at an integrated flour mill-cum-oil extraction micro-enterprise in Bhadohi, Uttar Pradesh, which was earlier dependent on expensive and highly polluting diesel generator.

Making Solar Energy Transition for Rural MSMEs Viable and Profitable

TARA collaborated with Smart Power India (SPI) to create an enabling ecosystem for rural solar energy transition by partnering with various private and public actors in the business ecosystem such as technology providers, financial institutions, service providers, and relevant government agencies. By leveraging digital technology, the initiative aimed at generating and aggregating rooftop solar demand from rural MSMEs, and unlocking economies of scale for incentivising technology providers, financial institutions, and system installers to operate in rural areas. The initiative, in partnership with financial institutions, successfully introduced an innovative financing model for easing the energy transition journey of rural MSMEs.

The first phase of the project was implemented over 6 months from January 2022 to June 2022, and the

second phase of the project was implemented over 3 months from November 2023 to January 2024. Over a total duration of 9 months, 2500+ rural micro entrepreneurs (primarily dependent on diesel generators) across 8 districts were reached out for transition to solar energy. During this period, a total of 1422 micro entrepreneurs were registered on Rooftop Solar App, and 16 micro entrepreneurs got rooftop solar power systems with a cumulative installed capacity of 160 kWp. Majority of the registered micro entrepreneurs were at different stages of financing and installation, and are expected to transition to solar energy by next year.

Taisei Soil System (TSS) – Successfully incubated and handed over to Municipal Corporations

Taisei Soil System (TSS), a decentralised, zero-discharge, waste-water treatment technology developed and manufactured by Taisei Kogyo Co. Ltd., Japan, was successfully verified by TARA at Varanasi and Muzaffarnagar cities in India. The



TSS Technology Being Transferred to the City Development Commissioner of Varanasi



Kimura ,E-Square and DA team analysing the know-how of machines set up in Kimura Lab at KGTI Bengaluru.

TSS technology treats wastewater without any requirement of electricity or chemicals. Entirely below the ground, no surface land area is required. The technology is treating 4000 liters of wastewater per day that is discharged from public toilets in Varanasi under the supervision of Varanasi Municipal Corporation. In Muzaffarnagar, over 8000 liters of wastewater is treated per day that is discharged from Shri Ram Group of Collage.

Hence, the two TSS plants are preventing 12,000 Liters of wastewater every day from mixing with Ganges River, thereby serving as an eco-friendly solution under the Namami Gange Programme from Government of India. In collaboration with E-Square Inc. and Original Engineering Consultants Co., Ltd. from Japan. Post pilot, the TSS technology has been incubated in Indian conditions and transferred to the Municipal Corporations of Varanasi and Muzaffarnagar respectively.

SDGs Business Model Verification Survey with the Private Sector for Training of Casting Engineers in India:

In the year 2022-23, TARA in collaboration with Kimura Foundry and other project partners focused on setting up the Casting Academy. During the year, lab equipment was finalised and delivered to the Karnataka German Multi Skill Development Centre (KGMSDC), where a lab has been set up to accommodate the Casting Academy, with all the necessary facilities and provisions required. Work was also initiated for formulating the course curriculum, hiring the master trainers, and initiating the process of getting it accredited by the industry and concerned institutions.

Indo-Australia Collaboration for Reduction of Plastic Waste in India coordinated by the CSIRO, Australia:

The project deals with Analytical assessment of the magnitude of a set of selected plastics waste streams and their flow channels through Material Flow Analysis (MFA) using publically available data and scientific literature and Life Cycle Analysis (LCA). The short-term strategy includes monitoring waste flows, understanding business models and value chains and recommending reduction/elimination points. A High-Level Round Table was held with sectoral stakeholders to discuss Circular Economy for plastics. Also as the project moves to the second year, stakeholder consultations, and qualitative analysis to prepare a report for the roadmap document. The long-term work plan includes implementing a system that can be directly translated into action by the Industry and the necessary regulatory measures and /or fiscal supports and incentives that policymakers would have to bring in to create an enabling eco-system.

HIGHLIGHTS

- Rooftop solar initiative across 7 states reaching out to over 3000 rural entrepreneurs leading to a cumulative 150 kWp of solar installations.
- 12 rural micro enterprises adopted solar energy resulting in cost savings of up to 60% and mitigating 240 tons of carbon emissions annually.
- 2 TSS Pilot Sites i.e. Varanasi and Muzaffarnagar handed over to municipal corporation of respective cities
- Validation of 16 tech-based enterprises promoting multi-layered & organic farming, jute bag manufacturing, bio enzymes, hydroponics, and fodder station
- Replication of Integrated Fishery, Poultry and Vermicomposting Enterprise Model with 561 entrepreneurs in Uttar Pradesh and Andhra Pradesh creating 954 jobs, utilising 350 tons of waste
- TARA as a Consultant to IMEDF, supported over 3,500 individuals (23% women) adopted nature-based solutions in 4 SFURTI clusters
- 30 women run e-Rickshaws mitigating 5 tons of carbon emissions per annum while enabling 15,000+ women access safe mobility, education and healthcare facilities

WAY FORWARD

Moving ahead TARA will continue to innovate and develop alternative delivery mechanisms for greener and more inclusive local economies. TARA will strategically package knowledge products and best practises and transfer them to partners and other like-minded organisations working in the field of high-impact entrepreneurship to scale action. TARA will expand its portfolio of green technologies and co-create innovative financial products for the widespread adoption of entrepreneurship solutions in the areas of clean energy, waste management, digital economy, and agro-based enterprise models through partnerships. TARA will also focus on providing consultancy services to innovative technologies looking for market validation opportunities especially in the sector of wastewater treatment, renewable energy and e-mobility. TARA will continue to provide technical assistance to the Indian Micro Enterprises Development Foundation (IMEDF) in delivering efficient services to its supported platforms to increase outreach, positioning, and policy influence.

ADVISORY SERVICES



Innovating pathways for an inclusive, just, and green economic transition in India through interventions towards policy, finance, technology, research, and dialogue to help transition to a circular economy in the plastics, building sector, agriculture, and advocating for smooth access to sustainable finance in India.



TARA's advisory services builds knowledge and advocates for Climate Change Resilience and Biodiversity Conservation, Resource Efficiency and Circular Economy, and Inclusive Entrepreneurship and Livelihood Security. TARA has structured its work in the following thrust areas in response to the emerging triple planetary crises of climate, resources, and livelihoods:

- Climate Change Resilience: To provide technical support on climate change adaptation in regenerating agriculture and water conservation sectors and provide SDG- CC interlinking support to state and national governments
- Sustainable Consumption and Production: To bring evidence-based policy change towards reduction in virgin resources using principles of resource efficiency and circularity
- Inclusive Development: To shape policy shifts towards decentralised green and inclusive economies through partnership building, dialogues, and supporting Ministry of Micro, Small and Medium Enterprises (MSMEs)



KEY INITIATIVES



Housing VAM tool interface - Opening page

TARA initiated the study for Housing Sector to develop analytical tool named “Value Assessment Methodology (VAM)”. The project funded by UN-Habitat, provided technical assistance and expertise on analytical tool development and data analysis for sustainability assessment of major housing programmes. The online dashboard created as a result, is called the Housing VAM. The Housing VAM is a rapid and assisted assessment targeted at national housing programmes and large housing projects, with valuable feedback on gaps and potential to shift towards more sustainable construction.

Upon completing an assessment, users will receive a tailored feedback report. The feedback report provides information on gaps and main areas of improvement for the housing programme or project. It likewise provides links to main housing standards, guidelines and regulations, SDGs and other tools and resources.

The project ‘A policy landscape analysis and pre-competitive collaborations relevant to finished

product waste’ examined existing and emerging legislation for textiles, footwear, and plastic packaging and identified risks, impacts, and opportunities with respect to the client to expand in the Indian market. The project looked at both pre-consumer and post-consumer waste. The research focused on those policies that have a direct impact on the pre- and post-consumer products/waste. Relevant policies that the research looked at and reviewed include - Regulation impacting the waste collection and handling systems like the Extended Producer Responsibility (EPR), Disposal bans, Waste shipment requirements; Targets related to end-of-life textiles or plastic packaging i.e., separate collection, reuse/preparation for reuse, recycling, solid waste diversion from landfill targets, targets for packaging; Recycled content requirements; Commitments to financing end of life circularity, grants for the development of recycling infrastructure; and “Enabling” or “Ancillary” policies for used and waste products



Agriculture and Climate Transition Workshop with World Bank and Metroeconomica



Narrowcasting session with the community members of Bundelkhand on climate change

e.g., design requirements (chemical bans, design for recycling etc), certifications, traceability, and labelling.

The project India- Country Climate Development Report Agriculture climate transition reviewed the draft of agricultural chapter of the India Country Climate and Development Report (CCDR) and prepared technical paper(s), which will be the basis for the agriculture's chapter of India's CCDR. The project also assessed the evidence available for India's existing agriculture and food system policies and how these are aligned with mitigation and adaptation/resilience at both national and state levels.

The objective of the project Monitoring and Evaluating Climate Communication and Education is to understand the climate change awareness, education and solutions delivered to rural and marginalised farming communities in Bundelkhand through climate change communication programmes of community radio stations in Bundelkhand. The project attempted to document climate change communication through community

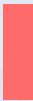
radio programmes (broadcasting and narrowcasting) to understand the degree of outreach of the climate change communication programme and related training activities of community radio in Bundelkhand.

The aim of the project Advisory Services for Community Engagement and gender inclusion in The Uttar Pradesh Power Distribution Network Rehabilitation was to improve the quality and reliability of electricity supply, reduce the aggregate technical and commercial (ATC) losses in electricity distribution, and restore the financial sustainability of the rural electricity supply. It was supported by the Asian Development Bank (ADB) and implemented by CRISIL. The project aimed to build institutional capacity to enhance the community participation in rural electricity distribution and especially in promoting gender-inclusive workplace practice in executing and implementing agencies covering both direct employees and contract workers.




Chantale Wong, United States (US)
Executive Director to the Asian
Development Bank interacting with Vidyut
Sakhi Denu Sharma in Chhata Block



HIGHLIGHTS



A workshop was organised by World Bank on “Agriculture and Climate Transition”. The workshop was organised in collaboration with Metroeconomica (lead partner) and Technology and Action for Rural Advancement (TARA). Its main objective was to present and discuss the preliminary findings related to two crucial aspects: (i) the impacts and vulnerability of Indian agriculture and food to climate change; and (ii) adaptation and mitigation strategies.



Through our project on Monitoring and Evaluating Climate Communication and Education, funded by the University of Saskatch, the project documented the case of climate change communication through community radio programmes (broadcasting and narrowcasting) in the form of documentary video and narrative reports. The videos are on the functioning of radio Bundelkhand and the listener's and experts' experiences and learnings from the Radio.



TARA built capacities of 170 Vidyut Sakhis in four selected Electricity Distribution Divisions in Barabanki, Meerut, Kosi, and Varanasi and helped CRISIL in reaching out to 3,42,900+ individuals about responsible energy consumption.

WAY FORWARD

In addressing the formidable challenges pertaining to resources, climate, and livelihoods, we have fostered collaborations with stakeholders across the spectrum. This includes local civic entities, ministry officials, grassroots community members, industry and business sectors, as well as international research organisations. The profound insights and empirical evidence culled from our endeavors, combined with the escalating global conversation around sustainable economies and the emphasis on 'building back better' post the COVID pandemic, will serve as pivotal catalysts in propelling TARA's initiatives in these domains forward.

Embracing a holistic strategy that paves the way for transformative actions, TARA is committed to overcoming obstacles that hinder the integration of these methodologies into policy structures, regulations, technical perspectives, market dynamics, and financial streams. TARA's objective is to amplify visibility and cultivate influential networks, centering its program around its core competencies. These include areas like sustainable housing, eco-friendly construction materials, plastic waste mitigation, fostering local eco-entrepreneurship, and implementing nature-based solutions (NbS). All of these efforts converge towards our overarching goal: facilitating the shift to environmentally-conscious and inclusive economies.

CAPACITY BUILDING



The capacity building programs implemented over the previous year were meticulously designed to address the unique needs of diverse stakeholders. We recognised that to achieve sustainable development goals and adapt to emerging challenges, organisations must nurture their human resources, leverage technology, and optimise operational processes.



Technology for Action and Rural Advancement (TARA) has implemented numerous capacity building programs in India. Here are some of the programmes

- **Digital Literacy Training:** TARA has conducted digital literacy training programs in rural areas, focusing on enhancing basic digital skills. This program aims to bridge the digital divide and empower individuals with technological skills for better opportunities
- **Entrepreneurship Development:** TARA has organised entrepreneurship development programs to nurture and support local talent in starting their businesses
- **Sustainable Agriculture Practices:** TARA has conducted capacity building programs for farmers, promoting sustainable and organic agricultural practices. These initiatives include training on efficient use of resources, crop diversification, and integrated pest management techniques.
- **Capacities building of SHGs:** TARA has conducted workshops focusing on empowering women in rural areas. These programs include training on entrepreneurship, leadership, financial literacy, and enabling women to become more self-reliant and confident
- **Circular Economy of Plastics:** TARA has partnered with Agra Nagar Nigam, to design 5 TPD MRF designs to manage the solid waste in the city. Through this partnership, TARA will work with the Nagar Nigam and provide the infrastructural support required to run a 5 TPD MRF.

Overall, TARA's capacity building programs have played a crucial role in skill development, empowering communities, and promoting sustainable development in rural areas of India.



KEY INITIATIVES



Door to Door electricity bill's generating and meter reading activity is being done by a Vidyut Sakhi Ayesha Khan

Capacity Building for Harnessing Digital Solutions in Rural Indian

Recognising the transformative power of technology, our capacity building programs placed a strong emphasis on harnessing digital solutions. Through specialised workshops and mentoring, we guided collection agents in rural geographies in Uttar Pradesh to streamline the electricity bill collection operations and support decision-making processes.

The Uttar Pradesh Power Distribution Network Rehabilitation Project supported by ABD and implemented by CRISIL aims to improve the quality and reliability of electricity supply, reduce the aggregate technical and commercial (ATC) losses in electricity distribution, and restore the financial sustainability of the rural electricity supply. While also building institutional capacity to

- enhance the community participation in rural electricity distribution and especially in meter reading, billing, and collections;

- promote gender-inclusive workplace practice in executing and implementing agencies covering both direct employees and contract workers;
- improve financial management capacity focusing on revenue recognition and collections of past receivables; and enhance capacity building on project management and safeguard compliance.

The overall impact of the project was to improve the quality and financial cost recovery in the power supply in Uttar Pradesh thereby leading to 24X7 power for all. To ensure efficient collection, the project involved Women's Self-Help Group who had been appointed as Vidyut Sakhis. These are women from the villages deployed as collection agents, they know the locals and hence can convince the non-paying consumers to make payments towards their electricity bills.



A online platform Bridge2Naukri has been developed to felicitate the Job fairs and filling out the gap between job seekers and jobs providers.



Ms. Chantale Wong and Sameer Kumar Khare
Senior Board members from Asian Development Bank-
ADB Felicitating the Vidyut Sakhi Nisha in Chhata Block

The hand-holding, along with the financial literacy and digital literacy trainings were provided to SHGs women (250) in all 4 Model Distribution Discoms through focus group discussions, workshops and regular mentoring that helped in

- Gained confidence for mobility
- Enhanced income

Bridging the Gap: Empowering Job Seekers and Employers through Bridge2naukri

Bridge2Naukri is supporting young aspirants in choosing career opportunities through counselling, training and placement assistance. In today's digital age, finding the right job or hiring the ideal candidate has become increasingly challenging. Navigating the job market can be a daunting task for job seekers, while employers struggle to reach qualified candidates efficiently. However, Bridge2Naukri, an online and offline placement platform, is simplifying this process by connecting job seekers and employers seamlessly.

The Online and offline facilitation model successfully reached out to more than 25000 active job seekers who are looking for suitable job or apprenticeship opportunities across geographies and sectors. It also helped in engaging with employers of various sectors and helped them in hiring skilled candidates which will ultimately help in improving the quality of workforce and decreasing the unemployment/attrition rate to some extent.

One of the key strengths of Bridge2Naukri lies in its seamless communication features. The platform enables direct interaction between job seekers and employers, allowing employers to evaluate candidates' suitability and job seekers to engage with potential employers. This direct communication streamlines the selection process, enhancing transparency and reducing the chances of miscommunication or misunderstandings.



Mass mobilisation and awareness by the
Bridge2Naukri team the services or
opportunities offered by B2N

HIGHLIGHTS

Build the capacities of Vidyut Sakhis and made aware on technical and non-technical aspects of the use of the Vidyut Sakhi App, which is developed by Uttar Pradesh Power Corporation (UPPCL) for facilitation in electricity bill collection and other aspects such as financial literacy, basic life skills and aspiration building etc.

3,42,962 consumers reached out and made aware on the adoption of efficient use of electricity and the need for timely payment of electricity bills.

The monthly average earning (Commission) of the Vidyut Sakhis increased from INR 850 to INR 6,583.75 per month after their handholding and capacity building. A Vidyut Sakhi Soniya Tomar is one of the role models to all Vidyut Sakhis in the region who earned INR. 90,000/- in the month of June 2022

TARA has partnered with Agra Nagar Nigam, to design 5 TPD MRF designs to manage the solid waste in the city. Through this partnership, TARA will work with the Nagar Nigam and provide the infrastructural support required to run a 5 TPD MRF.

WAY FORWARD

- In the coming year, TARA will focus on developing advisory services to strengthen and scale up the livelihood solutions through the Bridge2Naukri platform, along with behaviour change and communication development services. On the other hand, it has been observed that disposal of plastic waste is a serious concern due to improper collection and segregation systems.
- Plastic, of course, is uniquely problematic because it's non-biodegradable and, therefore, sticks around for a lot longer than the other forms of waste. To reduce plastic waste, the decentralised waste sorting and management models to be established environment-friendly waste disposal solutions. The implementation of these would be through creation of enabling ecosystems by means of collaborations, partnerships and direct demonstrations.
- Livelihood solutions and Plastic Waste Management, and Natural Resource Conservation, specifically water, would be key focus areas for creating desired change and impact.
- We look forward to setting up a capacity building programme for young minds in order to sensitise them about rural development and the concepts of 'systemic thinking', sustainable development. In further collaboration, fostering innovative approaches, and empowering even more communities and organisations to reach their full potential. Together, we can shape a business environment where organisations thrive and exceed expectations.

Business Affiliates

Technology and Action for Rural Advancement (TARA) continues to act as the ‘incubation engine’ of the Development Alternatives Group. The mandate of TARA, which was set up in 1985, is to test, adapt, and productionise the innovations of its sister concern not-for-profit Development Alternatives, and make them ready for dissemination, primarily through market channels. Over the years, it has incubated several business units and as a promoter, hived off new special purpose vehicles in an attempt to take sustainable development solutions to scale.

Incubatee Business Units

TAR Aurja

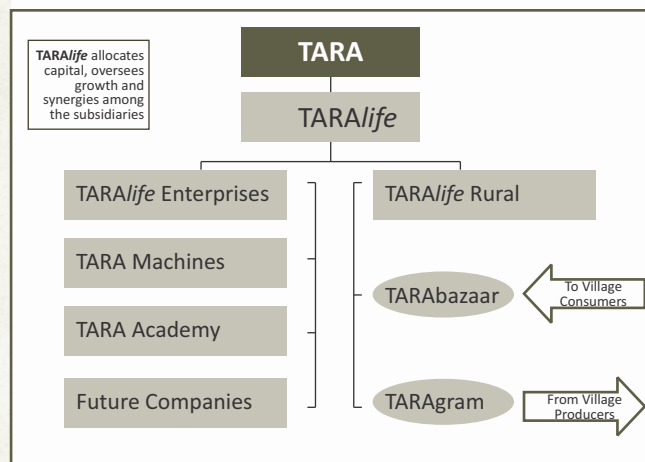
As an incubatee business unit, our special purpose vehicle, TAR Aurja, has pioneered the successful establishment and operation of ‘micro grids’ to deliver decentralised solar energy to village households and businesses in a commercially viable manner. It has grown to become a leader among micro grid operators in India, with cutting edge automated customer interface and power management systems providing solar powered electricity to village communities in Uttar Pradesh and Bihar.

TARA’s model of using energy as an accelerator for the economic growth model is unique as it recognises the dual role of people in villages i.e. that of “producers” as well as “consumers”. Our approach focuses on social inclusion, local growth and basic needs fulfilment, will ensure:

- Business viability of mini-grid operations by engaging with the community for building up demand with different stakeholders and use of technology for leak-proof energy and revenue management.

Development Alternatives Group Social Enterprises

Development Alternatives



*Lithium ion Battery Energy Storage System &
Grid-lock, Shivpura U.P*

- Greater incomes, creation of new jobs, new enterprises run by women/youth through co-creation of enterprise packages for existing and new entrepreneurs.
- Use of electricity to put money “into people’s pocket”, cash that can be used to pay for not just lighting but improved nutrition, entertainment, healthcare, and other needs.
- Customer delight by allowing customisation of product offerings via application and platforms to build reliability.



*TARAJA powered Enterprises...
Energy and Empowerment for All*

In close collaboration with Smart Power India, TARAurja operated mini- grids in 21 locations under the Smart Power for Rural Development (SPRD) Programme and undertook energy and revenue management services of 2 additional locations for the Dalmia Bharat Foundations. TARAurja cumulatively serviced 1800+ households with a cumulative revenue of INR 118 Lakhs during FY 2022-23. A significant portion of this revenue was generated by catering to the local enterprises with reliable energy for running businesses and ensuring customer delight, which is indicated by the Average Revenue per User (ARPU) of INR 596 per month. TARA, through its approach of community engagement and load acquisition through microenterprise development has ensured energy utilisation up to 63% out of the total 446+ MWh green energy generated during the year.

The reliable solar energy provided by TARAurja has substantially enhanced the average energy consumption of rural consumers, a key indicator of social and economic development. The average consumption has gone up from 16.83 units per month to 18.47 units per month, an increase of 9.74%.

Highlights of the Year:

- An increase of 1.13 % in revenue from sale of energy on y-o-y basis.
- An increase of 1.75% in revenue collections on y-o-o basis.
- Capacity expansion of Shivpura plant by 7.5 KWp to 60 KWp.

Indian Micro Enterprises Development Foundation (IMEDF)

TARA has enhanced its commitment to livelihood security and enterprise development through investment in the Indian Micro Enterprises Development Foundation (IMEDF), a special purpose vehicle set up by the Development Alternatives Group to accelerate impact in green and inclusive economic development.

Cluster Development

Capitalising upon innovation undertaken in the area of entrepreneurship and sustainable livelihood models for marginalised classes, IMEDF has positioned itself as a major catalyst in the cluster development arena, acting as a Nodal Agency of the Ministry of MSME under SFURTI.

In the financial year 2022-23, 1 more cluster was added to the IMEDF Portfolio, taking the tally to 30 clusters across 12 states,

reaching out to over 22,000+ artisans, crafts persons, and farmers, more than 9,000+ of who were women. As on 31st March 2023, the IMEDF footprint has extended to 12 States with a SFURTI grant of INR 959.00 million and investments by our partners to the tune of INR 650 Lakhs in these clusters. During the FY 2022-23, 22 clusters have become functional and entered the production stage. High-end and environmentally friendly technologies in clusters like medicinal and agro-based have been used to get optimum outputs. Green renewable energy sources like solar energy panels, water recycling, and waste-water treatment technologies are encouraged at the clusters.

IMEDF has been appointed as a Technical Support Agency for Eight Rural Industrial Parks (RIPAs) in Bilaspur district of Chhattisgarh. Under the project, IMEDF will provide technical support to various manufacturing units such as organic paint unit, etc.

IMEDF conducted the Sustainability Assessment of six of its clusters pan-India. The team visited the clusters to collect data and make a framework.

One case study was submitted under Sitaram Rao Livelihoods India Competition 2022, and was shortlisted as the top 10 case studies. The case study on Mat and Babui grass craft Cluster in Pashchim Medinipur, West Bengal, was placed among Top 5. The lac & Other NTFP Processing cluster, Jharkhand was nominated among the Top 3 Best SHGs in the country by PLAN India Impact Awards 2022.

Four clusters participated in 1st SFURTI Mela held in October 2022. Mat and Babui grass craft cluster, West Bengal participated in SIDBI Mela held in January 2023.

Micro Enterprise Development

IMEDF has signed a contract with Rang De for low-cost credit services through the udyamE channel. IMEDF delivers loan products for micro-entrepreneurs with support from social investors ranging from INR 20,000 to INR 1,00,000. In FY 22-23, IMEDF strengthened its ESS support through a strategic partnership with RangDe. A total of 1631 entrepreneurs have been able to start or grow their businesses with the help of loan products. The total amount of loans disbursed is INR 255.33 lakhs (inclusive of amount raised by social investors on udyamE Rural Business Fund, social investing platform). IMEDF is also working with RangDe to customise the loan products according to the need of entrepreneurs.



IMEDF partner during the TARAGram Yatra



SAF team at Barauliya cluster, U.P.

5465 users have been registered on the udyAME digital platform, which includes the mobile app and website. Besides text messages, digital services are also being promoted through social media platforms like Facebook and WhatsApp, cumulatively engaging over 500 customers monthly. To ensure a 'one-stop solution for all entrepreneurial needs, the udyAME platform needs to onboard partners with strong competence in technology, finance, marketing, and capacity building. IMEDF is working to have a strategic partnership with Transform Rural India and smaller NGOs across Uttar Pradesh to scale its operation through udyAME kiosks.

Capacity Building

IMEDF entered into a partnership with Yale School of Management's Global Social Entrepreneurship program under which students of the university visited IMEDF enterprises in Varanasi and Mirzapur culminating in a session at Bengaluru.

IMEDF partners such as ATREE, PRADAN participated in TARAGram Yatra 2022 and undertook a visit to Bundelkhand and Mirzapur.



*Mat and Babui grass craft cluster,
West Bengal at the SIDBI Mela*



Women workers at RIPA Chhattisgarh

TARA Applied Research Centre (TARC)

TARA Applied Research Centre has been established as a premier business centre to provide solutions in advancing low-carbon and resource-efficient solutions, transforming innovations into industrial technologies. We take immense pride in our role as pioneers in promoting environmentally conscious solutions within the cement and concrete manufacturing industry. Our primary focus is on the transformational technology, Limestone Calcined Clay Cement (LC³), which holds the key to a greener and more efficient future for the building material industry.

Cement industry is the third-largest industrial energy consumer, comprising 7% of the global industrial energy use. Cement production involves the decomposition of limestone (calcium carbonate), which represents about two-thirds of the total CO₂ emissions.

As a low-carbon technology, LC³ is one of the leading solutions to address issues born out of the rising global population and urbanisation patterns coupled with infrastructure development needs that drive the demand for cement and concrete.

TARC has positioned itself to directly intervene in India, Africa, the Middle East, and Southeast Asia, which are set to increase their domestic cement production capacity to meet infrastructure development needs.

Our Mission

At TARA Applied Research Centre, we aim to facilitate the seamless integration of Limestone Calcined Clay Cement into the operations of cement and concrete manufacturers worldwide. We are committed to revolutionising the construction industry by promoting LC³ as a viable alternative to conventional cement, reducing carbon emissions, conserving natural resources, and fostering sustainable development.

Expertise and Innovation

Our dedicated team of geologists, engineers, and experts bring together a wealth of knowledge and experience in materials science, cement chemistry, and sustainable construction. We thrive on innovation and collaboration, working hand in hand with cement and concrete manufacturers to adapt and implement LC³ technology into their existing processes. By leveraging our collective expertise, we aim to elevate construction standards while minimising the industry's ecological footprint.

Services We Offer

TARA Applied Research Centre offers a comprehensive range of services tailored to meet the specific needs of cement and concrete manufacturers seeking to adopt Limestone Calcined Clay Cement:

Technology Transfer: Our core offering involves smoothly and efficiently transferring LC³ technology to your production facilities. From feasibility assessments to process integration, we guide the industry at every transition step.

Research and Development: Our state-of-the-art research facilities enable us to refine LC³ technology continuously. We conduct in-depth research to optimise production parameters, enhance material properties, and explore new applications.

Consultancy Services: We provide expert consultancy on LC³ technology adoption, process optimisation, and environmental impact assessment. Our guidance assists you in making informed decisions aligned with sustainability goals.

Interested cement companies contract with the TRC and pay for the direct cost of the raw material examination and formulation of potential raw material mixes. External financing is sought for continent-wide dissemination activities. In this lab-to-industry transformation, LC³TRC provides the cement manufacturers and companies with a relook at their cement plants for decarbonising the entire cement manufacturing process.

The business unit is growing steadily and continues to develop clientele and explore more low-carbon avenues for Indian companies like MP Birla Cements, Ultratech Cements, and JK Cements and International Companies like SCC Thailand.

TARAbazaar: Delivery IN to the village

Despite growing aspirations, increasing purchasing power, and vast unmet needs, the village consumer is still largely underserved today. Remote, ill-connected markets are hard to service and most business models that rely on limited revenue streams cannot generate adequate revenues to cover operational costs. TARAbazaar will deliver a wide range of 'quality of life' products and services to village customers, thus reducing customer acquisition and distribution costs.



These products include a variety of basic needs fulfilment products for water purification, lighting and energy, preventive healthcare, and clean cooking fuel. The average purchasing power per capita across the target geographies is ₹3,000 (approximately \$50) for non-food products. The products represent a mix of daily, weekly, or monthly consumables, as well as one-off purchases.

TARAGram: Pick up OUT from the village

TARAGram increases local incomes through marketing of value-added products made in local village production centres using efficient technologies - many of them supplied by TARA Companies - to process local or recycled materials. TARAGram will establish production centres across Uttar Pradesh, Madhya Pradesh and Bihar, to make handmade paper, fabric and textiles out of recycled waste material, products from these paper and textiles, processed foods and traditional medicines, domestic products, and other revenue-generating activities.

Through this, TARAGram will continue to provide livelihood security for village communities, creating employment and home-based income generation opportunities for women organised in producer groups as well as productivity enhancement, quality assurance, value addition, and aggregation services.

Sufficient revenue/value is always built into the value chain for each stakeholder of the supply chain, making the total delivery system financially sustainable. By fulfilling basic needs and promoting livelihood security, it will build an unmatched brand equity.

TARA Machines

TARA Machines and Tech Services Pvt. Ltd. ('TARA Machines') develops and markets innovative green building and waste-to-wealth solutions for micro, small, and medium enterprises. The USP of TARA Machines is the capacity to deliver total business solutions to green building material entrepreneurs and recycling enterprises, with strong focus on technical support, material and product testing, training, and regular servicing. TARA Machines expects to establish numerous enterprises producing building materials in the next five years.

TARahaat

TARahaat is the leading provider of literacy and numeracy skills for adults, particularly women, in rural India. The primary product of TARahaat is TARA Akshar+. TARA Akshar+ is an ICT-based programme that imparts functional literacy in Hindi and basic arithmetic in just 56 days. After this, Gyan Chaupali is established as a post-literacy programme for six months, which strives to strengthen and build upon what the learners have already learned, and provide access to effective information.



Fly ash bricks machine being operated to produce energy-efficient bricks substituting clay bricks

Board of DIRECTORS



Dr Ashok Khosla

Chairman, Development Alternatives

For nearly five decades, Dr Ashok Khosla has been a pioneer in finding paths to attain development which can reach everyone and be sustained by the Earth's resources. He has been Co-Chair of the United Nation's International Resource Panel, President of the International Union for Conservation of Nature (IUCN), and President of the Club of Rome. He has also been a member of the Government of India's National Security Advisory Board and Scientific Advisory Council to the Cabinet. For his contributions, he has been awarded the Order of the British Empire by the Government of UK, the UN Sasakawa Environment Prize, and the Zayed International Environment Prize, among many others.

Date of Enrollment: 1985
Membership ceased: Till date



Rakesh Khanna

TARA, Advisor

Mr Rakesh Khanna is a member of Development Alternatives Group and oversees building partnerships, networks, and is an active member of the strategic team of the Group. He has been instrumental in setting up a network of franchised TARAKendras (Rural ICT Centres) and developing content, products, and services customised to local needs and establishing strategic partnerships. Besides being involved with various business development programmes in the past, he has been on the Environment Committee Panel of the Confederation of Indian Industries (CII). Mr Khanna completed his B.Tech in Electrical Engineering from IIT Delhi in 1971. With more than 40 years of experience to his credit, he's contributed 25 years in the corporate sector before deciding to lend his visionary instinct towards rural development.

Date of Enrollment: 2007
Membership ceased: Till date



B. Narayanaswamy

Consultant, Ipsos Research Pvt. Ltd.

Mr Narayanaswamy has over 30 years' experience in Ownership, Executive, Senior Management, and Consultancy in Market Research and Advertising. As the founder of Indica Research, Mr Narayanaswamy has spent time at IMRB, Mode and Contract Advertising. For Indus Union, he is a guide and a bouncing board, having played a key role in providing strategic depth to the Agency's work. He is a university rank holder in Bachelor of Engineering (Hons.) in Electronics and Communication, Madras University (1978), and an MBA from the Faculty of Management Studies – University of Delhi (1980).

Date of Enrollment: 2012
Membership ceased: Till date



Achla Savyasaachi

MFIN, Head-State Initiatives

Ms. Savyasaachi is currently working as the Vice President in Sa-Dhan, the National Association of Community Development Finance Institutions. Her work involves analysing different approaches for financial inclusion, facilitating dialogue between different stakeholders, policy makers, and service providers; leading several policy-oriented research; working to establish client friendly practices and systems in the microfinance sector; coordinating and participating in processes to evolve an appropriate regulatory legislation for Micro Finance Institutions. She has worked extensively in promoting people-based institutions. Ms. Savyasaachi is an Associate Member of the Institute of Company Secretaries of India. She holds an LLB from CCS University and a Post Graduate Diploma in Human Rights from Indian Institute of Human Rights (United Nations World Programme for Human Rights Education)

Date of Enrollment: 2012
Membership ceased: Till date

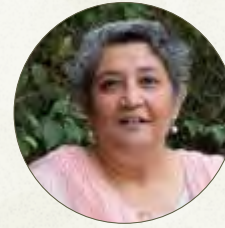


Amitava Basu

Consultant

He has worked in Asia and Africa for around 45 years in the field of accounting, finance, and institutional strengthening for the infrastructure sector and non-government organisations with the objective of facilitating institutional and financial reforms and poverty alleviation. He specialises in Financial Management, Public Sector Reforms, and Capacity Building. He has worked as the Executive Director of PricewaterhouseCoopers from 1997-2003 and was the President of Intercontinental Consultants & Technocrats Pvt. Ltd. from 2003-2016. He has taught courses on financial management at different business schools and conducted training programmes for working executives in XLRI from 1987-1996.

Date of Enrollment: 2012
Membership ceased: Till date



Zeenat Niazi

Chief Knowledge Officer, DA &
Senior Vice President, DA Group

Zeenat Niazi, Sr Vice President, and Chief Knowledge Officer of Development Alternatives Group provides oversight to the policy studies and development action initiatives at the Development Alternatives Group. Her work addresses resilience building in human settlements through Sustainable Consumption and Production (SCP) strategies, especially green and inclusive circular economy models.

She has been a founding member and Co-Chair of the Board of the Climate Action Network South Asia, member of the Multi-Stakeholder Advisory Committee (MAC) of the Sustainable Buildings and Construction Programme of UN's One Planet Network, Member of the C&D Waste Sub-Committee of the NITI Aayog on Construction and Demolition Waste Management in Urban Areas, Strategic Steering Committee member of UNEP PAGE Programme in India, the Steering Committee member of the Green Economy Coalition (GEC) in India, and is a member of the Task Force on Green and Inclusive Circular Economy for Angul District in the State of Odisha, India. She also contributes to the Global Green Growth Platform.

Date of Enrollment: 2017
Membership ceased: Till date



K. Vijaya Lakshmi

Chief Advisor, Development Alternatives

Dr K. Vijaya Lakshmi is the Chief Advisor of Development Alternatives. Her focus and achievements are in water quality testing, along with the development and application of innovative technologies that address particularly the problems of women. Dr Vijaya Lakshmi realised that 90 per cent of water borne diseases are due to coli form bacteria that largely affects women and children in rural areas and urban slums. She took upon herself the challenge of demystifying the science of water quality monitoring and developed filter and testing kits that can be taken to villages in India.

She has expertise in Environmental Management Systems (EMS) planning, design, and facilitation of implementation; EIA & EMP studies; corporate responsibility - policies and procedures; corporate sustainability - measurement and verification; state of environment studies and regional assessments in the framework of pressure- state-impact and – response strategies.

Date of Enrollment: 2012
Membership ceased: Till date



S. S. Venkateswaran

TARA

Mr Shankar Venkateswaran has about 35 years of experience of working in the corporate and social development sectors. He started his career in mainstream management consulting before going on to set up Partners in Change, a pioneering non-profit specialising in corporate sustainability and CSR. He has also set up the India office of the American India Foundation and served as its Executive Director, India and Director of the think-tank and consultancy firm, SustainAbility, before joining PwC as Director, Sustainability. In 2017, he retired as Chief of Tata Sustainability Group. Shankar has held board and advisory positions with several non-profits and academic institutions in India and overseas.

Date of Enrollment: 2012
Membership ceased: Till date



Maj. Gen. Rahul Bhardwaj, VSM (Retd)

Chief Operating Officer, TARA &
Associate Vice President, DA Group

Maj. Gen. Rahul Bhardwaj, VSM (Retd) has an experience of 38 years of proven leadership and organisational skills involving resource and man-management in a varied and highly competitive military environment. The job content included planning, coordination, allocation of resources, and motivation of teams and successful execution of plans. Such challenging jobs resulted in the exhibition of a logical and analytical mind combined with both written and verbal communication skills.

He utilised, acquired, and imbibed knowledge to innovate strategies leading to improved efficiency and reduction of costs. Maj Gen Bhardwaj has worked as part of a team at various points in his career by contributing positively towards the generation of ideas and following them up energetically to fruition.

Date of Enrollment: 2017
Membership ceased: Till date

AUDITORS' REPORT

K G Somani & Co LLP
CHARTERED ACCOUNTANTS

www.kgsomani.com
office@kgsomani.com
LLP Identification No. AAX-533()

Independent Auditor's Report

To the Members of Society for Technology and Action for Rural Advancement

Opinion

We have audited the accompanying financial statements of Society for Technology and Action for Rural Advancement (the Society'), which comprise the Balance Sheet as at 31 March 2023 and the Income and Expenditure Account, for the year then ended, and a summary of the significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give a true and fair view in conformity with the accounting principles generally accepted in India, including the Accounting Standards issued by the Institute of Chartered Accountants of India (ICAI'), to the extent considered relevant by the management of the financial position of the Society as at 31 March 2023 and its financial performance for the year ended on that date.

Basis of Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) issued by the ICAI. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Society in accordance with the Code of Ethics issued by ICAI and we have fulfilled our ethical responsibilities in accordance with the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of matter

Attention is invited to Schedule 22(9) of Schedules forming part of financial statements regarding investment made in the Equity shares of TARA Machines & Tech Services Pvt. Ltd. (a subsidiary company), during the year and its subsequent provisioning at the end of the year.

Our opinion is not modified in respect of the same.

Responsibilities of Management for the Financial Statements

The Management is responsible for preparation of these financial statements that give a true and fair view of the state of affairs, results of operations of the Society in accordance with the accounting principles generally accepted in India, including the Accounting Standards issued by the ICAI to the extent considered relevant by the management. This responsibility includes maintenance of adequate accounting records for safeguarding the assets of the Society and for preventing and detecting fraud and other irregularities; selection and application of appropriate accounting policies; making judgements and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal control, that were operating effectively for ensuring the accuracy and completeness of accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the management is responsible for assessing the Society's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the management either intends to liquidate the Society or to cease operations, or has no realistic alternative but to do so.

Regd. Office: 3/15, ASAF ALI ROAD NEW DELHI-110002
Corp. Office: A/1, Asaf Ali Road, 3rd Floor, Deline Cinema Building, Delhi 110002. Tel: +91-11-41403935, 23277677, 23252225
Converted from K G Somani & Co (Partnership firm) w.e.f. 24th June 2021



Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with Standard on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on whether the Society has in place an adequate internal financial controls system over financial reporting and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Society's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Society to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Other Matter

- i. In respect of the branch (Orchha), whose returns are included for the year ended on that date, the verification has been made through proper returns, adequate for the purpose of our audit, received from the branch not visited by us.

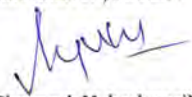
Regd. Office: 3/15, ASAF ALI ROAD NEW DELHI-110001
Corp Office: 4/1 Asaf Ali Road, 3rd floor, Delta Cinema Building, Delhi-110002. Tel: +91-11-41403938, 21277677, 21252225
Converted from K G Somani & Co (Partnership firm) w.e.f. 24th June 2021



- ii. As per section 17(1) of Foreign Contribution (Regulations) Act, 2010 (as amended), the amount of foreign contribution must be utilized through one or more FCRA Account opened for such purpose. However, as informed to us, the society during the financial year 2022-23 transferred funds from FCRA utilization account to one of its non- FCRA/local bank accounts in order to discharge the liability on account of TDS and Provident Fund appearing in the books of FCRA.
- iii. During the year ended 31st March 2023, TDS u/s 195 has been deducted from the payments made to Non-Residents and also deposited to the respective authority. However, TDS return under Form 27Q has not been filed.
- iv. The closing liability of Rs.29,94,140 towards staff welfare fund has been treated as long term borrowing for a period of sixty months as per agreement dated 31st march 2022 which includes opening balance of Rs.23,16,015, loan repayment by employees towards loan taken from staff welfare fund of Rs.4,19,359, employees and employers contribution of Rs.62,705 each and interest on loan (net of TDS) of Rs.1,33,356.
- v. The registration under the Foreign Contribution (Regulation) Act, 2010/Foreign Contribution (Regulation) Rules 2011, for carrying out activities of social nature with registration number 231650722 dated 5 August 2016 for the period from 1 November 2016 to 31st October 2021, the society applied for renewal and the same is pending with Ministry of Home Affairs (MHA) for approval. The extension has been provided multiple times till 31st March 2023 and the same is further extended till 31st March 2024 vide MHA Notification no.II/21022/23(22)/2020-FCRA-III dated 25th September 2023.
- vi. Expenses incurred in respect of common resources used by the Society for Technology and Action for Rural Advancement & Society for Development Alternatives (Related party) like manpower, assets, etc. have been allocated on the basis of the assessment made by the management. In the absence of the requisite information, we have relied upon the allocation made by the management.
- vii. In the absence of separate banks accounts for most of the projects, we are unable to comment whether the grant receipts have been utilized for the same projects for which the said grants have been received.

Our opinion is not modified in respect of the above-stated matters.

For **K G Somani & Co LLP**
Chartered Accountants
FRN: 006591N/N500377


(Bhuvnesh Maheshwari)
Partner
M. No. 088155



UDIN: 2308815586YWF8824

Date: 29-09-2023
Place: New Delhi

Society for Technology and Action for Rural Advancement
Balance Sheet as at 31 March 2023
(All amounts in ₹, unless otherwise stated)

	Schedule	As at 31 March 2023 ₹	As at 31 March 2022 ₹
Sources of funds			
Funds			
General fund	1	(26,774,608)	(22,762,613)
Non-current liabilities			
Long-term borrowings	2	30,985,465	28,782,835
Long-term provisions	3	1,469,756	1,248,682
Current Liabilities and provisions			
Unspent grants, net	4	40,845,724	32,726,512
Other current liabilities	5	31,352,387	28,929,466
Short-term provisions	6	377,955	374,277
		78,256,679	49,299,159
Applications of funds			
Non-current assets			
Property, plant and equipment			
Tangible assets	7	6,106,211	7,121,768
Non-current investments	8	4,545,725	4,545,725
Deferred tax assets (Net)	9	11,393,337	11,020,904
Long term loans and advances	10	1,276,805	2,477,030
Current assets, loans and advances			
Trade receivable	11	6,820,480	8,885,601
Cash and cash equivalents	12	40,152,661	7,195,347
Short-term loans and advances	13	6,962,076	5,644,044
Other current assets	14	999,384	2,408,740
		78,256,679	49,299,159

Summary of significant accounting policies and notes to the financial statements

22

The schedules referred to above form an integral part of the financial statements.

As per report of even date
For K G Somani & Co LLP
Chartered Accountants
FRN:006591N / N500377

For and on behalf of the Society for Technology and Action
for Rural Advancement


Bhuvnesh Maheshwari
Partner
M.No.088155


Ashok Khosla
Chairman


Maj Gen Rahul Bhardwaj, VSM (Retd)
Chief Operations Officer


Vinod Nair
Gen Manager Finance

Place : New Delhi
Date : 29-03-2023



Society for Technology and Action for Rural Advancement
Income and Expenditure Account for the year ended 31 March 2023
(All amounts in ₹, unless otherwise stated)

	Schedule	Year ended 31 March 2023 ₹	Year ended 31 March 2022 ₹
Income			
Grant income	4	108,652,549	59,857,133
Sales of goods	15	2,652,526	5,326,294
Technical and other receipts	16	21,524,287	36,837,809
Other income	17	3,443,669	4,371,749
		136,273,031	106,392,985
Expenditure			
Purchase of finished goods		2,652,526	5,266,950
Personnel expenses	18	30,318,938	25,209,611
Finance costs	19	1,769,858	1,621,219
Depreciation	7	1,123,749	1,421,740
Grant expenses	4	66,258,494	30,962,951
General and administrative expenses	20	35,348,395	35,492,628
		137,471,960	99,975,099
(Deficit)/Surplus before tax and prior period item		(1,198,929)	6,417,886
Less: Prior period adjustments	21	(2,099,982)	(123,501)
		(3,298,911)	6,294,385
Less: Tax expense			
Tax-Earlier years		(811,597)	(53,285)
Current year tax		(273,920)	(350,970)
Deferred tax benefit		372,433	(719,143)
(Deficit)/Surplus for the year transferred to general fund		(4,011,995)	5,170,987

Summary of significant accounting policies and notes to the financial statements

22

The schedules referred to above form an integral part of the financial statements

As per report of even date
For K G Somani & Co LLP
Chartered Accountants
FRN:006591N / N500377

Bhuvnesh Maheshwari
Partner
M.No.088155

Place : New Delhi
Date : 29-09-2023



For and on behalf of the Society for Technology and Action for Rural Advancement

Ashok Khosla
Chairman

Maj Gen Rahul Bhardwaj, VSM (Retd)
Chief Operations Officer

Vinod Nair
Gen. Manager Finance



The Development Alternatives Group

Development Alternatives (DA)
www.devalt.org

Technology and Action for Rural Advancement (TARA)
www.tara.in

Indian Micro Enterprises Development Foundation (IMEDF)
www.imedf.in

TARAlife Sustainability Solutions Pvt. Ltd.
www.taralife.in

TARA Machines and Tech Services Pvt. Ltd. (TMTS)
www.taramachines.com

TARAhaut Information and Marketing Services Ltd.
www.tarahaut.com

TARA Livelihood Academy Pvt. Ltd.



Technology and Action for Rural Advancement

B-32, Tara Crescent, Qutub Institutional Area, New Delhi – 110016, India

Tel: +91 11 2654 4100, 2654 4200, Fax: +91 11 2685 1158

Email: tara@devalt.org, Website: www.tara.in