

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

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Act 1976 (FCRA Reg. No. 231650722)

Society for Technology and Action for Rural Advancement

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Contents

Cŀ	HAIRMAN'S MESSAGE	4
IIV	MPACT	6
PA	ARTNERS AND COLLABORATORS	9
FC	OCUS 2018-19	10
a.	Technology	
b.	Entrepreneurship	
C.	Capacities	
d.	Influence	
e.	Business Affiliates	
CC	OMPLIANCE	30
a.	Board of Directors	
b.	Auditors' Report	

Chairman's Message



ince Independence, the Indian growth story has greatly benefitted a good part of the population. But it has also left huge numbers of our fellow citizens behind. And it has tragically undermined the productivity of the resource base on which future generations will depend. Over the past three and a half decades, the primary effort of TARA and the Development Alternatives Group has been to promote a model of national development that is more equitable and environmentally sustainable, than the one we have followed for over half a century.

Our view is that at the very least, a sustainable India must be a place where the basic needs of each of its citizens are met, not just the demands of its few elites; where clean water and sanitation is available for all; where

everyone has adequate nutritious food, secure shelter and access to health care; where every child is educated and can take active part in the knowledge society; where the aspirations of our youth are matched by the opportunities offered by the economy; and where institutions are transparent, accountable and participatory.

In other words, we need to build a nation where citizens have reason and the wherewithal to be happy and fulfilled, taking good care of environmental resources for their own well-being and that of subsequent generations.

One effective way to reach these mutually reinforcing goals is to create conditions under which the society creates and nurtures the generation of sustainable livelihoods and jobs at scale for all to have meaning, dignity and income; and the access they need to fulfil their basic needs.

While the not-for-profit flagship of the DA Group, Development Alternatives, is responsible for generating a different model of development and promoting it through both direct application on the ground and advocacy at the policy level; scaling out of the model is done by our incubation engine, TARA, and its commercial affiliates TARAlife and IMEDF.

A very large part of what we have achieved is because we had the means and ability over decades to try out radically innovative ideas. This was so because both financial and social support to independent civil society organisations was a strong commitment by national policy makers.

On the financial front, we received generous support from international development organisations such as DFID of UK; SDC of Switzerland; MacArthur, Ford and Rockefeller Foundations of the US; CIDA and IDRC of Canada; and other donor agencies with a commitment to research, innovation and knowledge generation as an integral part of designing better development impacts.

But this support has dried up. Current policies make it difficult for overseas or domestic funding to be received for innovation work. There is now virtually no support to civil society organisations to build institutional assets, a knowledge base, the capacity to develop essential, innovative solutions or to take operational risks. It is well known that investing one rupee in research can, in a short period, give perpetual annul returns of 10 rupees or more. Massive investment in research is why Japan, Taiwan, China and USA and, more recently, Singapore and Finland, are the blossoming economies that they are. But, despite strong policy commitments to science and technology, India does not invest in innovation of products and technologies or incubation of scalable delivery models that are needed for sustainable development. And certainly not to independent research organisations. Until it does so, our social, environmental and economic problems can never be solved.

On the institutional front, solutions to many of the big problems of lopsided development need not just the government and business, but also a vibrant and active civil society. Nurturing strong Social Purpose Organisations (SPO) is extremely important for identifying issues of mal development, trying out solutions and implementing them on the ground. Today in many countries, being an NGO is seen as the enemy of the public, an attitude that deprives those countries of the possibility of reaching a better future. We, in India, now need to change that.

Dr Ashok Khosla Chairman



Year 2018-2019

Empowered Communities

16,660

households accessed basic needs services like WASH, Clean Energy, Housing and Literacy





1,440 new SHGs formed and710 women's groups linked to banks

Clean and Green Environment

6,140

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





6.5 lakh tonnes of waste utilised

12 lakh tonnes of top soil saved

515 MWh green electricity generated

Income Generation Opportunities

690 enterprises set up and supported

6,460 people trained on employability and vocational skills





5,210 jobs created

INR $19.6\,\mathrm{cr}$ income generated through skill enhancement



Partners and Collaborators









































































TARA develops, validates and customises innovative eco-solutions for delivery to community groups, small and medium industries, micro, small & medium enterprises, government and intergovernmental agencies.

Technology

The Technology Development and Incubation team at TARA has created enormous interest through development and successful implementation of resource efficient and low carbon technologies in various countries across the globe, especially Africa and the Middle East. The initiatives entail product development and validation, conducting pre-feasibility studies, and subsequent transfer of technical know-how to development organisations and commercial business units in the global south. The work in this domain covers three functional areas, viz. Green Building Materials, Waste Utilisation and Water Solutions. It is supported by TARA's own labs, workshops, design studios and pilot production facilities at Delhi and Datia (Madhya Pradesh).

Key Initiatives

Technology Transfer

EcoKiln technology dissemination in Malawi: In the past year, TARA has been actively engaging with all relevant stakeholders for enabling dissemination of the EcoKiln technology in Malawi, by conducting regular information sessions across the country. Information has been disseminated to representatives from more than 2500 enterprises operating in the country through the use of ICT tools. Moreover, around 531 entrepreneurs were sensitised on the EcoKiln through 13 specialised information sessions in various target locations. This had led to growing interest in the technology among the business community, with TARA subsequently releasing 24 MOUs for soil testing to determine its suitability. In addition, the above initiatives, along with continuous interactions with the Malawian government, resulted in the release of a gazette notification on compulsory use of non-wood fired brick in the country.

Products and Processes

Innovative structures: TARA, in association with Digital Structures Lab at TATA Centre, MIT, USA, has developed a highly efficient roofing product for structural use. An alternative to classical roofing slabs, this is a reinforced concrete structure capable of withstanding loads of more than 20KN with standard deflections. The product demonstrates that if reinforced concrete can be

To enable market acceptability of innovative products, a connected chain of research-application-validation steps is required. TARA has successfully carried out field application trials of LC³ by constructing a canteen shed and administrative office at its Ghitorni campus. The work is categorised under the application vertical, where the real world usage of LC³ in structural buildings has been demonstrated. The canteen shed was made using LC³ slabs, while the administrative office has been constructed using LC³ blocks and hollow core LC³ slab. The performance of both buildings is at par with similar structures made using conventional cement varieties.



used intelligently, the embodied energy of structures can be reduced through material reduction. The developed and tested structure reduces embodied energy by 58%, concrete by 70% and steel by 10%, compared to a standard RCC roofing slab.

Medium capacity fly ash brick making machine: TARA has designed and developed a medium capacity fly ash brick making machine for producing high quality fly ash bricks. The topologically optimised design has resulted in an increase in the maximum compaction capacity from 30 tonnes to 45 tonnes. It is capable of producing around 1,600 brick per hours or 25,000 bricks per day (considering a total runtime of 16 hours daily). The machine has been designed to incorporate structurally optimised components for higher durability and performance, even in testing conditions. Moreover, the hardened liner plates help in extending the operational lifetime

Process Innovation

Production of LC³ through Vertical Roller Mill: A new process for production of LC²/LC³ was successfully implemented by TARA, which involved grinding the cement via the latest technology of Vertical Roller Mill (VRM). The VRM is a type of grinder used to convert coarse materials into an extremely fine powder, and finds use in the paint, cement and ceramic industries. This technology offers two major benefits over the traditional ball mill – high level of grinding efficiency and reduction in energy consumption to produce a higher quality

product. The initiative was a first collaborative effort between TARA and UltraTech Cements, the third largest cement manufacturer in the world. The LC³ technology is widely regarded as a cleaner, viable alternative to existing cement varieties, and has emerged as a potent solution for enhancing sustainability in the construction sector. The LC³ produced by this process has a mortar strength of 56 MPa (28 days), which is the highest ever recorded. The results prove that production of LC³ through the VRM technology is one of the most optimised technology-product combination for cement plants.



Highlights

Product Development: In line with its innovation and incubation mandate, TARA successfully developed and customised three new products and solutions, and implemented one new production process, in the building materials vertical. Through product development, the first link in the services value chain, TARA intends to subsequently provide incubation support for enterprise development in the area of clean technologies for housing and construction.

Industry Engagement: Through the Technology Resource Centre (TRC), new business associations have been established and existing partnerships strengthened with some of the major cement companies in India and across the globe. This has led not only to repeated engagement, but to receipt of new Expression of Interests and signing of new Non-Disclosure Agreements for joint collaboration towards incubating developed technologies.

South-South Cooperation: Sustainable impact of the Ecokiln and LC³ technologies and their relevance in enhancing resource efficiency and reducing the carbon footprint has attracted attention of cement companies, individual entrepreneurs, state and national governments, and equipment producers across the globe. For LC³, several companies in Africa and the Middle East have signed contracts for establishing feasibility. For the EcoKiln technology in Malawi, through sustained dissemination across the country, an appreciable number of agreements for soil testing have been signed with individual entrepreneurs. In all, for both technologies, enquiries have been received from cement companies and individual entrepreneurs from more than 10 countries in Africa.

Way Forward

TARA has remained steadfast in delivering towards its mandate and overarching objective in the product and technology development vertical. Last year, it has successfully carried out development and promotion of sustainable technologies and provision of consultancy services to industry, thereby strengthening efforts towards enhancing resource efficiency and promoting South-South Cooperation. The continuing efforts are testament to TARA's ability to deliver customised and innovative solutions for improving livelihoods of communities and enterprises, and improving the bottom lines and sustainability of companies.

Based on last year's work, it will endeavour to carry out the following broad range of activities:

- Through continuous monitoring and testing, enhance the performance of previously developed products
- Engage with academic and research institutions to design, develop and validate new and innovative technologies in the building material, water and waste space
- Build upon the technology transfer work carried out in Malawi to expand South-South Cooperation to new geographies in Africa
- Globally promote LC3 as a technology for enabling sustainability in the construction sector.



Technology driven and innovation based approaches to enterprise development for social change – empowering women, enabling youth, and unleashing entrepreneurship

Entrepreneurship

TARA focuses on promotion of micro and small enterprises through strengthening the stakeholder ecosystem and empowering individuals, using information and capacity building tools. 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.

Enterprise Development: Establishment 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 needs products and solutions through validation of alternative delivery mechanisms and creation of a market ecosystem.

Amplification: Delivery of enterprise support services at scale, through platforms and strategic partnerships.

Key Initiatives

Innovation - Science and Technology based Entrepreneurship Development (i-STED)

The project promoted entrepreneurship through application of innovative and eco-friendly technology solutions in waste-to-wealth (building material, paper recycling and processed fuel sectors). In the year 2018-19, it focused on addressing two key issues – availability and quality – affecting the development of fly ash brick industry in Bihar. TARA carried out a detailed survey of such enterprises and mapped 145 enterprises on Geographical Information System (GIS), making it available in the public domain. Under its quality improvement initiative, it devised and piloted a Quality Rating System to provide technical support and on-site training to 31 enterprises for quality enhancement.

Scheme of Fund for Regeneration of Traditional Industries (SFURTI)

TARA provided technical assistance to the Indian Micro Enterprises Development Foundation (IMEDF) to implement the SFURTI scheme of the Ministry of MSME. In the financial year 2018-19, five clusters worth INR 12.89 crores engaged with 3000+ beneficiaries across Uttar Pradesh, Uttarakhand, Gujarat, Andhra Pradesh and Karnataka.

Smart Power India (SPI) Micro Enterprise Development Project

The project sought to provide load development

A self-made entrepreneur "Kallu Karigar", as he is popularly known, Mahesh Kumar is an electrician who used to do fan Maharajganj in Balarampur disctrict of Uttar Pradesh. He was facilitated a loan worth INR 25,000 through TARA, and provided with technological consultancy to buy a fan winding machine. This machine has increased his productivity from three fans per day to six fans per day. Connecting his enterprise to TARAurja ensured high quality and reliable electric supply for his new winding machine, thus increasing his work efficiency and increasing his monthly revenue by 35% from his earlier income of INR 18,000.



services to different Energy Service Companies (ESCOs) in Uttar Pradesh and Bihar. Under this project, a total of 63 enterprises have been provided expansion services, i.e. technology upgradation, across six districts – Sravasti, Kushinagar, Balrampur, Siwan, Saran and Bettiah. The expansion of these enterprises has led to a load enhancement of 43kWh for two ESCOs (TARAurja and HUSK). INR 21 lakhs has been leveraged from two Micro Finance Institutions for setting up various micro enterprises.

Tafgard Technology / Taisei Soil System (TSS) – Prototype validation

TSS is a decentralised environment-friendly waste-water treatment technology developed and manufactured in Japan by Taisei Kogyou Co. Ltd. that treats biological effluents from toilets. As part of the project, TARA tested the prototype of the TSS technology in India. In the financial year 2018-19, TARA, in collaboration with the Japanese partners, municipal corporations and construction agencies in Uttar Pradesh, started the construction of TSS at two selected schools in Varanasi and Muzaffarnagar.

Philips

In order to provide high quality lighting technology to rural areas at a reduced cost, TARA, with support from Philips Foundation, aims to distribute 100,000 LED bulbs and LED tube lights to customers at ESCO sites. The intervention has been designed to bridge gaps in access to high

quality lighting solutions for rural consumers. The project partnered with six ESCOs (TARAurja, HUSK, OMC, Mlinda, HCL Foundation and Claro) in Uttar Pradesh, Bihar and Jharkhand, and distributed 38,000 LED bulbs and 11,000 LED tube lights benefitting 6,745 families.

Asia Engagement Hub - Systems Play

Systems Play (www.systemsplay.com) is a collaborative platform focused in the Global South, which is dedicated to building a community of praxis that innovates responses to intractable social-ecological challenges. TARA anchors the Asia Hub of this platform, which fosters collaboration, experimentation, and learning, with a focus on an issue of intense current concern: job creation in an increasingly dynamic society. We work with 20 regional, national and international partners and change makers who tackle complex problems, share their stories, and enable them to develop systemic solutions.



Highlights

- In the last financial year, TARA prototyped 23 enterprise packages and 5 business models; supported 483 micro enterprises, with 510 jobs created and 2800 individuals skilled on enterprise development
- Under the SFURTI programme, 5 clusters worth 12.89 Cr approved and are under various stages of implementation across 5 states; 3000+ artisans/farmers engaged
- Strategic partnerships developed with more than 30+ renowned agencies (nationally and internationally), which include 7 technology providers, 6 financial institutions, 4 global academic institutions, 4 research and policy institutions and 11 implementation partners
- Enhanced geographical footprint in 47 districts across 13 states through dissemination of technical and process insights; 487 clusters and enterprises mapped on GIS, and virtual platforms developed for strengthening enterprise support service delivery
- In the portfolio of green enterprises 6,50,000 kWh of solar energy generated (solar micro grids); 63,000 tonnes of carbon mitigated (fly ash bricks); 6,745 families benefited by saving 1,23,000 units of electricity through energy efficient lighting devices

Way Forward

Moving forward, TARA is committed to continuous innovation and accelerated action at scale. In order to do so, TARA is standardising processes, developing modules, and integrating digital technology based platform into its support service portfolio for micro and small enterprises. TARA is also actively building partnerships with premier global academics such as Norwegian University of Science and Technology (NTNU) and Bertha Centre for Social Innovation and entrepreneurship (Cape Town University). With their insights and experiences, TARA aims to influence policy and enable development at larger scales. TARA will capitalise on the platforms it supports, in order for transference of tools - including leading the Asia engagement hub of the Systems Play platform, and providing technical support to the Indian Micro Enterprises Development Foundation (IMEDF) in delivering efficient services to clusters and micro entrepreneurs.



Our flagship programmes 'functional literacy', 'literacy to self-reliance', 'skills to livelihoods', 'skilling supply chains', 'bridging information gap', 'bridge2naukri' and 'waste to wealth' are designed on the basis of context specific aspirations, particularly those of young women.

Capacities

Services or products provided by TARA perform various functions, including the capacity building of groups and individuals. Being an incubation and innovation engine, TARA's work in the area of 'capacity building' is focused on providing solutions to enhance knowledge, skills, employment opportunities and processes by enabling implementation at scale.

These solutions include knowledge packaging, designing of training modules, studies on the existing natural resource ecosystem, providing skill building trainings and designing processes to scale up the implementation.

Key Initiatives

Developing and Disseminating Knowledge and Information Packages

Capacity building of large number of target individuals/groups through packaged knowledge on different themes and subjects.

Designing Capacity Building Models

Integration of different components through innovations for scaling up the initiative.

Implementation

- Capacity building of individuals across multiple sectors and in alignment to the national ecosystem
- Designing the work packages using existing technologies in an efficient manner in order to ensure both direct and indirect implementation

Under the above listed, few demonstrations on the field have been:

Skills to Livelihoods

Under the Centre of Excellence programme (UNDP), women and girls were imparted skills in three major sectors, namely, Beauty and Wellness, Retail and Sales. Other than relevant skills of the trade, they were equipped with life skills training and interview readiness tips. These women and girls were linked with suitable

Coming from a not so economically strong family, living in Sultanpur, Mamta Sharma joined TARA-DISHA Centre of Excellence for a six-day training programme for sales associates. On completing the course, she expressed her views about the programme and her future aspirations - "During the training, I was groomed on personality development skills, body language, eye contact and customer management skills, which have built up my confidence level. Soon after my training, my interview was lined up with KFC. I got through it, and presently I am working as a team member while earning a salary of INR 8,500 per month. My family is happy that I am being able to help them financially, and in the coming months, I see myself climbing up the ladder in the organisation – to the position of the manager."



livelihood opportunities after the training. The modules imparted not only focus on introducing the know-how of trades, but also the inculcation of desired attitude and receptivity towards the dynamic external environment. These trained women and girls, once employed, start becoming the influences who Affect the overall community positively.

They become trend setters for their community – families start recognising the value of supporting women folks and help them in following their dreams.

Upskilling of Technicians

With the support of Hindustan Unilever Limited (HUL), technical training was imparted for HUL Pureit technicians in different geographies. The aim was to spread awareness and empower technicians on modifications in technology and other soft skill aspects, which would ultimately help the company to enhance their business. Through these trainings, technicians learn to perform better in both technical and non-technical spaces, including customer relationship management and smooth delivery of services.

Women Adult Literacy

TARA, with the support of HCL Foundation, made 1,556 women literate and numerate across six Gram Panchayats of Kachhauna and Behandar blocks of Hardoi district, through its flagship adult literacy programme TARA Akshar+. This is an ICT based programme, designed and developed by

the Development Alternatives Group, which has emerged as an alternative solution for addressing the problem of illiteracy in a fast and effective manner. It uses advanced memory techniques, cutting-edge heuristics and computerised graphics to compress total learning time to 112 contact hours spread over 56 days. Post Akshar Gyan and TARA Ganit, the learners are taken forward to the post literacy component of the programme - Gyan Chaupali, where the women practice what they have already learnt in terms of reading, writing and arithmetic; enhance their understanding of the world around through games, edutainment material, guest speaker sessions on banking, savings, health and hygiene, WASH related aspects, etc. Through the initiative, some women were also linked to vocational training on tailoring and stitching conducted by the Rural Self-Employment Training Institute (RSETI), Hardoi.



Highlights

Engagement was strengthened with HUL Pureit for capacity building of 100 existing technicians of HUL. This turned out to be a successful skill upgrading programme for company employees, which has a good possibility of replication.

1500+ women and girls were made literate through the TARA Akshar+ programme. Besides the learners, 30 local instructors and TARA Sahelis as the field team were trained for the programme, which gave them good livelihood options even after the programme, feeding into the local economy.

2,430 women and girls were trained on different courses in different sectors and also linked to livelihood opportunities. This line of work of TARA helped in gaining a good understanding of the existing ecosystem and possibilities of developing synergies.

Many existing partnerships such as with UNEP, GIZ and HUL, were strengthened to explore new avenues of work. This included waste management (mainly effective disposal) and strengthening of the natural resource base through scoping studies and so on. These projects have helped in capacity building of stakeholders in the value chain, through better exposure and exploring new linkages.

Way Forward

With extensive experience in the field of capacity building through field based interventions, TARA will now work to enhance the technology driven applications in order to reach out to a larger audience and make the ongoing initiatives robust. The aim would be to bring efficiency in the processes mainly related to monitoring and tracking mechanisms.

Emerging learnings in the field of skilling and livelihoods will aim to fill the gaps in the ecosystem by exploring existing mechanisms and processes. These interventions will not just be based on a linear approach of creating livelihood linkages or enhancing livelihoods, but will also focus on creating a sustainable ecosystem that supports the changes introduced. The aim is to impact over one lakh individuals in the coming year, through different interventions at different locations in five geographical clusters.

Work done in the field of waste management will be taken forward by engaging with relevant stakeholders and bringing efficiency in the existing processes.



The Policy and Planning team at TARA builds knowledge on Sustainable Consumption and Production (SCP). It works with state governments, businesses and research institutes to fulfil India's global commitments on Climate Change action and the Sustainable Development Goals.

Influence

TARA creates awareness through consultations with several stakeholders including state government departments, Central Ministries, Civil Society Organisations and UN agencies. The four state governments engaged with in 2018-19 are Tamil Nadu, Telangana, Himachal Pradesh and Punjab, along with the Ministry of Environment, Forest and Climate Change.

Key Initiatives

A pilot was conducted with the Government of Assam for integrated assessment of the Sustainable Development Goals (SDGs) and climate change adaptation/mitigation. The assessment tool called Climate Change Impact Analysis (CCIA) was used to assess the SDGs targets of Public Works Department and Department of Environment, Assam.

A capacity building module on climate change adaptation focusing on Agriculture, Cities and Financing Climate Change action was developed for the Government of Assam, in collaboration with the Action for Climate Today Programme of Oxford Policy Management.

TARA has also drafted submissions on the gender policy of the Adaptation Fund and submitted proposals to them as an active member of the network.

A training programme on using Umberto software (tool) for MFA (Material Flow Analysis) and LCA (Life Cycle Analysis) of the construction material was conducted at the head office. The training was conducted by Ms. Martina Prox from ifu Hamburg, Germany, as a part of the GIZ Resource Flows project. Eight participants from TARA and three from the GIZ Delhi office attended the training.

TARA and Adelphi initiated a project to address the issues of climate change adaptation in the water sector by identifying appropriate technology requirements for a particular state. They identified technology solutions and suggested upscaling these through project concepts for building climate resilience. The workshop aimed to share Assessment (TNA) with nodal agencies and stakeholders from Himachal Pradesh, Punjab, Tamil Nadu and Telangana, discuss and finalise the highly prioritised technologies. Suitable case studies from across the world were identified to discuss in the workshop, and further steps project concepts for implementing the technologies.



Highlights

TARA, with European Union, SWITCH-Asia and GIZ, jointly conducted an 'India SCP Multi-Stakeholder Consultation' at India Habitat Centre, New Delhi, in August 2018. The consultation provided a platform that brought together various stakeholders from the government, civil society, academia and private sectors to create multi-stakeholder dialogue to mainstream SCP in India. The environmental impacts of the current consumption and production and lifecycle practices, and the potential to mitigate these impacts through an inclusive strategy that supports economic growth needed to fuel development in the country was deliberated in the consultation.

Way Forward

Climate Change Adaptation projects have facilitated collaboration with funding organisations such as the Adaptation Fund (AF), GIZ and NABARD. Our focus is now on developing more projects on the role of CSOs in communicating and sharing learnings from adaptation projects nationally and globally. We will endeavour to overlap the Economics of Land Degradation approach with land-based adaptation models.

TARA will aim to create visibility and high-value networks to build a programme from the representation at COP, AF board meetings and being a part of the AF-NGO global network.

BUSINESS AFFILIATES

Over the past year, the business affiliates of the Development Alternatives Group were restructured to scale up the solutions for sustainable development it has evolved over its thirty six years of research, analysis and operation.

Technology and Action for Rural Advancement (TARA) continues to act as the "incubation engine" of the Group. The mandate of TARA, which was set up in 1985, is to test, adapt and productionise the innovations of its sister not-for-profit Development Alternatives, and make them ready for dissemination, primarily through market channels.

As an incubator, TARA is currently validating the market potential and business model of TARA Urja, which has pioneered 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 1,900 customers in 21 villages.

TARA has also enhanced its commitment in the area of enterprise development through support to the Indian Micro Enterprises Development Foundation (IMEDF), a special purpose vehicle set up by the Development Alternatives Group to accelerate impact in the area of

entrepreneurship driven green and inclusive economic development.

DA Group Social Enterprises TARA TARA life allocates capital, oversees growth and synergies among the subsidiaries TARA*life* TARAlife Enterprises TARA*life* Rural To village TARA Machines **TARAbazaar** Consumers TARA Academy **TARAhub** Aggregator **Future Companies TARAgram** From Village Producers



TARA, in turn, has promoted TARAlife Sustainability Solutions Pvt Ltd ('TARAlife') with the purpose of rapidly speeding and scaling up the dissemination of TARA incubated technologies and solutions.

TARAlife is a holding company mandated to set up and support subsidiary companies and commercial units to create livelihoods in rural communities and to bring transformative products into the rural market. TARAlife, with its operating divisions and its subsidiaries, is a group of companies set up to commercialise technologies, products and services that are proven in the market and have demonstrated a potential for scale.

TARAlife has several subsidiary units, including:

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 costly to service and most business models that rely on limited revenue streams cannot generate adequate revenues to cover these 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 INR 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.

TARAhubs: Points of Presence

TARAlife Rural's last-mile connectivity with village customers will be enabled by strategically located "TARA hubs" - mini-malls where sale of incoming products and aggregation of exports will create a commercially viable marketplace.

The primary function of the TARAhub is to provide operating facilities for TARAbazaar, TARAgram, TARA Machines and the TARA Livelihood Academy. Space will also be rented to external partners for financial services, IT and mobile repair

services, and retail outlets such as for beauticians, tailors and household appliances. The facility will be powered by a TARA Urja unit, a sister concern under the TARA umbrella, using solar and other renewable energy, ensuring reliable power for the facility and enabling the unit to sell its surplus power off-site to neighbouring clients.

The three pillars of TARAlife's rural presence, the TARAbazaar, TARAgram and TARAhubs are, together, the key supports for the local community to generate a new and vibrant economy.

TARA Machines

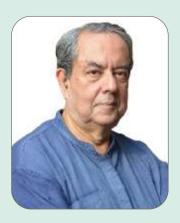
TARA Machines and Tech Services Pvt. Ltd. ('TARA Machines') develops and markets innovative green building and waste-to-wealth solutions for micro, small and medium enterprises. The USP of TARA Machines is the capacity to deliver total business solutions to green building material entrepreneurs and recycling 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.

Board of Directors 2018-2019



Dr Ashok Khosla Chairman Development Alternatives Group



Achla Savyasaachi Head-State Initiatives MFIN

Amitava Basu Board Member TARA



Rakesh Khanna Advisor, TARA



Shrashtant Patara CEO, TARA



K. Vijayalakshmi Vice President Development Alternatives Group



Zeenat Niazi Vice President Development Alternatives Group



Auditors' Report

Society for Technology and Action for Rural Advancement Income and Expenditure Account for the year ended 31 March 2019

	Schedule	Year ended 31 March 2019 ₹	Year ended 31 March 2018 ₹
Income			
Grant Income	3	10,79,94,644	7,82,47,026
Sales of goods		46,67,896	17,39,920
Technical and other receipts	14 16	61,09,120	1,02,75,219
Other income	16	27,88,474	16,14,794
		12,15,60,134	8,98,76,959
Expenditure			
Purchase of finished goods		44,30,535	42,35,187
Personnel expenses	16	3,03,31,221	3,47,59,424
Finance charges	17	18,62,303	16,42,134
Depreciation	6 3	5,28,156	6,13,586
Grant expenses	3	7.43,44.239	4,75,47,038
General and administrative expenses	18	1,97,23,195	1,30,92,896
		13,12,19,649	10,18,90,265
(Deficit)/Surplus before tax		(96,59,515)	(1,20,13,306)
Less: Tax expense			
Current tax		-	
Deferred tax benefit		35,63,155	(5.87,969)
(Deficit)/Surplus for the year		(60,96,360)	(1,26,01,275)

Summary of significant accounting policies and notes to the financial statements

This is the Income and Expenditure account referred to in our report of even date.

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

For Walker Chandlok & Associates

Chartered Accountants Firm Registration No.: 001329N For and on behalf of the Society for Technology and Action for Rural Advancement

Nitin Toshniwal Partner Membership No. 507568

Chairman

Shrashtant Patara Chief Executive Officer GM Finance

Place: New Delhi Date : 31 October 2019

Society for Technology and Action for Rural Advancement Balance Sheet as at 31 March 2019

	Schedule	As at 31 March 2019	As at 31 March 2018
Sources of funds		3.20	20
Capital			
Capital fund	1	(1,47,84,815)	(86,88,455)
Loan fund			
Unsecured loan	2	2,65,00,000	2,65,00.000
Liabilities and provisions			
Unspent grants, net	3 4	2,98,53,263	6,47,72,256
Current liabilities	4	2,12,65,802	2,31,74,301
Provisions	6	33,70,871	32,46,418
		5,62,05,121	10,90,04,518
Applications of funds			
Fixed assets	8 7	34,46,894	39,75,050
Deferred tax assets	7	97,86,578	62,23,423
Investments	-8	1,80,72,490	2,90,85,990
Current assets, loans and advances			
Sundry debtors	9	25,73,125	28,47,934
Cash and bank balances	10	2.02.51,194	5,67,71,618
Other current assets	11	3,18,638	88.699
Loans and advances	12	1,17,56,202	1,00,11,804
		3,48,99,159	6,97,20,055
	-	6,62,05,121	10,90,04,518
Summary of significant accounting policies and notes to the			
financial statements	10		

This is the Balance Sheet referred to in our report of even date.

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

For Walker Chandlok & Associates

Chartered Accountants

Firm Registration No.: 001329N

For and on behalf of the Society for Technology and Action

for Rural Advancement

Nitin Toshniwal

Partner Membership No. 507588

Ashok Khosla

Chairman

Shrashtant Patara Chief Executive Officer

Vinod Nair GM Finance

Place : New Delhi Date: 31 October 2019

Walker Chandiok & Associates

T+91 11 4278 7070 F +91 11 4278 7071

Independent Auditor's Report

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

Report on the Financial Statements

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 2019 and the Income and Expenditure Account for the year then ended, and a summary of significant accounting policies and other explanatory information.
- 2. 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 ssued by the Institute of Chartered Accountants of India ("ICAI") of the state of affairs (financial position) of the Society as at 31 March 2019 and its surplus (financial performance) for the year ended on that date.

Basis of Opinion

3. We conducted our audit in accordance with the Standards on Auditing (SAs) issued by the ICAL 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 these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management for the Financial Statements

- 4. The Management is responsible for preparation of these financial statements that give a true and fair view of the state of affairs (financial position) and surplus (financial performance) of the Society in accordance with the accounting principles generally accepted in India including the Accounting Standards issued by the ICAL. This responsibility includes the design, implementation and maintenance of adequate internal control 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.
- 5. 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.



Walker Chandiok & Associates

Auditor's Responsibilities for the Audit of the Financial Statements

- 6. Our objectives are to other resecutive assurance about whether the financial statements as a whole me teet from material missistement, whether due to finant or error, and in issue an auditor's report that inhalogs our opinion. Reveniends assurance is a high level of assurance, but is not a guarative that an audit conducted in succedance with Standards on Auditing will always credit a material missistement when it exists Missistements can arise from those or error and are considered material it, inside they or in the appropriate, two could reasonably be expected to influence the connectic decisions of users taken on the basis of these featurals abstracted.
- As part of an audit in accordance with Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:
 - Identify and sesses the risks of material modulatement of the financial statements, whether due
 to face or error, design and perform said procedures respectives in thruse risks, and obtain
 suit evidence including the utilization conflicates submitted by the sub-respects, that is
 sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a sustrial
 misstatement resulting from throat is, higher than for one resulting from error, as final 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 piece an adequate internal financial cortrols 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 Society's use of the going concern basis of accounting
 and, based on the audit evidence obtained, whether a maintail uncertainty exists related to
 sevents or conditions that may cast significant doors on the Society's ablight 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 familial inferior sor, 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 clause the Society to cases to confirme 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 manurer that achieves far presentation.
- We communicate with the management 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

- 9. We did not audit the financial statements of branch (Crochts), whose financial statements reflect total statement of 255.47.715 and net assets of \$1,07.77,998 for the year then ended on that date, as considered in the financial statement. These financial statement have been suitled by Mis. 36A & Association whose subtilined have financial statement and the statement of the statement have been suitled by Mis. 36A & Association whose subtilined three for the year then ended to the extent they relace to the financial statements of the Society for the year then ended to the extent they relace to the financial statements of audited by us as stated in this paragraph is based oddly on the sund traper of Mis. SMA & Associates. Our opinion is not modified in respect of the above matter with respect to our reliance on the financial statements audited by Mis. SRA & Associates.
- 10. Further, the Society has also submitted audited financial statements for the year 31 March 2019 pursuant to the requirements of Section 4446 of the Income Test Act, 1901, on which we assured an earlier sport to the board of members of the Society.

Restriction on distribution or use

11. The financial statements have been prepared by the management, solely, for the purpose of inflorestation of the Members of the Society and therefore, these financial stationments may not be suitable for another purpose. This report is issued solely for the aforementioned purpose and accordingly, should not be used, inflored to or distributed for any other purpose or to any other purpose to use prior written consent. Further, we do not accept or assume any shollify or any duty of once for any other purpose for which or to any other purpose for which or to any other purpose.

For Walker Chandick & Associates

Chartered Accountants Firm Registration No.: 001329N

Nitin Toshniwaii Partner Membership No.

Membership No.: 507568. UDIN: 1950 #56 8 A A A A A E L US YO

HEW DISK

Place New Delhi Date: 31 October 2018

The Development Alternatives Group

Development Alternatives (DA) www.devalt.org

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

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

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

TARAhaat Information and Marketing Services Ltd. www.tarahaat.com

TARA Livelihood Academy Pvt. Ltd.













