



THE GUIDING PRINCIPLE OF TATA TRUSTS

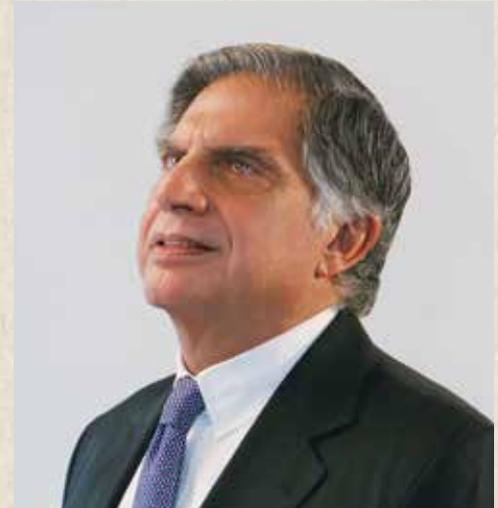
“There is one kind of charity common enough among us, it is that patchwork philanthropy which clothes the ragged, feeds the poor, and heals the sick. I am far from decrying the noble spirit which seeks to help a poor or suffering fellow being. However, what advances a nation or a community is not so much to prop up its weakest and most helpless members, but to lift up the best and the most gifted, so as to make them of the greatest service to the country.”

~ JAMSETJI TATA



MESSAGE FROM THE CHAIRMAN

Over the past year, the Tata Trusts have continued to focus on issues and causes of national importance and on the creation of opportunities for lower income communities in India. The Trusts have been actively involved with initiatives announced by our Prime Minister, as well as in the areas of water conservation, sanitation, cancer care and rural upliftment. In February 2019, one such state-of-the-art cancer facility in Varanasi, equipped with facilities for early detection and treatment, was inaugurated by the Prime Minister. The Trusts are participating in similar projects with the government, such as 'Lakhpati Kisan', which will help create rural empowerment by creating jobs and livelihoods for over 1,00,000 households.



Partnerships with like-minded foundations and research institutions have helped create self-sustaining ecosystems which benefit society as a whole. The Trusts have traditionally supported or actively collaborated with various globally renowned research entities, such as Massachusetts Institute of Technology (MIT) and University of California, San Diego on projects such as low-cost medical devices and the elimination of the malaria toxin carried by mosquitoes.

It is truly heartwarming to see the Trusts continue to transition from a traditional grant-giver to a national catalyst of social change, while creating gratifying stories of impact, some of which have been mentioned in the pages that follow.

The Trusts will continue in their journey of dedicating themselves to the enhancement of the quality of life of the communities that they serve.

Ratan N. Tata



CORPORATE INFORMATION

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Mr. R. Venkataramanan (up to March 31, 2019)

Secretary & Chief Financial Officer

Mr. Burzis S. Taraporevala (up to June 30, 2018)
Mr. Ashish Deshpande (with effect from July 1, 2018)

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Chartered Accountants

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Legal Advisors

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Kotak Mahindra Bank Limited, Mumbai
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Standard Chartered Bank, Mumbai
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FINANCIAL OVERVIEW 2018-2019

The year that was:

The total disbursements made by the Trusts during the year were ₹10,944.38 million (US \$156.35 million). Disbursements of ₹10,275.68 million (US \$146.80 million) were made on all programme grants during the year. Endowments to the tune of ₹67.50 million (US \$0.97 million) were made and small grants touched ₹0.50 million (US \$0.007 million).

The total disbursements to individuals amounted to ₹600.70 million (US \$8.58 million).

Details of grant disbursals: 2018-2019

| TYPE OF GRANT | ₹ IN MILLION | US\$ IN MILLION |
|-------------------------------|------------------|-----------------|
| Institution: Programme grants | 10,275.68 | 146.80 |
| Institution: Endowment grants | 67.50 | 0.97 |
| Institution: Small grants | 0.50 | - |
| Individual grants | 600.70 | 8.58 |
| Total | 10,944.38 | 156.35 |

₹10 million is ₹1 crore; 1 US \$ is approximately equal to ₹70

Individual grant disbursals: 2018-2019

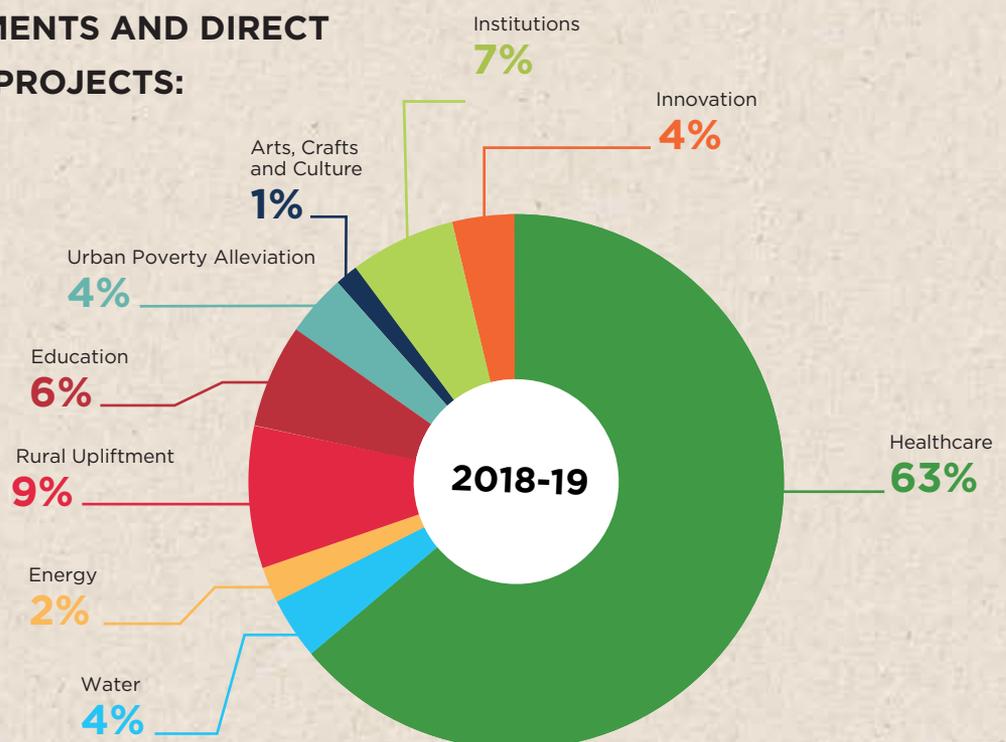
| TYPE OF GRANT | ₹ IN MILLION | US\$ IN MILLION | % |
|---------------|---------------|-----------------|------------|
| Medical | 318.13 | 4.54 | 53 |
| Education | 282.57 | 4.04 | 47 |
| Total | 600.70 | 8.58 | 100 |

Institutional grant disbursals (Theme wise): 2018-2019**

| THEMATIC AREA | ₹ IN MILLION | US\$ IN MILLION |
|---------------------------|------------------|-----------------|
| Healthcare | 6,553.20 | 93.62 |
| Water | 441.61 | 6.31 |
| Energy | 162.10 | 2.31 |
| Rural Upliftment | 901.54 | 12.88 |
| Education | 627.97 | 8.97 |
| Urban Poverty Alleviation | 364.41 | 5.20 |
| Arts, Crafts and Culture | 150.95 | 2.16 |
| Institutions | 766.90 | 10.96 |
| Innovation | 375.00 | 5.36 |
| Total | 10,343.68 | 147.77 |

** The figures in the table reflect institutional grant disbursals in the financial year

GRANT DISBURSEMENTS AND DIRECT IMPLEMENTATION PROJECTS: 2018-2019



Health



A Village Health Volunteer collecting samples for testing blood for malaria using rapid diagnostic kit.

OUTREACH



29 states + 7 union territories



6.24 million individuals



STRENGTHENING THE NATION'S ABILITY TO FIGHT DISEASES

India is undergoing an epidemiological shift in the profile of diseases, facing a triple burden of communicable diseases, non-communicable diseases and accidents/injuries. While healthcare services are greatly skewed in favour of urban areas, the majority of the population resides in rural areas. The Indian healthcare system also operates amidst multiple supply constraints, such as facing a significant gap in human resources in terms of their availability, distribution and capacities. To elaborate, India has a ratio of **0.7 doctors and 1.5 nurses per 1,000 people** compared to the WHO's ideal average of 2.5 doctors and nurses per 1,000 people. There are significant gaps even in the medical infrastructure. In 2011, in India, the World Bank reported an availability of just **0.7 hospital beds per 1,000 people**. Further, India has poor public health financing - at just over **1% of the GDP** being spent on healthcare. With the lowest rates of technology adoption, and just over 1% GDP being spent on the health sector, India continues to remain poor in its health outcomes.

The Trusts aim to address these challenges by building a healthy nation where quality, affordable, and patient-centric healthcare is accessible to all Indians. The focus is on improving the quality of primary healthcare and its access to all, by addressing challenges in human resources, infrastructure, and technology adoption, among others.

The ultimate mission is to strengthen healthcare access to the bottom 10% of the Indian population pyramid by 2021, leveraging existing and emerging information communication technology and healthcare technologies.

KEY THEMATIC AREAS UNDER THE HEALTHCARE PORTFOLIO INCLUDE:

Non-Communicable Diseases:

Screening for and diagnosis of common NCDs including Hypertension, Diabetes, and Oral, Breast and Cervical cancers, for all citizens aged 30 and above.

Communicable Diseases:

Supporting three initiatives to tackle Tuberculosis through: (i) a TB consortium in collaboration with the Indian Council of Medical Research;

(ii) a study on supplementing nutrition to Tuberculosis patients and their families in Odisha; and (iii) India Health Fund.

Mental Health:

The Mental Health Initiative supported by the Trusts focuses on homeless people with mental illness, community-based mental health programmes and institutional reform. The Trusts also help to strengthen public health facilities through capacity building, technical interventions, and innovative technologies.

Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCH+A):

This approach was developed to provide a 'continuum of care' to ensure equal focus on various life stages of women (adolescence to mother to child and again to adolescence). The Trusts engage in community interventions such as strengthening the AAA - Accredited Social Health Activist (ASHA), Anganwadi Worker (AW), Auxiliary Nurse Midwife (ANM) - platform, in order to address community issues / barriers. The Trusts help to strengthen government health facilities by capacity building, technical interventions and use of technology.

Systems Strengthening:

The Trusts are collaborating with various governments to create sustainable, socially relevant and state-of-the-art infrastructure. Key projects include assisting the Government of Maharashtra to establish the Maharashtra State Supply Chain Corporation for a healthcare delivery system that will automate procurement and inventory management for all healthcare providers under the state government.



KEY ACHIEVEMENTS

- a.** Kicking off the Pan-India NCD screening programme with the Prime Minister launching the NCD application connecting 33 states and UTs.
- b.** Launching Mobile Medical Units (MMUs) in Varanasi, Mathura and Gorakhpur.
- c.** Complete redevelopment and launch of 8 UPHCs in slum areas of Nagpur.
- d.** Initiating Virtual Consultations through the Digital Nerve Centre established in Hyderabad.
- e.** Training a cadre of 100+ national trainers in the NCD application.

FUTURE PLANS

- a. Rajasthan and MP:** Scale-up the ASMAN (Alliance for Saving Mothers And Newborns) programme from current number of facilities covered (81).
- b. Telangana:** Start affordable diagnostic facilities through the tele-pathology initiative in Vijayawada.
- c. Madhya Pradesh:** Develop master trainers to train specialists, Medical Officers and Staff Nurses for improved MNCH (Maternal, Neonatal and Child Health) outcomes.

d. Uttar Pradesh: Release community level mass awareness campaign on early identification of fever and prompt referral for AES (Acute Encephalitis Syndrome) treatment in Gorakhpur.

e. Odisha: Disseminate findings from the malaria programme's digital portable microscope pilot and scale-up the same.

BEST PRACTICES

a. Digital record keeping: Entire value chain for the patient made paperless in Urban Primary Health Centres (UPHC) in Nagpur - right from patient registration and fees payment to prescription and medical test records.

b. MMU-TMU (Tele Medicine Unit) model for NCD management: Model followed in Kolkata, Varanasi and Vrindavan, where patients are screened for common NCDs at MMUs that go from village to village, and are referred to the nearest TMU for regular follow-up treatment.

CHALLENGES FACED

Attraction and retention of appropriately qualified human resources to work in rural/difficult locations.

Sanitation drive in a village.





Project aligns with SDG

3 GOOD HEALTH AND WELL-BEING



ASHA workers being given guidance and support to identify Acute Encephalitis Syndrome by the project team.



TAKING A CITY AHEAD ON THE ROAD OF HEALTH

Project Prayaas, Gorakhpur

The city of Gorakhpur is blessed with clay soil and a very high water table, making it an intensive paddy-growing area. The regional ecosystem is full of rivers, lakes, irrigation canals, reservoirs and rice fields. However, this area is prone to floods, making the region endemic to Acute Encephalitis Syndrome (AES). The Medical College Hospital of Gorakhpur is the only tertiary care centre for the management of such cases. There's only one hospital for the entire Gorakhpur division, comprising six districts - Maharajganj, Kushinagar, Siddharth Nagar, Deori, Basti and Gorakhpur. It not only affects people's accessibility to basic primary healthcare, but also makes early identification extremely difficult. Most of the patients reach the hospital at an advanced stage, leading to tragic deaths.

Project Prayaas is an attempt by the Tata Trusts to strengthen primary healthcare infrastructure & delivery through innovative community-based approaches that reduce the burden of acute encephalitis syndrome. Some of the important pillars of Project Prayaas are to enhance healthcare through capacity building, equipment augmentation and institutionalising monitoring systems. To achieve this, the Trusts sought to engage with ASHAs, the local anganwadi centres and ANMs, by empowering them as health activists with the help of Mobile Medical Units (MMUs). The MMUs

were deployed to serve as a link to the primary healthcare system.

Project Prayaas brought to life a community level mass awareness campaign on early identification of fever and prompt referral for AES treatment, all with the help of the local health workers – ASHAs, Anganwadis and ANMs. Since then, the treatment of over 66% of all children within the region with fever became trackable. The project is improving the community's ability to prevent the spread of AES through the facilitation of multiple awareness sessions and village health and nutrition days. Project Prayaas is an attempt to improve the lives of the community.

KEY SUCCESS FACTORS

Total consultations through MMUs: 20,000 (62% women)

Total distance covered by MMUs: 26,000 KM

(as on March 2019)



A telemedicine consultation at the Swasthkutumbam.



TELEMEDICINE TO THE RESCUE

Better healthcare; a healthier rural India

G. Kasturi, a housewife from Gkonduru village visited the local clinic in her village with complaints of palpitation and chest pain for 2 weeks. Being from a moderate economic background and due to her daily household work, she kept postponing her visit to the town for a health check-up. She was also hesitant to go to local male practitioners in her village.

One day, she saw a banner of the Swasthkutumbam, a telemedicine clinic supported by the Tata Trusts at a bus stand. She decided to visit the clinic for a health check-up. Kasturi shared, "I was surprised that there was such a nice clinic in the village and the staff was humble. They also briefed me about telemedicine consultation and got my basic check-up done."

Kasturi was happy to see a lady MBBS doctor and shared her symptoms and complaints frankly. Advanced medical devices were available that captured her pulse rate,

blood pressure and oxygen levels at Vijayawada Hub via the telemedicine platform. The doctor made a probable diagnosis of hypertension and prescribed her medicines for a month. Initially, she had been worried about the cost of medicines; however, when they turned out to be mere Rs.25 (as they were sold cost-to-cost), she could not believe that she could actually buy monthly medicines at the cost of daily vegetables.

The pharmacist explained the correct dosages, the importance of adherence to medicines and encouraged her for a follow-up visit. When she saw other patients paying digitally using Aadhaar Pay, Kasturi also was inspired to be a part of digital India. She left the clinic with a smile, and more than enough cash leftover for regular household expenses.



Elder Care

CARING FOR THE KEEPERS OF OUR SOCIETY

The past decades have seen an exponential growth in the population of the country. As per Census 2011, India has about 104 million individuals above the age of 60 years, constituting almost 8.6% of the total population of the country. As per various research documents, this number is expected to reach over 300 million by 2050, which at that point, will constitute about 20% of the population. In addition to the overall increase in the number of the elderly, the number of people above 80 years is increasing rapidly, the number being about 11 million in 2011. The demographic shift is going to be a huge challenge and new models of services will need to be developed to address the needs of the elderly in rural and urban settings.

Elder Spring, a programme of the Trusts, emerged as an outcome of this thinking process. Through this programme, the Trusts endeavour to address the needs of the elderly population (60+ age) in India through multiple dedicated interventions in the sector. The objective is to improve the quality of life of the elderly by maintaining their dignity, through caregiving, social & economic opportunities, and an empathetic ecosystem.

Various conceptual designs that were developed as part of the programme are in different stages of execution.

The programme comprises three themes:

a. Elder Spring Urban Programme - focuses on happy and healthy aging of the elderly population in urban areas through multi-activity centres at

urban hubs, which include activities like yoga, meditation, health check-ups, etc. It is initiated in Bhubaneswar along with the Government of Odisha.

b. Elder Spring Rural Programme - focuses on addressing the basic health needs of the elderly in rural areas through the central government programme - National Programme for Health Care of the Elderly (NPHCE), and strengthening community-based care for the elderly through village-based activity centres.

c. Elder Spring Ecosystem Building

i. Elder Spring Response System - accessible through a toll-free number, it is a free service that provides information, guidance, and emotional support in order to improve the quality of life of the elderly.

ii. Elder Spring Digital Platform - endeavours to create a nationwide digital platform for elders with a focus on an easy-to-use, trusted, digital place for the elderly and their caregivers.

iii. Advocacy - contributes to the development of a national plan for the senior citizens by participating in the sub-committee that was set up by the Ministry of Social Justice & Empowerment.

OUTREACH



**One district in each
of the 4 states**

(Odisha, Maharashtra, Telangana
and Karnataka)



180 villages



9,255 elderly



26 health facilities

Operationalise
Geriatric Clinics

KEY ACHIEVEMENTS

a. Odisha

i) The elder component of the 'Anand' programme for the Government of Odisha, was conceptualised and is being implemented through a 'Hub & Spoke Model' approach for addressing the needs of the elderly and other groups, including people with disabilities, transgenders, persons affected by substance abuse, etc. The Hub will be an integrated space for training, capacity building, awareness generation, systems development, etc. Promotion of various spoke (neighbourhood) centres will also provide a physical space to spend time that specifically caters to the needs of the elderly in their own neighbourhoods.

ii) An MoU was signed between the Social Security & Empowerment of Persons With Disabilities Department (SSEPD) and the Trusts for demonstrating a spoke centre and supporting SSEPD for efforts made towards improving the quality of lives of the elderly in Bhubaneswar.

iii) The first Anand Spoke Centre for the elderly was launched in September 2018 under a partnership with HelpAge India. The centre also offers physiotherapy services.

b. Maharashtra

i) Operationalisation of NPHCE in Mul block of Chandrapur district was facilitated along with the Public Health Department of the Government of Maharashtra, for providing health services to more than 3,000 elderly members. Simultaneously, 9 village activity centres were set up with the help of Gram Panchayats.

c. Telangana

i) Operationalisation of NPHCE in all 22 health facilities of Medak (19 Primary Health Centres and 3 Community Health Centres) was facilitated along with the District Health Services and District Administration, providing health services to 5,970 elderly persons. Simultaneously, 5 activity centres were set up which eventually led to the Government of Telangana operationalising a weekly geriatric clinic in 20 districts of Telangana.

ii) Country's first connect-centre-based Response System for the elderly was launched in Hyderabad, under an MoU with the Government of Telangana.

iii) Development of a technology platform was initiated, intended to aggregate information of service providers on various products and services, actively playing a role based on the invitation received from the Ministry of Social Justice and Empowerment in the creation of a National Plan for Senior Citizens.

FUTURE PLANS

a. Collaborate with partners for sharing costs of the activity centre along with direct government funding.

b. Replicate similar centres in other parts of Bhubaneswar city with new partners and funding arrangements.

c. Undertake documentation of baseline reports and the qualitative stories of achievements for both urban and rural programmes; subsequently, publishing good practices.

d. Launch the digital platform.

BEST PRACTICES

a. Monitoring the health status of members, as per the WHO recommended SF-36 questionnaire in the Spoke Centre. The members are recommended appropriate action based on their score, which is revisited after six months to check for improvement.

b. Monitoring the status of well-being and happiness of members across four parameters; namely: (1) control over things and situations; (2) autonomy; (3) self-actualization; and (4) pleasure. This is done using CASP-19 questionnaire, which is also revisited at the end of six months to track the change in the happiness index of members at the Spoke Centre.

CHALLENGES FACED

a. To work in the rural setting and attract the elderly into using the PHCs for health care. Lack of doctors and medicines at the PHCs has further deterred the elderly to visit the PHCs.

b. To encourage families to show interest in elderly health care.

c. To attract urban middle-class elderly members to pay for services in the activity centre was a challenge at the beginning of the programme.





Project aligns with **SDG**

3 GOOD HEALTH
AND WELL-BEING



*Annapurna loves to engage herself
in the various activities at the center.*



FINDING MYSELF AFTER A LONG TIME

Annapurna Sahoo's journey

Annapurna Sahoo, who is 65 years old and residing in Bhubaneswar, Odisha, recalls, "When my kids were growing up, all my time was spent in taking care of them. My whole life changed according to their needs and I forgot all about my hobbies and what I liked. Now, when they are married and living their lives, I wanted to look after myself and follow my passions."

Dancing was her passion, but she didn't feel free enough at home to try it. Then, one of her relatives told her about Anand Centre, supported by Government of Odisha, HelpAge India and the Tata Trusts. Anand Centre is for senior citizens and offers different activities like dance, music, yoga, health check-ups and a library. Annapurna says, "It had all that could excite a 65-year-old woman like me. Intrigued by the thought of it, I visited the Centre in Bhubaneswar and it changed my life forever."

Annapurna's usual day at the Centre is spent in a Gita session and in engaging in spiritual talks by the Chinmaya Mission, which she enjoys a lot. She participates in all the activities, especially yoga, since she has been a yoga practitioner for the last 20 years. She also learnt aerobics, which gave her a sense of achievement, to be able to do that at her age.

"But above all this," says Annapurna, "the centre has helped us all to regain our confidence and look at life with a fresh perspective. We bond with our teachers and the staff by learning something new every day and in turn giving them some lessons about life. The best part is that I've made new friends and we all love spending time together. Now I dance carefree; not shy in front of anyone, knowing that this is 'our centre', a place where we oldies can form new friendships and find different hobbies that we'd left behind."

Cancer Care

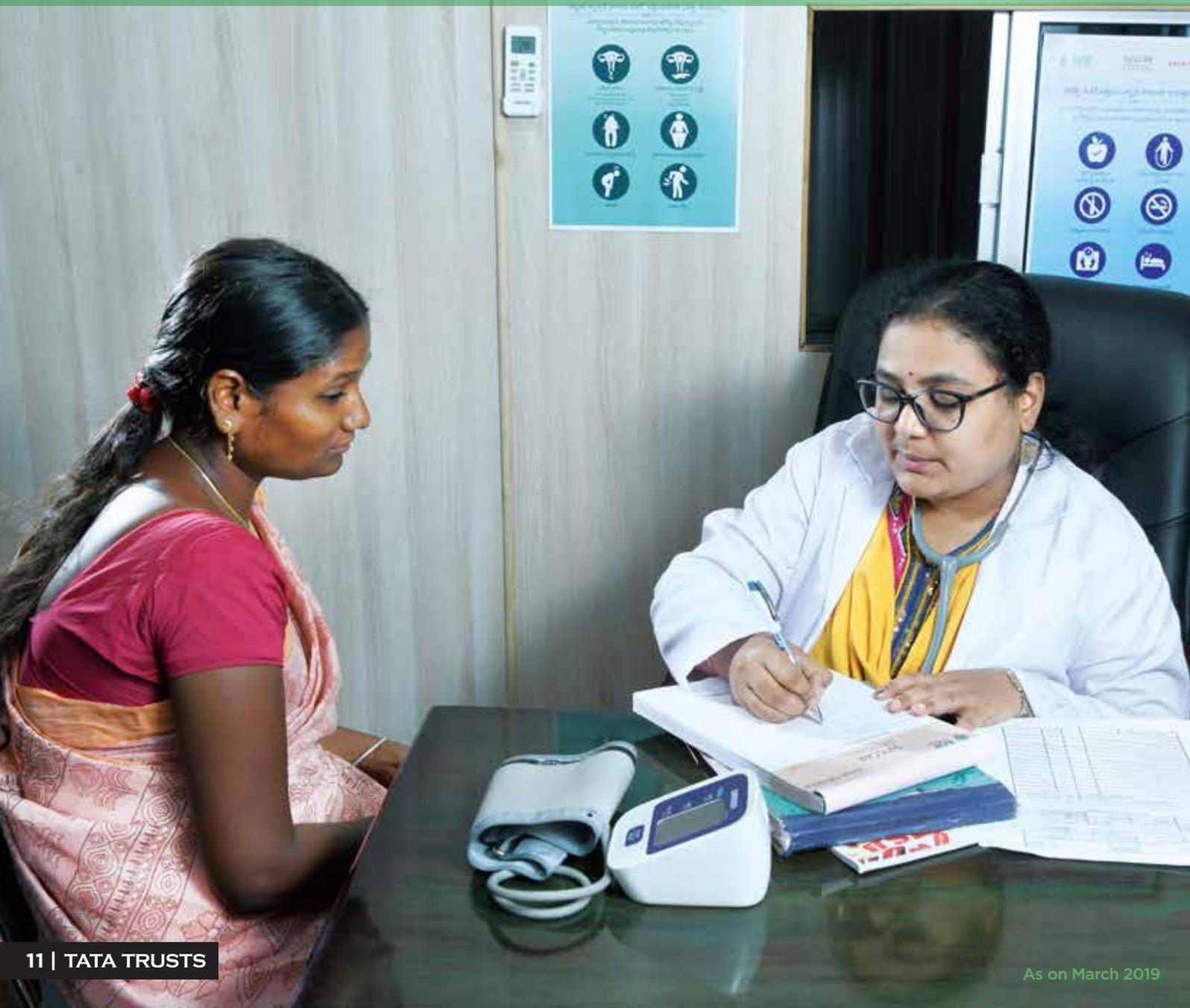
GIVING CARE THAT IS FORWARD IN TIME

The current model of cancer care in the country is not able to take the burden of the disease, key challenges being high disease incidence, shortfall of human resources and infrastructure, and long waiting periods and poor outcomes.

The vision of the Cancer Care programme of the Trusts is to transform Cancer Care in India and to improve quality of life for cancer patients and care givers by providing affordable, accessible and high-quality care from the early onset of the disease.

In partnership with various governments and like-minded organisations, the aim of the programme is to develop a network of healthcare facilities for treating the most common cancers closer to people's homes. The network will emphasize on awareness & health promotion, prevention & screening and early diagnosis, leading to timely treatment.

Doctor Kamala with patient Vijaya Lakshmi at Sri Venkateswara Institute of Cancer Care and Advanced Research Out-patient Department in Tirupati, Andhra Pradesh.



OUTREACH



**Over 100,000 beneficiaries
have been screened for
non-communicable diseases**
including cancer, in target catchments.

KEY ACHIEVEMENTS

- a.** Ground-breaking ceremonies were conducted for various levels of hospitals in Assam.
- b.** Capacities of two hospitals, one in Varanasi and one in Jamshedpur, were enhanced.
- c.** Foundation oncology courses were supported for enabling and encouraging medics to adopt oncology as a career choice.
- d.** 135 nurses were trained to provide better cancer care.
- e.** Cancer awareness and pre-screening activities were conducted in multiple states (camps, walkathons, bike rallies, ASHA trainings).
- f.** The youth was engaged through various activities conducted under the National Service Scheme to curb tobacco consumption.
- g.** A one-of-its-kind 'Centre for Oncopathology' was initiated for training and cancer diagnostics.
- h.** A quality improvement programme was initiated with Stanford Medical Centre for Cancer and Palliative care.

FUTURE PLANS

The team is working towards setting up a network of cancer care hospitals in Assam, along with stand-alone cancer care facilities in Maharashtra, Odisha, Jharkhand, Karnataka, Gujarat and Andhra Pradesh.

BEST PRACTICES

a. Focus on Palliative Care

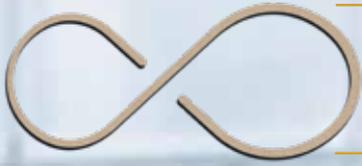
Palliative care will be an integral part of the cancer care programme across all levels of hospitals, including the community where home-based care will be provided around the radius of the hospital.

New palliative care services have been initiated in Assam at Assam Medical College, Dibrugarh and Jorhat Medical College, Jorhat; while services at the State Cancer Institute, Guwahati have been strengthened with the support of additional manpower.

Curriculum has been developed for a one-year fellowship programme, keeping in mind the training needs of doctors and nurses of upcoming oncology hospitals.

b. Formation of Patient Advisory Groups Modeled on the award-winning Patient Reference Group from King's College, UK, India's very first Patient Advisory Group (PAG) in Assam was introduced in October 2018. The aim of the PAG is to get direct advice, feedback and inputs from patients, survivors and caregivers on all aspects of the patient's journey – from awareness, screening, diagnosis, treatment, palliative care, affordability and life after treatment. These valuable inputs will allow the programme team to bring about a tangible difference for the patient.





Nutrition



Children enjoying their Mid-day meal in a school in Kaiserganj, Bharach District, Uttar Pradesh.

OUTREACH



29 states and
5 union territories



270 districts



20 million
households



100 million
Individuals

DELIVERING A NATION ON THE PATH OF ENHANCED NUTRITION

Despite tremendous economic and social advancement in recent years, India remains home to a high number of malnourished people. Data from the National Family Health Survey (NFHS-4) identifies nearly 36% of children under the age of five as underweight, 39% as stunted, and 21% as wasted. Further, nearly 53% women of reproductive age, and 59% of children aged 6-59 months are anaemic. Statistically, malnutrition can result in potential GDP loss of about 2-3% and more than 10% potential reduction in lifetime earnings for each malnourished individual.

Equally, evidence demonstrates that every dollar invested in the package of interventions, on stunting, anaemia in women, exclusive breastfeeding and the scaling up of the treatment of severe wasting among young children, would yield between \$4 and \$35 in economic returns, making early nutrition-focused investments one of the best value-for-money development actions.

The grave impact of hunger and malnourishment on our nation's development agenda and the need for urgent remedial action has necessitated the Trusts' engagement in nutrition. Understanding that malnutrition is not the failure of nutrition alone, but rather a combination of factors, provides a new perspective to look at the problem holistically and approach it sustainably. Consequently, the Trusts have been keen to make a contribution towards ensuring food and nutrition security in the country.

Since malnutrition occurs as a result of multisectoral causality, the solution must also involve multisectoral interventions, rather than relying on vertical programmes. The Trusts, along with their implementing partner - The India Nutrition Initiative (TINI) - have structured their interventions through the following three approaches:

a. Product development- The Trusts and TINI are striving to undertake translational research for developing nutritious food products such as GoMo snacks, fortified salt, milk, oil and rice, which are developed carefully after dedicated research.

b. Platform augmentation - Products are being designed in line with the existing platforms; i.e., government schemes or channels for appropriate scale-up, with the view to strengthen the specific platform to deliver to its best potential.

c. Policy and Advocacy - Separately as well as together, the Trusts and TINI have been working towards data-driven research to mobilise policy makers on the strengths and weaknesses of existing and upcoming schemes to make wise decisions and re-strategising of the policies.

The key outcomes include:

1. 30% reduction in stunting in children below 5 years in the target communities by 2022.
2. 3% annual reduction in anaemia in children below 5 years and women of reproductive age by 2022.
3. Annual reduction of 2% in low birth weight by 2022, in line with the POSHAN Abhiyan - the country's flagship programme to improve nutritional outcomes for children, adolescents, pregnant and lactating women.



KEY ACHIEVEMENTS

- a.** The Swasth Bharat Preraks (SBP) programme successfully deployed 315 SBPs in 2018-19 across the Phase I districts of the POSHAN Abhiyan, including Aspirational Districts as identified by NITI Aayog. The SBPs have been able to catalyse convergent efforts and have played a critical role in supporting the Ministry of Women and Child Development, the state and district offices in supporting implementation of the abhiyan across over 300 districts with the mandate of making nutrition the people's agenda.
- b.** The programme focusing on Mother, Infant, Young Child Nutrition (MIYCN) covered over 2.25 million people across Rajasthan, Andhra Pradesh and Maharashtra. An integrated, multisectoral approach targeting refurbishment of 454 Anganwadi centres, building capacity of frontline workers, strengthening communities and improving the nutritional content of supplementary nutrition led to better adoption of Integrated Child Development Services (ICDS) - thereby improving nutrition outcomes in women of reproductive age and young children.
- c.** Fortification of staples like milk, oil, rice and salt, impacted the lives of approximately 100 million people this year. During the year: (a) 15 million litres of fortified milk was supplied across 22 states; (b) 4.21 million metric tons of fortified oil was supplied to over 321 million beneficiaries across 8 states; (c) 750,000 metric tons of double fortified salt (DFS) was supplied to over 50 million individuals across 7 states; and (d) 5,189 metric tons of fortified rice were supplied to 1.2 million people.
- d.** The Trusts partnered with FSSAI to organise the Swasth Bharat Yatra to generate awareness on food safety and health living. The yatra comprised a pan-India cyclothon covering 6 tracks across the country over a period of over 100 days and 20,000 kms. The yatra saw the participation of over 8,000 cyclists and reached 25 million people across the country.
- e.** The Trusts and Mars Inc. collaborated for affordable accessible nutrition at scale, which resulted in the launch of GoMo in January 2019 in the markets of rural Uttar Pradesh and Maharashtra. In a short span of 3 months, 12.98 tons of GoMo were sold by 467 last-mile-sellers (primarily women), reaching 4,541 villages.
- f.** Central kitchens were set up, benefiting 22,000 children from 54 schools of Palghar and Nashik districts through provision of hot cooked meals, thrice a day.
- g.** A study to measure malnutrition was published across parliamentary constituencies in India in collaboration with Harvard University and Institute of Economic Growth, Delhi.

FUTURE PLANS

- a.** Deploy SBPs across approximately 400 priority districts identified by the state and centre with a greater focus on quality of implementation of POSHAN Abhiyan components and strengthen service delivery at all levels.
- b.** Scale-up the learnings from the MIYCN programme with greater engagement of the government and expand the programme to selected districts of Gujarat, Jharkhand and Uttar Pradesh.
- c.** Undertake advocacy at the highest level to make fortification of milk and oil mandatory in India.
- d.** Fortify 10 million litres of milk through private and cooperative dairy sector and fortify 80% of the fortifiable packaged oil through industries using means like advocacy campaigns and trainings.
- e.** Scale-up rice fortification to saturate more districts in Maharashtra and Andhra Pradesh, whilst advocating to make DFS an essential commodity of the food basket.
- f.** Reach 8 million children with nutritious products (such as GoMo) and provide a regular income uplift to 4,000 last-mile entrepreneurs.

BEST PRACTICES

- a.** Continuous engagement with key stakeholders at the centre, states and district levels to support implementation of POSHAN Abhiyan through deployment of Swasth Bharat Preraks, or catalysts of change, at district levels and community mobilisation for strengthening the ICDS delivery system.
- b.** Setting up of the Food Fortification Resource Centre to ensure holistic promotion of fortification efforts in the country. FSSAI standards to reduce micronutrient insufficiency in the population were implemented, through use of evidence-based, cost-effective technologies, advocacy, trainings and capacity building with the government and industry stakeholders.

CHALLENGES FACED

- a.** Training women with no previous sales experience, to be rural entrepreneurs for sale of GoMo was a challenge, which was overcome by introducing robust training modules, with an emphasis on financial literacy.
- b.** Prerak retention in difficult terrains and amidst occasionally unsupportive administration was ensured by continuous engagement with Preraks and the government machinery - including showcasing Preraks' success and efforts through print media and website.



The Power Paanch Girls of Morena, Madhya Pradesh, the first ambassadors of the movement, which now has 840 girls spreading the awareness about anaemia in the Morena Urban Project.



LAYING A STRONG FOUNDATION TODAY, FOR A HEALTHIER TOMORROW

With the Power-Paanch Girls

It is a known fact that Iron is the backbone of modern life. Beneficial for fighting anaemia, Iron requirements increase considerably in women once they enter menstrual age. Hence, it is crucial for adolescent girls to understand the correlation between anaemia and iron, and its impact on their future.

However, active engagement of adolescent girls within the nutrition rhetoric continues to be a challenge in India. As a result, more than 67% of women in Morena, Madhya Pradesh were anaemic as per NHFS 4 (2015-16).

Given the need, Dr. Prateek Vashishtha, a Swasth Bharat Prerak (SBP) deployed in the district, stepped in. Dr. Vashishtha has a master's degree in social work from the Tata Institute of Social Sciences, Mumbai and is a healthcare specialist in prosthetics and orthotics from the University of Delhi. He is registered with the Rehabilitation Council of India and has also worked with the Ministry of Social Justice and Empowerment. His past work experience has been in sectors of disability, rehabilitation, healthcare management and research work. His aspiration to work towards equity motivated him to become a Swasth Bharat Prerak.

With his wealth of experience, he was firm in his belief that girls could become ambassadors to spread awareness among their peers and bring a positive behavioural change in their community. Consequently, he initiated a movement to mobilise adolescent girls of the community and enlighten them on the dangers of anaemia.

During a field visit to the anganwadi centres of Morena

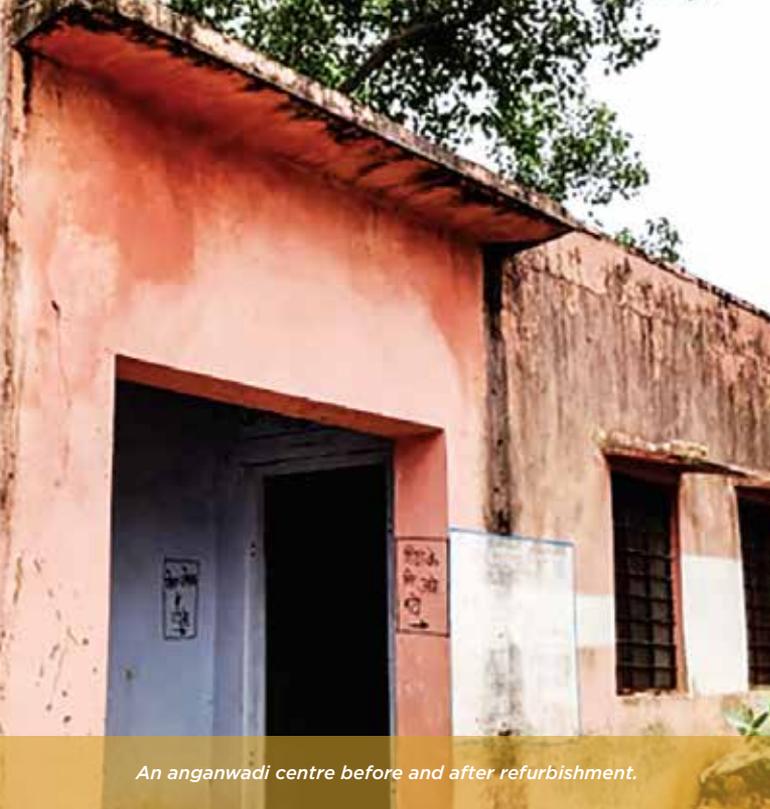
Urban Project, Dr. Vashishtha met with five adolescent girls, who were tested to be anaemic and conducted an awareness session for them on the dangers of anaemia, its symptoms, causes, and remedies, along with the importance of iron and iron supplements to tackle anaemia. A month later, the follow-up of those five girls indicated a considerable improvement in their blood haemoglobin levels, and the SBP realised that now they could win this war.

Dr. Vashishtha encouraged each of the five girls to further impart education on anaemia to five more girls each – their friends, relatives or community members. Thus, began the 'Power-Paanch Girls' movement to fight against anaemia.

To incentivise the action, the Power-Paanch girl who helps in identifying the maximum number of girls with anaemia and aids in improving their blood haemoglobin levels was recognised for her efforts and awarded a special badge.

The movement brought a huge change that was owned and driven by a community of adolescent girls. It began with one Power-Paanch group and today is a community of 840 girls across the Anganwadi centres in Morena Urban Project. This community now focuses on empowering women and spreading awareness about menstrual hygiene and tackling many other myths.

This is a cost-effective method that spreads the message and brings effective results. The project is now covering five other districts in Madhya Pradesh, aimed at transforming the life of every woman and girl that it touches.



An anganwadi centre before and after refurbishment.



Project aligns with SDG

2 ZERO HUNGER



CHANGE AT THE TOP IMPACTS CHANGE DOWN THE LINE

Bhanwar Lal's quest to make his Panchayat 'Kuposhan Mukt'

The courtyards of the Anganwadi centres (AWC) of the Jhilai panchayat in Tonk, Rajasthan, always remained silent. The community members of the panchayat were ignorant of its existence and they hardly visited the Anganwadi center to participate in its activities. Even the Sarpanch, Shri Bhanwar Lal, didn't pay any attention to improve the anganwadi's conditions and mobilise community members to start using the services. The anganwadi workers had to go house-to-house to get the beneficiaries to participate on Village, Health, Sanitation and Nutrition Days (VHSND).

As a result, many children suffered from malnutrition. The Tata Trusts are implementing programmes focusing on livelihoods, health, education, etc. in Rajasthan. The Trusts' Mother, Infant, Young Child Nutrition (MIYCN) team met with Shri Lal, and discussed the need for the young children to visit anganwadi centres and avail of the facilities. Consequently, with the help of the Trusts, refurbishment work in one of the anganwadi centres in his panchayat was initiated. Bhanwar Lal himself monitored the work. He noted an increase in the participation and received positive feedback from the parents who sent their children to this anganwadi.

He was then convinced and so he took it upon himself to refurbish the other 9 AWCs using the panchayat

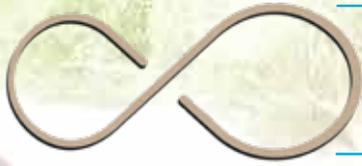
funds available to him. He also built a toilet and cleared space to start a kitchen garden at the AWCs.

Bhanwar Lal recalls, "To tell you the truth, initially, what went on at the anganwadis used to make no difference to me; but when the representative from the Tata Trusts explained their role to me, I realised how valuable they were."

He pledged to make his panchayat 'free from malnutrition' and he was so motivated that he personally visited every house along with the Tata Trusts' team to identify malnourished children and provide them with necessary care and give support to the family. He even involved the local committees - like Rajeevika, Nehru Yuvak Mandal, Panachayti Raj Institutions and the school staff-in his mission to help drive awareness on malnutrition and his interventions received national recognition during the 'Poshan Month' awards.

Dedicated to his mission, even today Bhanwar Lal visits every house and monitors the progress of the children. With determination, he says, "It is my dream that malnutrition is eradicated from the homes in my care and is replaced with joy."





Water, Sanitation & Hygiene



Snakes and Ladders: This age-old game is used to inculcate hygiene practices amongst children in Talaja, Gujarat.

OUTREACH



12 states



91 districts



5,389 villages



570,000
beneficiaries



735 schools



60,000 women/
adolescent girls

TATA WATER MISSION

The Tata Water Mission (TWM) serves to create a healthy future for underserved communities through improved access to safe, assured and adequate drinking water and improved environmental sanitation. The mission advocates a decentralised, demand-responsive and community-managed approach to achieve the goal and is aimed at promoting innovative, technological and economically sustainable solutions. Integrated Water, Sanitation and Hygiene projects, comprising hardware and software components, ensure an overall increase in the quality of life of beneficiaries and students. The various sub themes under TWM are listed as under:

Water: To address emerging challenges with regard to water availability and quality across underserved communities through innovative technologies and community-driven approaches.

Sanitation and Hygiene: To provide infrastructure and address behavioural issues with regard to sanitation usage and maintenance.

Water Conservation: To provide adequate infrastructure and enhance capabilities of communities to adopt conservation measures through rain water harvesting, ground water recharging, etc. and meet the current demand for water, while focussing on ensuring judicious usage to ensure sustainability. Further, it is aimed at ensuring overall water management, creating awareness about supply-and-demand gap and to make communities self-reliant for their drinking, domestic and agricultural water needs.

Menstrual Hygiene Management: To impart awareness and change the notion of impurity associated with menstruation, thereby normalising it. Additionally, to ensure that women make informed choices with regard to practices followed during menstruation from absorbents to myths, etc.

Mission Garima: To create safe, healthy and humane working conditions for the conservancy workers of Mumbai and to create awareness about segregation of waste among urban communities leading to behavioural change.

KEY ACHIEVEMENTS

- a. 570,000 individuals in 5,000 villages across 12 states were covered over a period of four years.
- b. National level recognition was received for TWM at the International Sanitation Conference held in New Delhi during October 2018. A book on the Zilla Swachh Bharat Preraks was published by the Trusts launched by the Vice President of India during the event in which the Trusts also presented its learnings.

- c. Helping the Government of India in developing Solid Liquid Waste Management (SLWM) policy guidelines which were rolled out across the country.

- d. Efforts to address issues relating to microbiological contaminants (E-coli form, bacteria, virus) and chemical contaminants (Fluoride, Arsenic and Salinity) in drinking water were made, besides suggesting alternatives to twin-pit technology and solid waste management for the sanitation sector. Few technologies in the field of drinking water were successfully upscaled.

- e. Strong partnerships were built with other sector players (especially national and international foundations) through which over USD 14 Million were mobilised for co-funding projects. Further, over USD 40 million were mobilized through government and community contribution.

- f. The Trusts' efforts on Springshed Management were recognised by the Government of Uttarakhand; consequently, Himmothan Society (an associate organisation of the Trusts) was appointed as a nodal agency for 'State Springshed Consortium of Uttarakhand'.

- g. The Trusts' contributions towards the sanitation sector were recognised by the Governments of Andhra Pradesh, Gujarat and Uttarakhand.

- h. Prerak initiative – a young fellowship programme which aims to mobilise and motivate young professionals to work on development programmes and contribute towards nation building – was replicated across other portfolios, such as Nutrition, Aspirational Districts, etc. and received recognition by the government.

FUTURE PLANS

- a. Upscale the Menstrual Hygiene Management programme across multiple states, besides expansion in three new states through ongoing Trusts' programmes across other thematic areas.

- b. Develop a Project Management Unit on Water at the Ministry of Jal Shakti through placing five professionals to help develop a policy framework and implement a road map.

- c. Expansion of the WASH programme through fund mobilisation.





Project aligns with SDG

3 GOOD HEALTH
AND WELL-BEING



Women showing their bracelets, the beads indicate the menstruation cycle.



BREAKING FREE FROM YESTERDAY'S TABOOS

Menstrual Hygiene Management

Menstruation has always been stigmatised across India and is considered a taboo. It has been clouded in misconceptions that have perpetuated over generations. Girl after girl has found their period to be abnormal, scary and impure, making them feel shameful, undeserving and dirty. Girls are still discreet about periods, fighting a lonely battle, within themselves because there is no one to talk to.

Especially in Indian villages, where the girl is handed a laundry list of "things not to do from now on". In this scenario, it was extremely difficult to get the women to step out of their houses, leave alone talk about periods.

The Tata Trusts, on understanding the importance of teaching women safe practices of menstruation that directly impacts their health and well-being, took an imperative step towards curtailing myths around women hygiene and care through Menstrual Health Management (MHM).

Women discuss freely only amongst themselves, therefore, to reach every woman, 5 Community Resource Persons (CRPs), under a Cluster Anchor were trained. These CRPs created their multiple groups of adolescent girls and women, and formed a community of 15-20 participants. These communities act as close-knit extended families to women, explaining to them the importance of menstruation and breaking the shackles of the existing myths and taboos. As part of a mass awareness and engagement campaign,

a menstruation mela was conducted, wherein women consulted the gynaecologist, got information about different absorbents while actively engaging in fun activities like bracelet making, etc., all geared towards driving home the message that menstruation is not taboo and that safe practices lead to healthy living.

Ms. Kajal Vala, a CRP, conducted her first training and helped women in Kadodara village in Gujarat to realise the importance of menstrual management. She acted as a catalyst of change, encouraging many other women to come forward and support the initiative.

One of the members, Harshita, gauged the sensitivity of the subject during her tuition classes. Recollecting a few incidents, where girls were behaving in an odd manner and not attending classes, Harshita realised that she could contribute by sharing her knowledge with many young girls who come for tuition with her, and she too became a part of the initiative.

Today, about 70% of the women in the village have adopted hygienic practices recommended during the MHM sessions and most women have also understood the reason behind the myths and taboos. They are able to go to work without thinking twice about any infection or any leakage. The initiative has reached 50,000 women till March 2019.

Over time, women have started accepting Menstruation as 'normal'.



Project aligns with SDG

6 CLEAN WATER AND SANITATION



735 schools were covered under the WASH programme.



INTRODUCING WASH IN SCHOOLS

Making kids the carriers of change

Serkhet, a Government Primary school at Raipur, is situated in a remote block of Dehradun with 33 students attending from 5-6 villages. However, in terms of facilities it is at the tail end. The toilets weren't in a good working condition and the authorities had lost all hope to receive any help, as even after many interventions by various organisations nothing was implemented that brought an impactful change.

The Tata Trusts along with their associate organisation, the Himmotthan Society, decided to roll out WASH in the schools. Water, sanitation and hygiene (WASH) aimed at making a visible impact on the health of children through improving their hygiene practices, and those of their families. It was also aimed at improving the curriculum and teaching methods, while encouraging community ownership of water and sanitation facilities within schools.

It took some time to bring the school authorities on board and assure them that the project will materialise. With the thought of improved children's health, school enrolment, attendance and retention, the school authorities joined hands to pave way for a new generation of healthy kids. Hindustan Petroleum Corporation Limited, along with the Tata Trusts' Tata Water Mission supported the project.

Students have been the fundamental change agents and ambassadors for the WASH programme, and are incredibly happy to see the changes in their school ambience. A student happily says, "our school stands; it is so colourful, with these messages painted for us on the walls and being read by us daily. We are enjoying making it a habit, be it keeping our school clean, having better toilets or learning water management."

Another one adds, "We also learn many new things about water quality, sanitation through puppet shows, film clips; which is really interesting."

The project has helped in inspiring the teachers and the school management committee to play an active role and adopt these practices as their common duty.

A teacher says, "this is a welcome initiative, and now our common duty to maintain all assets will ensure long term sustainability and improve the quality of life of our communities."



Work in progress at the Mcchbhandar village water supply scheme.



WATER, THE THIRD MIRACLE AT MCCHBHANDAR VILLAGE

“I have been fortunate to see 3 miracles in my life” – Shri Mangal Mahali

This is the story of the people in Mcchbhandar village, Forest block panchayat – Gurbandha block, located on the bank of Swarnrekha river in Jharkhand. Here, 43 households, with approximately 5 members in each, depend on only 3 hand pumps – and just 1 during summer – for their water needs. None of them have access to Piped Water Supply (PWS).

Taking note of the hardships these households have to face every day, CInI, an associate organisation of the Trusts, decided to intervene. With 90% of the funds to be borne by the Tata Trusts, the remaining 10% (amounting to roughly ₹500-1,000 per household), was to be borne by the villagers.

The Mcchbhandar village was an existing part of the Mission 2020 Lakhpati Kissan initiative implemented effectively by CInI. 50 farmers who used to be daily wagers, had since enhanced their income exponentially

to become lakhpatis. Several meetings were held between June and October 2018 to raise awareness about water related issues and, by the end, ₹20,500 was raised by the community.

The construction of ‘Jal Minar’ commenced to address the issues of water scarcity. The community engaged wholeheartedly, and did the manual labour that was required. Some even poured in from the neighbouring districts. The Poul Due Jensen Foundation, parent organisation of Grundfos, donated solar panels and motor for facilitating uninterrupted source of electricity for the water supply scheme and, finally, on April 01, 2019, the villagers inaugurated the scheme – and 43 homes enjoyed access to PWS.

Shri Mangal Mahali joyously announced that he had been fortunate to see 3 miracles in his life – electricity, toilet and running water in his house.”



Rekha's mother installed a water purifier at home, to ensure that Rekha and other family members drink purified water.



FROM WATER-BORNE DISEASES TO A FOUNTAIN OF HEALTH

Rekha's nick of time success story

Rekha, a 15-year-old girl from Pokhari village in Uttarakhand, suffered from a severe bout of diarrhea every monsoon for three years. She eventually became so feeble that she could not attend school and had to be hospitalised. Rekha's mother was worried about her daughter's health. Her father suffered economically as well, since as a daily wage-earner, his instinct kept him at his daughter's side instead of his work. The culprit? Contaminated water.

It is a strongly held belief that water that emerges from mountains is pure. Not so in Uttarakhand, where, because of unplanned development, water had become severely contaminated. As a result, those who drank it could be afflicted by illnesses such as diarrhea, cholera, typhoid, schistosomiasis and more.

Himmotthan, an associate organisation of the Tata Trusts, took up the challenge of addressing this health-threatening problem. The solution was – a water purifier. The supply chain was such that the community

entrepreneur could procure, sell and promote the product. Trishulii (a producer company supported by Himmotthan), procured Tata Swachh – a purifier that was easy to manage, durable and could deliver results. The Saryu Ghati Self Reliance Cooperative helped in promoting the use of these purifiers in the community.

Himmotthan rolled out a community awareness programme, which included training workshops, exhibitions, rallies and street plays in order to educate approximately, 5,000 households on safe drinking water. Similarly, Water and Sanitation Committees, School Management Committees, Self Help Groups, Health Workers and Panchayats were empowered to manage any challenges that might arise at a local level.

As a result of this effort, the situation has changed.

Today, Rekha is doing well, is focused on her studies and she has secured a First Division in her Matriculation exams.



Environment and Energy



Lighting up the floating huts in Loktak Lake to make them eco-friendly tourist floating homestays.

OUTREACH



7 states

(Uttar Pradesh, Gujarat, Bihar, Odisha, Manipur, Rajasthan, Karnataka)



25,503

clean cooking devices sold



56,963

social impact products sold



17,868

households with access to lighting from renewable sources



16,785

households benefiting from solar-based solutions

THE EMPOWERING EFFECT OF POWER

There is a strong connection between the reduction of poverty and access to sustainable and clean energy. The challenge in ensuring access is to facilitate availability of energy and appliances, which are affordable and reliable, whilst also meeting user requirements and consumer preferences. Additionally, it is becoming increasingly imperative to develop decentralised, renewable energy systems that are optimally utilised for household, livelihood and community needs. The Trusts' strategy is to identify the gaps, innovate solutions that are reflective of context, ground-test them through pilots and subsequently, upscale the most effective solutions in conjunction with sustainable financing models.

The two major initiatives under this theme are: The Clean Cooking Programme and The Solar Energy Programme, both of which respectively aim to make sustainable clean cooking, social impact products and solar solutions available and accessible to underserved communities in rural, tribal and semi-urban areas. Designed to the context of the geography, clean cooking solutions such as improved cook stoves, induction stoves and other social impact products are promoted and sustainable financing is established as part of the chain. Research is also being conducted to define and increase the adoption of clean cooking solutions in rural and tribal households and facilitate displacement of traditional cook stoves. Solar energy is being used to address household, commercial and community energy needs in vulnerable off-grid and weak-grid regions, in conjunction with a variety of delivery models and financing systems.

Partnerships have been established through SUSTAIN+, a pan-India platform that focuses on decentralised renewable energy as an enabler for poverty alleviation. Through this platform, renewable energy technologies will be integrated with different thematic areas towards solving some of the pertinent challenges faced by the rural, tribal and urban communities.

KEY ACHIEVEMENTS

a. As part of action research on creating a shared framework and roadmap towards sustained adoption of clean cooking solutions in India, the first of four surveys was conducted and

temperature sensors were installed in 375 households in Gujarat, Uttar Pradesh and Bihar, resulting in rich data, establishing the foundation of the research.

b. Following a literature review and stakeholder consultations, the first draft of the Adoption Matrix was developed, which is focused on developing a shared understanding and definition of adoption along a multi-dimensional and multi-staged continuum.

c. A behaviour change communication campaign, geared towards raising awareness on the hazards of indoor air pollution and the benefits of clean cooking options, aiming to catalyse both the purchase and usage of several solutions was executed in select districts in Gujarat and Uttar Pradesh. Over 14,000 households were covered through interactive nukkad nataks, wall paintings, community and school events that were conducted in 16 villages.

d. 10,000 12-Watt solar LED streetlights with motion sensors were installed in 183 villages of Pali constituency in Rajasthan. These automatic lights operate from dusk to dawn at two intensities of brightness for maximum efficiency. The aim of this initiative is to provide reliable renewable lighting in rural public spaces.

e. In Manipur, the Trusts partnered with 2 local NGOs to facilitate access to affordable and sustainable solar-powered systems for household lighting, community lighting and livelihood generation. Currently, 185 systems have been installed in selected districts of Manipur.



FUTURE PLANS

- a.** Test and pilot innovative technologies with increased efficiency and reduced costs that meet the cooking requirements and cultural styles of communities. Those that perform well would be scaled up.
- b.** LPG access across the country has increased with the implementation of the Pradhan Mantri Ujjwala Yojana; yet, refill rates remain an issue with the barriers of cost still in place. Financing systems will be piloted to address this barrier and its impact on the adoption of LPG will be studied.
- c.** Take steps to transform the efficiency of Decentralised Renewable Energy (DRE) initiatives towards poverty alleviation. SUSTAIN+ would be an active platform of like-minded organisations that would commit to develop and upscale integrated development solutions.
- d.** Actively transfer the knowledge and promote capacity building and skill development of stakeholders through trainings, exposures, interactions, collaborative program designing, etc.

BEST PRACTICES

- a.** In-depth research is being conducted in the clean cooking sector, which aims to identify, define and measure the barriers and drivers of sustained adoption of clean cooking solutions. This transparent and verifiable data will be invaluable, not only in measuring and mapping

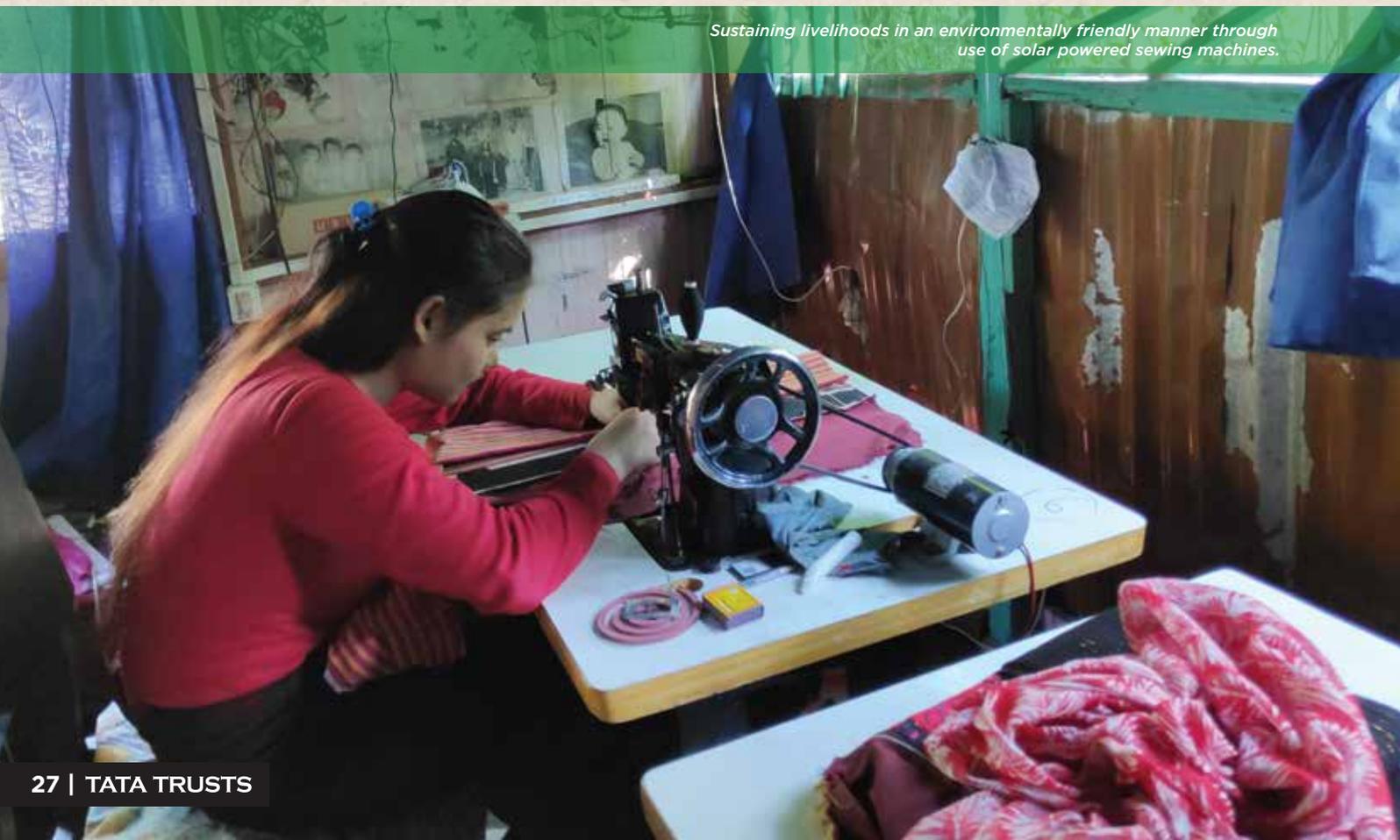
the types of interventions that can deliver results, but also in understanding how to utilise such data to manage improved iterations of programmes over time and inform fund flows for sustained impact.

- b.** Several innovative technologies, supply systems and financing mechanisms for household, livelihood and community requirements are being trialled within the energy portfolio. On the basis of these pilots and trials, technologies and programmatic components that have performed well and show potential are being scaled up.

CHALLENGES FACED

- a.** Challenges in piloting new mechanisms - Various financing mechanisms have been developed to provide sustainable and affordable solar solutions to the community. However, there are challenges faced whilst using these mechanisms (such as the Risk Guarantee Fund) through formal banking institutions. A series of legal approvals and some bothersome processes are necessary prior to these financial institutions being able to lend to individual families for implementing solar energy systems, thus delaying implementation on ground.
- b.** High cost of technology is a constraint. Some solutions are very effective, but not affordable to all segments of society. Multiple pilots and considerable support is required to facilitate adoption of such technologies.

Sustaining livelihoods in an environmentally friendly manner through use of solar powered sewing machines.





Beneficiaries, such as Meera, were motivated to purchase the induction cook stove, upon winning the 'Cooking with clean cooking stoves' competition, organised by the Trusts' implementing partner, as a part of the programme. The ease of purchasing it in installments was a further booster.



HOW TO MAKE HOME COOKING HEALTHIER?

By making it cleaner

84% of Indian households in rural areas use solid/biomass based fuel for cooking. This fuel includes wood, dung cakes, crop residue and occasionally household waste. The fuel used in these stoves burns inefficiently and emits toxic and hazardous smoke, which women inhale from close quarters on a daily basis. Daily exposure to this smoke, along with general pollution, results in significant long-term health issues.

The Tata Trusts' Clean Cooking Programme aims to create an enabling ecosystem for ensuring availability and accessibility of clean cooking devices at the doorsteps of the rural and tribal communities.

One highly popular, cleaner and valued solution in electrified villages has been the induction stove. Women appreciate the safe to use, easy to clean experience and the fact that it works on an easy to access and affordable fuel. In Uttar Pradesh, under the ambit of the Trusts' Clean Cooking programme, induction stoves are promoted. These are marketed through village level entrepreneurs - usually local women - who have received training on the sales of social impact products along with guiding the families on usage. Through their enterprising efforts, they have developed an additional source of income and, with increasing confidence, are stepping out of their homes and pushing societal norms.

Over the last six months, households could easily access affordable financing options, with which they can purchase an induction stove with a small down payment and 3 installments paid over three months. This move has made a significant difference in more households choosing to purchase a clean cookstove, impacting sales considerably. Meera, one such beneficiary says, "Now we use it (induction cook stove) for most of our cooking as electricity supply in our village is reliable and it is very convenient cooking on it."

Further, women have been regular with the payment of their installments, which is always a good indicator of their valuation of a product.

It also significantly impacts the following SDGs





Solar powered pottery wheel to create a beautiful flower pot.



FROM THE SUN TO THE POTTER'S HANDS

A ray of hope

Thongjao, a small village known as 'Land of pottery' is situated at the periphery of Kakching district, which falls under the Thoubal District in Manipur. It is predominantly inhabited by the Scheduled Caste community reliant on pottery and associated crafts for its livelihood.

The artisans previously only had access to electric pottery wheels, which were inefficient, noisy, small for their requirements and often dangerous to use, not to mention the unreliable supply of electricity, which made it difficult for them to produce high quality products and earn a stable substantial income.

The Tata Trusts' technical implementation partner, SELCO Foundation, has facilitated the installation of a solar wheel system in the workshop of Ibomcha, a highly skilled potter. These wheels are powered by a reliable and renewable source of energy and allow the potter to work as per his schedule. The solar based system is properly installed by a trained entrepreneur, which also has fail-proof systems in place to ensure the safety of the user. The installed motor is able to provide more power and speed, with reduced noise on a larger wheel as compared to the electric wheel, thus allowing the potter to produce larger and better quality products in improved working conditions. Consequently, the artisan is able to consistently earn a higher income, while working under improved and safe conditions.

When the system was initially installed in Ibomcha's workshop, small technical glitches surfaced. However, the local entrepreneur immediately addressed them and secured Mr. Ibomcha's confidence in the capability and usefulness of the system. His monthly income has since increased by over 30%. This has set an example for the rest of his community, with many artisans visiting his workshop and showing interest in a similar solar-powered system at their workspaces. This is a great indicator of the possibilities of boosting economic growth and establishing decent and safe working conditions through clean and affordable energy sources.

This programme most directly impacts the following SDGs





Floating Hut Homestay, Moirang.



FROM FISHERFOLK TO ECO-FRIENDLY HOTELIERS

Ensuring sustainable livelihoods for the floating huts of Loktak Lake

Loktak Lake is located in Moirang block, Bishnupur district, Manipur, and is home to the fishing community that lives in floating huts lacking basic amenities, such as electricity. Over time, the catch of fish has decreased, and sustainability of livelihoods is a big question mark. The local authorities obviously have bigger fish to attend to and could not be bothered with these small-time fisherfolk. To add salt to their wounds, and in the guise of conservation, the authorities laid down certain guidelines and restrictions, constraining livelihoods even further.

Sapam Ashok Singh – one of the hut owners was a worried soul. “Since generations, we have caught fish in this lake. The floating hut is our home. What will we do on land?” he wondered. His sentiments were echoed by the other members of the community too.

Necessity, they say, is the mother of invention. With their backs to the wall and their livelihoods in jeopardy, the fisherfolk started exploring alternate solutions. This gave birth to the idea of using the floating huts as a tourist eco-homestay with the pristine Loktak lake providing the perfect setting. Here too, there was a challenge. Sapam explains, “the local authorities do not allow the usage of diesel engines on our floating huts, due to

pollution concerns. We also could not use kerosene or any candles since the huts are made of thatch and bamboo, and the risk of catching fire is quite high”.

Loktak lake was the perfect opportunity for the Trusts and their Associate Organisation Centre for Microfinance and Livelihood (CML), to intervene and salvage the livelihoods of the fisherfolk. In March 2018, the latter operationalised the initiative called ‘Ensuring Energy Security for communities living in remote areas of Manipur’, the main objective of which is to provide decentralized solar energy solutions to unserved communities not covered by the grid.

Under the initiative, CML facilitated the installation of solar home lighting systems for Sapam and two other families living on the lake. They, in turn, helped popularize the solution with other families.

Loktak lake is now a preferred eco-friendly tourist spot for the weary city folk who want to get away from the rat race and enjoy nature in the simple, but functional floating homestays. Simultaneously, it has ensured that the fisherfolk get to stay in their generations-old habitat and earn a sustainable income too.



Livelihoods



Banana cultivation provides additional income to farmers in Kotagarh village, Kandhamal district, Odisha.

OUTREACH



12 states



157 districts



8,960 villages



1.02 million families



5.10 million individuals

DISCOVERING NEW MEANS TO LIFE

22% of the population of India, i.e. 240 million, people are poor. Out of these, about 80% live in rural India. The rural area in India is so vast that the problem statement gets varied and changes its nature and intensity across various regions of the country. The mountain states have been witnessing rapid depletion of natural resources due to environmental degradation, loss of forest cover has led to widespread soil erosion, loss of soil fertility, decreased agricultural production and migration of population; while in northern plains, over use of new technology such as high-yielding seeds, chemical fertilizers, pesticides and farm mechanisation - as part of the Green Revolution - has led to multiple problems related to agriculture. The north-east region of India is considered one of the biodiversity hotspots in the world. Subsistence agriculture forms the main occupation with about 80% of the population engaging in it. While settled cultivation is practiced in the plains, shifting cultivation, locally known as Jhum, is the predominant agricultural practice in the hilly regions. This unchecked practice of Jhum has put pressure on the fragile ecosystem leading to food scarcity. Rising unemployment and health issues pose a serious threat to the social, and economic stability of the region. On the other hand, the central and western Indian belt is rich in natural resources, yet the poorest region of the country, and home to many tribal populations. Agricultural practices followed by the tribals, who form 90% of the population, are quite primitive resulting in low productivity. This has forced the tribal populations deeper into poverty. Increase in salinity in the coastal regions of Gujarat due to over exploitation of ground water and ingress of sea water is also one of the acute challenges which pose major threat to livelihoods of over 75,000 farmers in the regions affected by salinity.

Through its Rural Upliftment portfolio, the Trusts' objective is to contribute towards achieving SDG - 1, i.e. ending poverty in all forms everywhere, by 2030. The Trusts' Rural Upliftment programmes aim to benefit around 12.5 million rural poor of India by 2021. The programmes focus on supporting direct field action for innovations, promoting effective delivery systems for livelihood support services and building strong community institutions for sustained impact of programmes. For increased coverage and impact, the Trusts further focus their investments within the portfolio in line with the national strategy of fund flows. Natural resource management, agriculture, livestock development and community institution building are the cross-cutting thematic areas. The projects target rural income generation through farm and

non-farm activities, water conservation and irrigation systems, fisheries, post-harvest activities and marketing of produced goods. The development, strengthening and handholding of Farmer Producer Organisations and other such institutions is a major part of this activity. Many years of experience have allowed the Trusts to identify and evolve best practices and learnings which are replicated across issues and regions, adapting to and shaping large initiatives, while integrating projects for larger and more sustainable benefits. A challenge today is adopting change, including climate-related change. Therefore, the core of the programme remains innovation and integration of ideas and projects with a focus on sustainability through development of strong exit policies. A significant change is now being brought about by a relatively new and developing area of focus and integration of technology into different aspects of projects.

KEY ACHIEVEMENTS

- a.** Programmes under the Rural Upliftment Portfolio benefitted around 5.1 million poor people, of which 800,000 were added during 2018-19. This translates to about 2.1% of the rural poor population of India.
- b.** The DHANII programme under the Tata Dairy Mission facilitated an average procurement of approximately 84,600 litres of milk per day, with 28,800 members providing milk across 617 Milk Procurement Centres established under the programme.
- c.** A comprehensive study was undertaken covering around 750 Farmer Producer Organisations in the country, which provided insights on the way forward for establishing 'Centre for Excellence in Agricultural Development (CEAD)' in project areas.
- d.** The Open Source Fisheries programme benefitted approximately 25,000 farmers through its improved Package of Practices for producing quality fishes. Over 45 million fingerlings were produced in the programme during 2018-19.
- e.** 1,250 micro enterprises were operationalised by individuals/group entrepreneurs.
- f.** Construction of 940 water harvesting structures increased irrigation potential of around 27,000 acres of land.



FUTURE PLANS

- a.** Upscale interventions to cover around 6 million rural poor by March 2020, thereby increasing the total coverage of national rural poor to 2.5%.
- b.** Enhance the capacities of programme teams and other community institutions by organising training programmes.
- c.** Address the end-to-end value chain of agriculture from production to marketing of agricultural produce.
- d.** Enhance irrigation potential to mitigate agrarian distress.
- e.** Build community institutions and manage value chains with Farmer Producer Organisations.

BEST PRACTICES

- a.** Creation of artificial glaciers in Ladakh for sustained agriculture.
- b.** Popularising the use of alternate energy systems in rural development programmes.

CHALLENGES FACED

Support through governmental schemes/ NABARD, etc. often takes considerable time. Networking and constant follow-up are necessary; at the same time, flexibility in the program design is often required.

Women farmers with their yield in Nandurbar, Maharashtra.



Crafts

The crafts sector in India is in a precarious condition today, with the country at the risk of losing an entire generation of skilled, young artisans who are rapidly exiting their legacy livelihoods to other occupations due to poor incomes, as they lack the skills to connect with markets and patrons directly. This is increasing migration pressures on cities and also causing an irreparable loss of the country's heritage crafts. Not surprisingly, it is extremely difficult to provide alternative skilled employment to 11.65 million artisans.

In view of the above, the two key objectives of the Trusts' engagement in the field of crafts are to:

(a) work with artisans, thereby empowering them to become practicing custodians of India's rich heritage crafts; and (b) preserve and conserve dying crafts.

KEY ACHIEVEMENTS:

- a.** Two incubation and design centers opened by the Trusts in Odisha and Assam for handloom weavers.
- b.** Weaver entrepreneurs under The Handloom School Program observed a 237% increase in income compared to the baseline.
- c.** Artisans engaged in Kauna and Bamboo craft in Manipur have observed a 164% increase in income compared to the baseline.

FUTURE PLANS

- a.** Operationalising 3 incubation and design centers in Odisha, Assam and Andhra Pradesh.
- b.** Nurturing 70 artisan entrepreneurs in Odisha, Assam, Andhra Pradesh and Nagaland.
- c.** Developing a programme for reviving endangered crafts.

BEST PRACTICES:

- a.** Nurturing artisan entrepreneurs with hands-on education in business, design, use of IT tools and communications.
- b.** New product development based on traditional heritage textiles



An artisan filling brass pieces into clay mould.

OUTREACH



7 states



11 districts



8,000 artisans



Project aligns with SDG



Mr. Biakkunga, village Zotuitlang, Lunglei district, Mizoram was able to produce higher yield of bananas, owing to the technical know-how regarding agricultural practices imparted by the NEIDA experts.



FINDING HOPE FOR FARMERS

Plantations and pigstyes

Sometimes, the smallest assistance can lead to the biggest changes. One only has to ask Mr. Biakkunga from Zotuitlang, Lunglei district, Mizoram or Ms. Kekhenyi-u from Chizami village in Phek district, Nagaland.

Mr. Baikunga owns 3 acres of land and his banana crop is flourishing beyond his expectation, this year. The crop is expected to bring an additional income of approximately Rs. 20,000, with growth in the years to come.

He attributes much of the success to an intervention by the North East Initiative Development Agency (NEIDA), an associate organisation of the Tata Trusts, set up with the object of driving the North East Initiative to address the development issues of communities in the north eastern states of Mizoram, Nagaland and Arunachal Pradesh. NEIDA collaborated with NABARD for the Tribal Development Fund (TDF) Project and supplied 100 banana suckers, 100 orange budded, Nitrogen fixing tree seeds, to add to the income of the farmers. Baikunga, along with other farmers of the TDF project area were imparted technical knowledge on plant protection measures and agriculture soil practices by teams from NEIDA.

Ms. Kekhenyi-u harbours a similar view with respect to NEIDA's piggery intervention which benefitted farmers like her. Although a traditional choice for those with no

formal education, initially, backyard pig farming did not provide much income. Consequently, supporting her family with the meagre income was becoming difficult.

However, through NEIDA and its field partner, Chakhesang Women Welfare Society, Kekhenyi-u received training on the important aspects of pig rearing like balanced diet, construction and management of a proper pig sty, along with budgeting for the same, maintaining hygiene, etc.

These were practiced by Kekhenyi-u and in just a matter of 10 months, results were visible. Her first fattened pig, now weighed 140 Kgs instead of the 80 Kgs she was accustomed to and she earned ₹30,800/- for it.

Delighted, she explains, "Feed management, disease prevention practices and measures such as de-worming, vaccination, providing fresh water and bathing the pigs regularly were some of the new practices I learnt as a part of this programme and practiced them. It made a difference to my income."

Both Ms. Kekhenyi-u and Mr. Baikunga are now looking forward to a steady increase in productivity and income with the improved practices in their fields of livelihood.



Project aligns with SDG

1 NO POVERTY



Somi bai with her herd of goats in Gordhanpura village, Pali district, Rajasthan.



A STORY OF 3 TO 39

The miracle of goat rearing

Somi Bai, from village Gordhanpura of Bali Block, Pali District, Rajasthan, supports her family with goat rearing. Her husband, their five children and her father-in-law depend primarily on Somi Bai's enterprise, which began when she got married and brought three goats to her husband's home.

After a couple of years, the number of goats and bucks she reared increased. But, with success came disaster as well. Suddenly, her goats started falling ill and dying, which was a huge setback for her.

At the same time, Somi Bai joined a Samli Bor - a self-help group. Here is where she met a fellow member, who was a Pashu Sakhi (fondly called 'doctors' by the community). The Centre for Microfinance (CmF), an associate organisation of the Tata Trusts, trains village women to be Pashu Sakhi under its livelihoods programme. They undergo various training exercises and exposure, equipping themselves with skills in preventive animal health care and animal management practices. They further get on-field support from paravets, community livestock facilitators, livestock assistants and doctors associated with the programme.

Somi Bai received support and guidance from a Pashu Sakhi on adoption of improved animal management practices on a day-to-day basis, along with support from the Community Livestock Facilitator (CLF). Moreover, she got a goat shed constructed under the MGNREGA project.

She recalls, "All of this led to several benefits. I was able to deal with the day-to-day problems faced in goat rearing and the spreading of seasonal diseases has been contained, especially with the goats and bucks living in a hygienic and protected environment. The Pashu Sakhi and CLF help with regular vaccination and deworming. I have sought immediate help and treatment whenever my livestock fell ill." She also benefitted from getting a fair price when selling the goats by weight, a practice promoted as a part of the programme.

Somi Bai now has 39 goats and draws in an annual income of ₹30,000 to 35,000 from goat rearing itself. Having repaid all her debts, she has also initiated farming, sent her children to school and built a pucca house for her family. As a bread-winner, she, like many other entrepreneur women, has found her voice in her family and the community!



Project aligns with SDG



Kabir now implements best practices of pond management in Kalamkhet village, Sepahijala district, Tripura .



RESTORING FAITH IN FISHING

A story of fostering smiles

It was like any other morning for Kabir Hossain, until he spotted some yearlings floating on the surface of one of his ponds in the last week of June 2018.

Kabir, a resident of Kalamkhet village, Mohanbhog Block of Sepahijala District had joined the fishery project implemented by the Tata Trusts under its Tripura State Initiative (TSI). He stocked around 2,500 yearlings of Rohu, Catla and Mrigal (commonly known as Indian Major Carp) in two of his ponds.

However, to his distress, one day, when he collected some fish, he found wounds on their bodies. Worried, he instantly put to practice the knowledge imparted by the TSI team and dissolved 200 gm of potassium permanganate in his pond. Kabir also informed the concerned cluster coordinator, Maran Debnath about the development. Mr. Debnath immediately visited and suggested Kabir keep the fishes in a solution of 10 litres of water and 100 grams of salt for two minutes. However, nothing changed. Stumped by this, they contacted the programme expert on fishery,

Dr. A. K. Sahu (also former Head, APED, Indian Council of Agricultural Research – Central Institute of Freshwater Aquaculture). On hearing the symptoms Dr. Sahu diagnosed it to be an Arugulas attack. Though unsure about the cause, the immediate solution was to add 'Botux' to the pond. Kabir followed the advice and saw all the insects die within 5 minutes. To his relief, no fish had died and, by the following day, the disease was arrested completely.

Later, during Dr. Sahu's visit to the Tripura project areas, he visited Kabir's pond and interacted with him, he realised his folly. Kabir recalled dropping poultry waste in the pond. Dr. Sahu reminded him of the best practices of pond management and advised him to be more careful in the future.

Now, Kabir is a happy fisherman and shares, "I'm happy I enrolled under the fisheries initiative and it is because of the help from the TSI team that I could regain my fish and save my livelihood."



Project aligns with **SDG**



Tulsi Devi in her field of Napier fodder grass, Rengal village, Almora district, Uttarakhand.



FEEDING HOPE

Finding alternate income opportunities for farmers on a hilly terrain

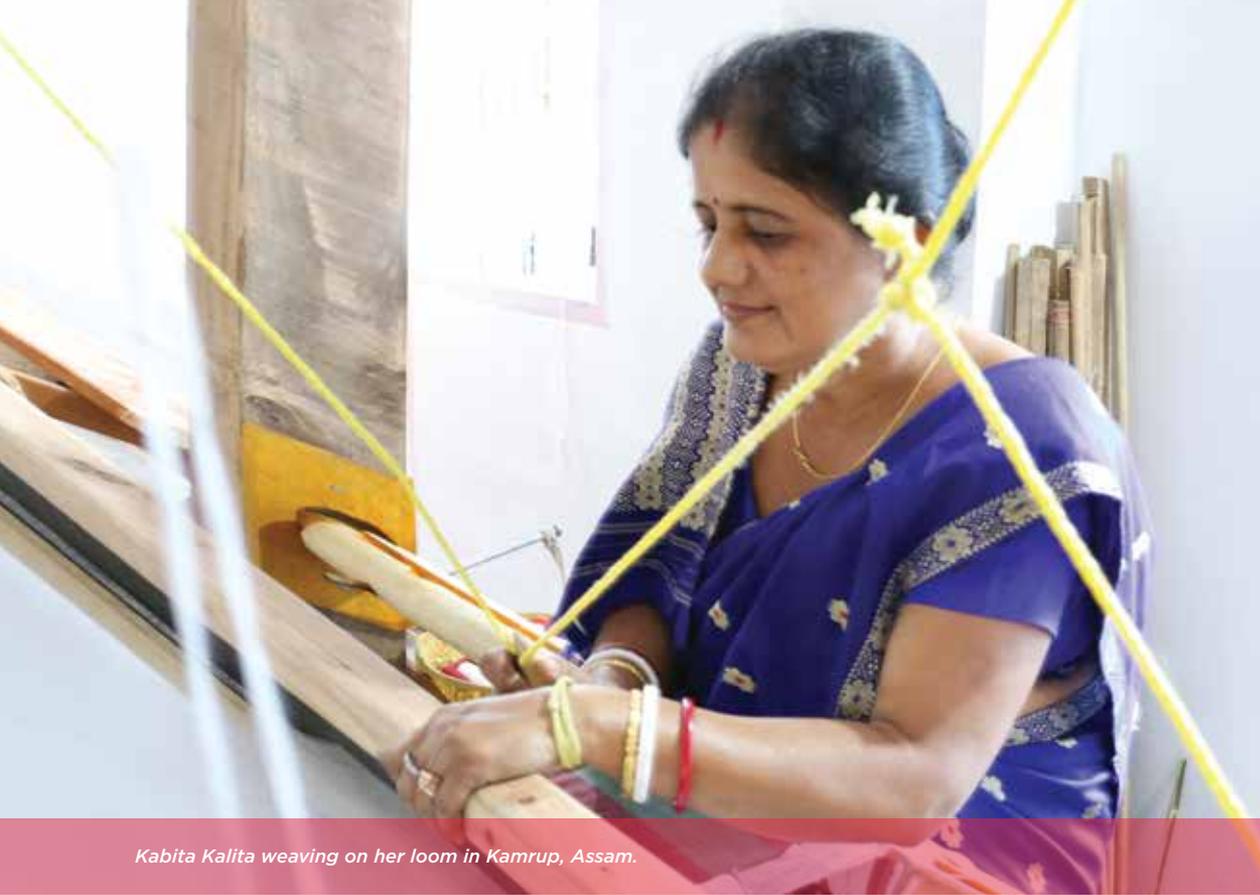
Tulsi Devi lives in Rengal village of Dobha cluster in Almora, Uttarakhand with her family. Agriculture and livestock rearing are the main sources of income for her family of 5. However, life in the village is challenging for her, due to limited resources and lack of other opportunities. Inadequate fodder for the cattle and a rain-fed agriculture system has forced many families to work as daily-wage-labourers or migrate to neighbouring cities or states in search of employment. The shortage of fodder led Tulsi Devi to discard livestock rearing as a source of earning.

Himmotthan Society, an associate organisation of the Tata Trusts, conducted a survey to understand the precise need of the area, in order to ensure a sustainable income. One need that the survey highlighted was fodder. Himmotthan, with its experience in executing development programmes, provided support to the local Self Help Groups (SHGs) to start a fodder nursery and fill the gap. This provided a two-way approach to solving the problem – the fodder plantation could meet the needs of local residents for fodder for their livestock as well as generate income for them by selling the saplings of these fodder plants for future cultivation.

Tulsi Devi was encouraged to enroll as a member of Vandevi Self Help Group and start a fodder nursery centre. She was helped and guided all the way from starting the nursery in a small part of her land, to providing financial and technical support by Himmotthan and its partner organisation Chiraag.

Tulsi Devi feels that the biggest impact of this was that her husband now could stop working as a daily-wage-labourer and, instead, they could work together in their own field. They earned a regular income, which helped them to further their fodder nursery to a business and expand their fodder plantation. Tulsi Devi's nursery ensured regular availability of fodder, which helped many other families to generate a regular income from livestock rearing. These families now sell surplus milk, thereby increasing their income.

Tulsi Devi's family has also encouraged others to take up fodder nursery as an income generation activity. Today she is a successful entrepreneur and happily says, "this fodder provides food for our buffaloes and also helps us to earn more money. We are expanding the area under fodder plantation and our business opportunities, too!"



Project aligns with SDG

8 DECENT WORK AND ECONOMIC GROWTH



Kabita Kalita weaving on her loom in Kamrup, Assam.



GIVING CRAFT BASED LIVELIHOOD SUPPORT

Antaran's Journey

The weavers associated with the Tata Trusts' Antaran – Transforming Crafts Programme have been through a lot. Most of the villages where households are engaged with this programme are located on the banks of the Brahmaputra river, where frequent flooding causes massive soil erosion and destruction. This makes income from agriculture unviable.

The Tata Trusts initiated an intervention in handloom development in this region, considering its economic vulnerability and the prevalence of a weaving culture. A skill known to every woman in the region, each household has one or two looms, which were used to cater to the needs of the households. Through Antaran's intervention, the weavers were systematically taught how to become commercial weavers.

A full-fledged Incubation and Design Centre (IDC) was set up by the Centre for Microfinance and Livelihood (CML) – an Associate Organisation of the Tata Trusts at the central Bhagwati Para, Kamrup, Assam. Here, women from nearby villages could learn all about new techniques in weaving, designing, production, quality, costing, pricing, market and enterprise development.

Ever since market development and design support has been given by the Antaran team, so the weavers could create marketable products. Artisans are creating their own brands too, for eventually buyers and designers will approach them directly. Additionally, weavers are also

trained to work with markets, learn communication skills & social media marketing and much more. The community has been sensitised about the opportunities for earning money with their existing skills and resources.

The project is still at an initial stage; nevertheless, the weavers are confident that their weaving skills will become a sustainable livelihood option and are developing their craft accordingly.

"The freedom to access the resources of the cluster in a responsible manner makes us want to return to the IDC even after having completed the training course!", says Pratibha Kalita Das, a trainee under the Antaran programme, who now runs the Chandroday Enterprise.

The programme focusses on promoting a holistic sustainable model, ensuring socio-cultural acceptability by helping revive traditional methods of dyeing and weaving, while creating contemporary designs. It is economically viable as it eliminates middlemen and the artisans receive returns commensurate to their labour.

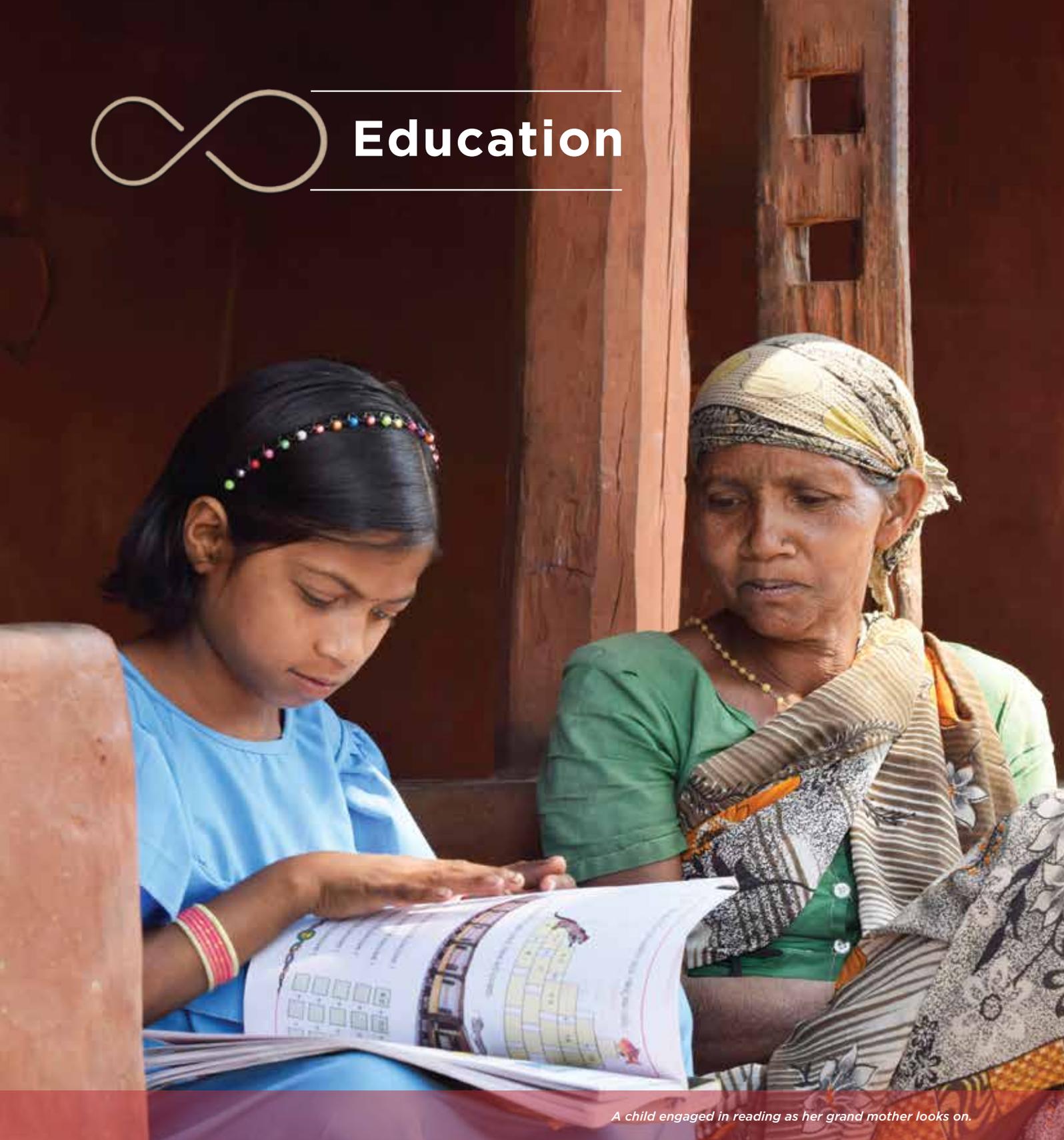
Kabita and Jyotsna Kalita, the duo weaver-entrepreneurs who trained under Antaran, and who started their microenterprise 'Monikanchan Handlooms', are joyous. Kabita explains, "We're always in a rush to complete orders and the demand for our products is only increasing each day. Now we feel confident to bring on more weavers with us and expand our enterprise!"

(SKILL-UP-GRADATION TRAINING)
Venue - Melsikia
(22.11.2017 To 21.02.2018)
Implemented by - Darabar Sahitya Sansad
Supported by - TATA TRUSTS





Education



A child engaged in reading as her grand mother looks on.

OUTREACH



20 states



152,204 teachers/
trainers/anganwadi
workers



3,670,947 students/
children



44,277 schools

LIGHTING UP THE FIRE OF KNOWLEDGE

For the first time since the introduction of the Right to Education Act, India witnessed tangible improvements in education outcomes. The Annual Status of Education Report (2018) revealed that more than half (50.5%) of all children in Class 5 can read a Class 2 textbook, taking the statistics up from a lower 46.9% in 2012. However, the challenges of equity and learning persist in the country. The Trusts' education portfolio operates with a core goal of ensuring equitable access to quality education for children and adolescents, with a focus on reducing gender and social disparities. The Trusts' steadfast approach to building a more egalitarian education system in India involves quality improvement, achieving grade-appropriate learning levels, developing 21st-century skills, and simultaneously, strengthening the education system and communities in identified geographies.

With a vision towards 'Authentic Learning for all', the Trusts are designing and implementing an array of interventions, from developing curriculums for training teachers, to building technology-based teaching resources; the attempt is to make learning and teaching more effective for millions of children in India. Authentic learning is an instructional approach that allows students to explore, discuss, and meaningfully construct concepts and relationships in contexts that involve real-world problems and projects that are relevant to the learner. It refers to a "wide variety of educational and instructional techniques focused on connecting what students are taught in school to real-world issues, problems, and applications".

At the same time, education in India sees participation not only from educationists, but also from researchers, entrepreneurs, innovators, investors, international agencies and the government. It is only through such collaboration and design that context-specific solutions may emerge, and therefore, the Trusts seek to converse, convene and converge with like-minded organizations in the space to create a multiplier effect and move the needle on learning outcomes.

As the Trusts shift from being a purely grant-making organisation to an implementing and convening body, the effort is to solve critical problems at scale. Exemplary solution architecture is that of TEJAS Programme (Technology Enabled Education through Joint Action and Strategic Initiatives) in partnership with the British Council. This programme has demonstrated success in addressing the long-standing challenges within the traditional cascade model of teacher training. The cascade model of training, also commonly

called 'Train the Trainer', typically involves 3-4 levels of training and often entails problems of distortion of the messages transferred during the training, as they are passed down many levels of personnel. In line with the Government of Maharashtra's efforts to implement English language teacher training programs in all government schools, the Trusts and British Council jointly designed the TEJAS Programme to replace the cascade-training model by setting up local communities of practice for the purpose of continuous professional development. A bold initiative, the programme has seen positive outcomes of its engagement with the government system including government participation, teacher's increased engagement in learning, and the appropriate use of technology to support professional development among government teachers.

The wide range of programmes in the Trusts' education portfolio addresses multiple needs in the sector. Although diverse, they are united by the sole objective of working for the development of every child.

In order to meet the broad goal of towards 'Authentic Learning for all', the education portfolio has defined 4 verticals:

- a.** Broadening Access seeks to tackle sociological problems related to access and equity in education.
- b.** Deepening Learning seeks to design pedagogical solutions across different contexts.
- c.** Developing Teachers aims to work towards capacity building of teachers.
- d.** Strengthening Systems looks into the opportunities and challenges of working at scale.



KEY ACHIEVEMENTS

- a.** Khan Academy in India: a 5-fold increase in learners from 180,000 in 2016 to over a million in 2019.
- b.** Parag - the Trusts' Publications Initiative bagged the 'educational initiatives' honour at the London Book Fair International Excellence Awards.
- c.** Avasara Academy supported by the Trusts is one of 25 Ashoka Change-maker Schools across India.
- d.** Connected Learning Initiative - key findings from midline studies show that all students, including students from SC, ST and OBC categories were found to make significant gains in basic and intermediate technical knowledge.

FUTURE PLANS

- a.** The portfolio seeks to deepen its work with governments towards system strengthening to empower an evidence-based public administration.

b. Apart from pre-service Teacher Education, the portfolio envisions to influence the discourse of 'teaching' as a profession and raise its stature through multi-pronged work with Teacher Education Institutes, supporting Teacher Education Programmes, etc.

c. The portfolio also seeks to work in the area of Social Emotional Learning (SEL), with the aim to foster social-emotional development of children in the age group of 6-18 years. Despite the mention of SEL in the National Curricular Framework, 2005, this domain is only now seeing traction in the education system.

d. The portfolio recognizes the importance of cutting-edge research and aims to bring rigorous monitoring and evaluation through various platforms being built by the Trusts and through better research linkages with TISS.

e. The portfolio envisions supporting game-changing innovations at scale in the education sector.

The tables are turned! A child helps her grandfather to read.





Students engaged in a group activity in a MV school.



MANISHA'S TRANSFORMATION

The power of values being caught, not taught

Manisha, a young girl attending school, was simply not motivated. School seemed like a chore and chores at home were a bore. She was disobedient, listless and, frankly, hard for her parents to handle.

The Right to Education Act 2009 (RTE) mandates that the curriculum framed for schools should be in "conformity with values enshrined in the Constitution" using the pedagogy of "learning through activities in a child-friendly and child-centred manner." (Section 29, RTE).

However, while impressive on paper, implementation lagged behind due to lack of capacity building of teachers and school heads in the relevant competencies. Meanwhile, children like Manisha suffered.

A path-breaking programme, Mulyavardhan (MV), is a values-based whole school transformation programme which was developed by Shantilal Muttha Foundation (SMF) and the Tata Trusts, and adopted by the government of Maharashtra in 2016. Under this approach, values are not "taught" by teachers, but "caught" by students through experiential activities in the class and the entire school ethos, processes and practices.

The MV framework and learning materials were developed in 2015, in consonance with the main government educational policies and statutes. Prior to that, SMF implemented a five-year pilot (2009-2014) in government primary schools in the Beed district of Maharashtra. This pilot underwent various national and international evaluation studies, recommendations from which were incorporated in the current programme.

MV is aligned to the state curriculum learning outcomes and is approved by the SCERT. The programme framework is based on the four constitutional values highlighted in the Preamble: justice, liberty, equality and fraternity. To make these values actionable, eight MV values have been defined aligned to the school-education context, which are: respect for human dignity, responsibility, autonomy, creative and

critical thinking, harmonious living, valuing diversity, concern for others and active contribution. To internalize these values, five competency clusters for children's social-emotional learning have been identified- self-awareness, self-management, responsible decision making, relationship skills and social awareness.

To impart these skills, teachers access MV educational materials, through which children from standards 1-5 participate in experiential activities enhancing their learning and social-emotional capacities. The result has been impressive with teachers feeling empowered with skills to transform their classrooms into joyful, child-centric learning environments.

In 2018-19, MV has reached to 40,231 primary schools across 36 districts covering 2,265,249 students and 115,126 primary teachers in Maharashtra, while in Goa it reached to 781 primary schools across 2 districts, covering 22,056 students and 1,711 primary teachers.

Data from an unprecedented 45,899 teacher interviews confirms improvements in children. The January 2019 evaluation study also revealed positive results for learning outcomes. MV schools have attained a 25% higher score over non-MV schools in their overall performance towards nurturing constitutional values in schools, as well as a 10% higher score over Non-MV classrooms in providing a child-centric environment that demonstrates practices for developing support of value-related competencies. This development is especially noteworthy since internationally the average relative improvement percentage for school-based social-emotional learning programmes stands at about 10% in developed countries.

Manisha's entire personality altered. She started enjoying school, and at home, was a great source of support to her mother helping her with chores, ensuring she learns from her mistakes and grows as a person.



Promoting reading with pleasure, in a Government Primary School in village Bijemal, district Mahasamund, Chhattisgarh.



THE ROAD AWAY FROM ROTE

A nine-month intensive, transformative journey

If there is one practice that plagues education in India, especially when it comes to primary education, it is the heavy dependence on rote learning. Monologues by teachers, rote learning, repetition without comprehension and copy writing from textbooks and blackboards by students contribute to this greatly. Comprehension, critical thinking and problem solving seem absent.

Consequently, a healthy learning curve amongst students is absent.

National surveys - such as Annual Status of Education Report (ASER) 2018 - have repeatedly revealed that students are not achieving class-appropriate learning levels. The aforementioned study found that only one-quarter of grade 3 students could read and understand a story written in a few simple sentences. It is also important to note here that it is quality early grade literacy intervention that drives progress toward achieving the United Nations' Sustainable Development Goal 4 in its effort to unlock the potential of youth through quality education.

The Language and Learning Foundation (LLF), New Delhi decided to intervene, with the assistance of the Tata Trusts. With a 3-year support commitment, a variety of long and short duration professional learning programmes were developed, targeting government school teachers, teacher educators and academic support personnel.

LLF's flagship 9-month intensive course on early language and literacy was offered in five north Indian states, namely, Haryana, Rajasthan, Uttar Pradesh, Bihar and Chattisgarh. This plays a balancing act between building conceptual understanding and equipping the participants with pedagogical toolkits for use in early language and literacy teaching. Till date, 390 participants have completed the 9-month course on ELL (Early Language & Literacy), out of which 217 are government school teachers, 106 are academic support

staff and 29 are teacher educators.

The impact of the course was best described by one participant:

"I learnt a lot while taking this course. Especially, the importance of making children understand concepts rather than forcing learning by rote, as well as the do's and don'ts for a teacher. It made me grasp the importance of understanding the capabilities of each child and being patient. A teacher should be sensitive and empathetic, but I didn't know that it actually works in getting a positive result."

The following key pointers were the reasons for the strong buy-in by the educators:

The extended duration of 9 months as against the "one-off" or "one-time" in-service trainings allowed participants to easily go through the cycle of "un-learn", "learn" and "re-learn".

Participants received continuous support from the LLF team, allowing them to engage with rigour and continuity, where they were able to visualize their growth as a journey, giving them a necessary sense of accomplishment.

It did not provide ready-made answers, but helped build a perspective on early literacy teaching-learning.

The experiential approach enabled every participant to empathise with early grade students and understand their struggles and challenges, thus becoming more sensitive to them.

LLF's conviction and commitment to comprehensively work along with State systems, especially through the inclusion of academic support staff in the participants' profile, along with the teachers, suggested a deliberate journey towards systemic understanding on why early learning is important and how the same can be achieved.





Digital Transformation





Data Driven Governance

AN AGILE BOTTOM-UP APPROACH

The volume of data in the world is increasing exponentially. As per the estimates, around 90% of the data in the world was created in the past 2 years, and so is the case with data that the government requires for decision-making. Data is the backbone of any effective decision-making and the stepping-stone for setting accountability. If analysed and used effectively, this real time data can reflect the real-time insights into the well-being of people, whilst also helping in designing targeted interventions for the benefit of the vulnerable segment of society. In the context of Data Driven Governance, there are unprecedented opportunities for informing and transforming the society basis this data; however, there are key areas, which need immediate attention to leverage this opportunity such as:

- a.** Absence of a centralised decision support system with real-time data for tracking and monitoring of progress to ensure prioritization of public funds.
- b.** A need to provide training and capacity building, so that people on-ground and within the administration are able to utilize such methods for better service delivery.
- c.** Overcoming the lack of awareness and understanding among the community regarding planning process to ensure their basic needs are met.
- d.** Bringing down the costs by leveraging easily customizable technological systems.

With a vision to 'activate rural and urban governments and associated stakeholders to

move towards a data reliant culture of decision making, and enhance the data and technology discourse in Indian Governance', the Data Driven Governance (DDG) portfolio at the Trusts aims to strengthen rural and urban decision systems through the use of data and technology. The key objective has been to provide functional and technical support to governments for carrying out data intensive planning, as a means to supplement decision making, leading to the creation of the DELTA (Data, Evaluation, Learning, Technology, and Analysis) framework.

Beginning from one Gram Panchayat in 2014, the Data Driven Governance portfolio now covers 85 districts across 27 states. The programme has covered a population of 2.5 million through on-ground surveys, with direct benefits given to 56,000 households and 66,000 individuals. With a prime focus to capacitate the administration, the DDG team has conducted a thorough training for over 500 administrative officers on utility of data and use of dashboards.

The engagement models defined and implemented under the Data Driven Governance portfolio are often the first-of-its-kind in the Indian context, and are iteratively refined basis on-ground experiences and uptake demonstrated from respective administrations. It captures a spirit of innovation to transform decision making in governance, positively influencing a multitude of stakeholders, including administrations and communities across levels.

OUTREACH



27 states



85 districts



Over 6,000
villages



Approximately 439,000
households



1.2 million
individuals



Active participation of women in Pali Sabha.

KEY ACHIEVEMENTS

a. ISO 37120 learnings built into the Ease of Living/ Liveability Standards exercise rolled out by the Ministry of Housing and Urban Affairs. 100 City Data Officers in place for all smart cities to take the DataSmart Cities (DSC) mandate forward – the Trusts are a part of the Steering Committee and Working Group for DSC and National Urban Innovation Stack (NUIS).

b. Development of India's first e-learning course on Data Driven Governance for capacity building of municipal officials, delivered over a period of 15 hours. The modules covered include:

- i. An introduction to Data Driven Governance for Urban Local Bodies (Module 1– 4 hours)
- ii. Departmental and Cross Departmental Convergences with implications on departmental decision-making (Modules 2 and 3 over 8 hours).
- iii. Practices of Change Management to bring about Data and Tech Enablement in ULBs (Module 4–3 hours)

c. Uptake of DELTA in one of the key large-scale implementation NITI Aayog's Transformation of Aspirational Districts programmes with an outreach of approximately 800,000 individuals across 4,032 villages in 85 districts.

d. Conducting a large scale DELTA micro planning exercise, in partnership with Tata Steel Rural Development Society, on the 270 km long Jamshedpur to Kalinganagar corridor. The programme has an outreach of approximately 370,000 individuals spread across 472 villages in 5 districts of Jharkhand and Odisha.

FUTURE PLANS

a. Capacity building

1. Build capacity of administration by conducting regular, thorough trainings on dashboards, data

management, data privacy and data cleaning.

2. Create course modules for capacity building of 100 City Data Officers and senior leadership within the municipal administration.

3. Generate case studies for both rural and urban segments.

4. Train a cadre of motivated community resources to carry out implementation of the identified projects, and leverage funds from government and private sources through interactive workshops.

b. Technology

1. Improve and manage the in-house, fully customizable DELTA platform for data collection, analysis and visualization – open to use within teams across various portfolios.

2. Incorporate the data-update feature with the created system to ensure that data on these dashboards is updated regularly to support decision making, basis most recent information.

3. Work with various Trusts' teams and associate organizations to introduce uptake of DELTA as the foundation for data collection in their on-ground projects.

BEST PRACTICES

Capacity building - To create, nurture and further the spirit of data-driven empowerment, collaboration and governance, it is very important to capacitate the administration to use the data based decision-making dashboard for decision making. Consequently, in order to ensure this, capacity building sessions of administration are conducted on a regular basis.

Data quality and technology improvement for other teams - The rich experience of the data driven governance team in the field of creating decision support systems basis data collection is being shared with other teams within the Trusts. Consequently, the costs incurred by different programme teams within the Trusts for data collection are reduced.



Community participating in the Participatory Rural Appraisal exercise being conducted in the village.

Project aligns with SDG

17 PARTNERSHIPS FOR THE GOALS



SOWING THE SEEDS OF PROGRESS

From share-cropping to sharing smiles

Tapan Kumar Behera was from a farming family in a small hamlet called Damodarpur in Purusottampur village of Basta Block in Balasore. Only 26, his entire family was struggling to make ends meet since sharecropping yielded a meagre income. However, determined to support his family, he studied hard to graduate in 2014 from a local UN Degree College. Armed with his degree, Tapan started looking for work. It was around the same time when DELTA (a digital micro planning process), an initiative by the Tata Trusts, commenced in the Basta and Baliapal blocks of Balasore district, in Odisha.

In 2015, this led him to work as a surveyor. He learnt the process with enthusiasm and became both comfortable and proficient with digital equipment. His exemplary performance in the micro planning process encouraged project management to provide him further work opportunities and, in no time, he was engaged to conduct focus group discussions, other participatory rural appraisal exercises and even conduct Palli Sabhas and Gram Sabhas. When the last mile linkage programme (implementation of Village Development Plans prepared under DELTA process) began, he was immediately on board and continued for 2 years, performing beyond expectations and adding value to the project and his career.

Tapan soon learnt the development platforms and processes for village and institutions and for the Gram panchayat, handling electronic gadgets and data from primary sources, analysing data and generating

information for discussions in the village and GP level meetings. Not a man to encourage idleness, he also encouraged coordination with functionaries and people's representatives, prepared reports and presented them before decision makers with enthusiasm.

Perhaps this was because he was a natural at the skills of community mobilization, conducting Participatory Rural Appraisal (PRA) exercises, identifying development issues, shaping people's opinion, finding solutions to community and institutional development issues, managing people towards a collective effort, etc.

Most of all, though, he understood the plight of the poor. He dedicated himself to work for the poor and uninformed in his own village Panchayat and block. His reward was the appreciation from the community, which was measured in smiles; after all, because of him, they had access to developmental schemes and documents.

As he moved on to attain a Master's Degree in Social Work from the University of Odisha to hone his key skills and strengthen his career journey, he refuses credit. Instead, he remarks, "While working with DELTA & Last Mile Project, a simple rural educated youth like me got a nice opportunity to earn money and serve my local people. Especially, it provided me an opportunity to enter into a professional career and showed me the path to a professional career. Now I am a development professional with professional education and will happily continue in the sector."



Internet Saathi

MAKING WOMEN THE LEADERS OF CHANGE

At an estimated 5 million users, India has the second largest internet population in the world. However, in 2015, only 1 in 3 internet users in urban India was a woman. This statistic became worse with only 1 out of 10 internet users being a woman in the rural areas.

With the intention to address the huge disparity, the Internet Saathi programme was launched jointly by the Trusts and Google in July 2015. The Programme aims at spreading internet literacy to rural women through a “train the trainer” approach. Qualified women are identified and trained as Internet Saathis. Each Saathi is provided with two mobile broadband-enabled smartphones and given the responsibility to train 600-700 community women in clusters of 3 to 4 villages over a period of six to eight months.

In June 2017, a Section 8 Company “Foundation for Rural Entrepreneurship Development” (FRIEND) was set up with the aim of upscaling the programme and covering 300,000 villages (close of half of the estimated 640,000 plus villages in the country) through a network of nearly 83,000 Internet Saathis by 2019. Further, the foundation targets to create livelihood opportunities for 100,000 Saathis by 2022 while being financially sustainable.

As on March 2019, the programme has delivered internet literacy to nearly 25 million women in rural communities across 252,000 villages, through a network of over 68,000 Internet Saathis. Recent measurements on gender parity indicate that 3 out of 10 rural users of the internet are women. Of the over 68,000 Internet Saathis, more than

59,000 have already completed the digital literacy outreach. 38,000 Saathis (approximately 64%) have opted to continue with the Internet Saathi programme for the livelihoods phase of the initiative. These Saathis cover over 116,000 villages across 18 states and are being trained to undertake social impact programmes in their villages. More than 25 million Indian women are now internet savvy.

KEY ACHIEVEMENTS AND IMPACT

Internet Saathis are social influencers within their community, leveraging technology and digital mediums for effective outreach.

The Internet Saathi impact study of the women beneficiaries conducted in 2017 by IPSOS highlighted:

45% women believe they have increased their income by learning new skills.

57% women feel they have learnt better ways of investing their money.

Women are twice as likely to express themselves in village level meetings and 3.5 times more likely to join other social causes.

OUTREACH



18 states



68, 087 saathis



252,000 villages



24.52 million beneficiaries



An Internet Saathi imparting training to rural women.

The Internet Saathi Impact Study 2018 conducted by TNS highlights the utility of the internet amongst the Saathis and the kinds of micro-enterprises they set up or aspire to set up. Notably:

- a.** 7 in 10 women accessed the internet for the first time via the Internet Saathi programme.
- b.** 1 in 3 women believes that the Saathi programme has positively impacted their personal and children's education.
- c.** 30% of people have improved access to health-care information and enjoy improved health.
- d.** 53% uplift observed for upskilling of women.
- e.** 2 in 10 women go on to start their own business with an average revenue of over Rs. 4,000 per month.

FUTURE PLANS

- a.** Foster women entrepreneurs at every stage and develop a roadmap to transform aspiring and capable individuals into successful entrepreneurs.
- b.** Find opportunities for Saathis in nascent trades,

such as operating beauty parlours, menstrual hygiene management, facilitating online recharge for mobiles, etc.

CHALLENGES FACED

- a.** Positioning the Internet Saathi as an opinion leader in matters of internet literacy amongst the community, whilst not letting the livelihood opportunity reducing her to a simple seller of products within the community.
- b.** Lack of continued opportunities for the Internet Saathis, therefore making their continued involvement in the program untenable.





Ragini teaching Madhubani painting art to other women in her village.

Project aligns with SDG

5 GENDER EQUALITY



FROM VILLAGE TO THE WORLD WIDE WEB

Ragini Kumari, an Internet Saathi, inspires others to learn

Ragini Kumari lives in Darbhanga district of Bihar. She comes from a very conservative rural Indian family, where girls are married off at a very young age. Her fate was no different. She got married when she was 16 and soon became a mother of two. Despite having a poor family background and endless household responsibilities, Ragini never stopped dreaming. Her determination to change her life made her join an institution where she learnt the art of Mithila paintings. Thereafter, the institute employed Ragini to teach other women the art.

Whilst being an inspiration to others, Ragini wasn't satisfied with what she was doing. "The job did not pay too well to provide for my family and, especially my two kids, with a bright future", shares Ragini. "I wanted to do something more; after some deliberation, I set up a small boutique of Madhubani paintings in my house. Whilst villagers would visit to have a look, unfortunately, there were not many buyers for my art."

One day, Ragini heard about the Internet Saathi programme, in which women were given a mobile phone and trained to use it to access online services, post which,

they would train other women similarly. Ragini had never used a mobile phone earlier and she was eager to be a part of the programme.

Upon joining the programme, Ragini received 2 mobiles and soon realised that she could access the World Wide Web to expand her business, whilst getting fresh ideas for new designs. She created her Facebook account and shared her paintings world-wide, in the process, enhancing her business.

Simultaneously, Ragini continued interacting with women in her community, inspiring them to break the glass ceiling and touch the sky. A proud Ragini shares, "I received an award for my efforts in the field of social work. Today, people associate me with my Madhubani paintings not only in my village but also from neighbouring places."

Ragini has carved out her own path with determination and hard work. She feels that this is her tribute to the nation's traditional heritage. When asked about her life, Ragini says, "Hunar hai toh kadar hai. If you want to do something different in life, do it now and never look back."





Sports



*Punch like a butterfly and sting like a bee.
A girl being trained at the Mary Kom Regional Boxing Foundation.*

OUTREACH



11 states



32 districts



7,733 children



150 coaches

LEVELLING THE PLAYING FIELD

Over the years, India's education policies have emphasized academics as the prominent marker of intellectual development and economic progress. This has unfortunately resulted in sports, arts and culture being accorded a lower priority in school and college curricula.

Physical training in schools is largely restricted to marching drills or physical training exercises, undertaken once a week. There are limited opportunities for children to explore the excitement of an individual or team sport. Only a few individuals, with an overriding passion for sport and the resources and family support to sustain and nurture that interest, can dream of becoming a sportsperson.

The other challenge is the lack of availability of skilled resources like certified coaches, sports programme managers and sports scientists such as physiotherapists, nutritionists, psychologists, data analysts, etc. This impedes the path to sporting excellence. There is a dearth of professionals in sports-related careers, which has a correlating effect on the quality of sportspersons.

These are the practical challenges on the ground, which need to be addressed if India aspires to be a sporting nation and improve its performance at international levels.

A majority of Indian athletes that have made a name in the international circuits are from the rural and tribal regions of India. They have the physical capabilities to endure hardships that excellence in sports demands, coupled with an intense desire to win, in the face of all odds. However, what they lack is resources that will help them get better coaches, better facilities, better infrastructure and, opportunities to help them develop into better sportspersons. That is the goal of the Trusts' endeavours in the Sports portfolio.

The Trusts believe that promoting sports will have the dual benefit of raising the standard of Indian sports, as well as promoting livelihood opportunities in these underdeveloped regions. All the Trusts' sports-focused programmes also include capacity building of local human resources. The goal is to not only provide career opportunities to sporting youth in these regions, but also build and nurture a creative ecosystem that will facilitate holistic development of the youngsters.

KEY ACHIEVEMENTS

Hockey – 6 boys from the Naval Tata Hockey Academy, Jamshedpur, were selected in the Jharkhand state team to participate in the Junior National Championships organised by Hockey India and secured the 3rd position.

Cricket – The Cricket Live Premier League (CLPL) was organised in December 2019, at Dahisar Sports Club, Mumbai, giving the beneficiaries their first ever exposure to competitive sport. Beneficiaries were divided into teams based on their skill level and experience in the programme, and were made to play matches in a format similar to school level tournaments with the Trusts' coaches serving as umpires and scorers.

Polo – 3 out of the 20 players of the women's Polo team, supported by the Trusts, were part of the Manipur team that played in the 4th Statehood Day International Women's Polo Tournament 2019, in which USA, Canada, Kenya and Argentina were the participating countries.

Boxing – Three boxers supported by the Trusts participated in the National Sub Juniors Competition in Daman & Diu as part of the 64th National School Games 2018 under the aegis of School Games Federation of India. One Silver and one Bronze medals were secured in the competition.

Football – 2 players from the Trusts' Centre of Excellence in Mizoram were selected to represent the Junior National Team, one of whom is the captain of the India U-16 team.

Badminton

a. The Trusts' badminton programme is on-going across 25 grassroots centres and covers all 8 districts of Mizoram state.

b. The maiden state level Grassroots Tournament was successfully organized at Aizawl. A total of 143 players (boys and girls) participated across age categories.

c. 25 of the 26 players selected for undergoing training at the Regional Development Centres in



Aizawl and Serchhip came through the grassroots programme.

d. Of the children from the Trusts' grassroots programme who participated in the State Level Tournament, 24 were seeded amongst the top 10, based on state rankings across age groups.

e. 25 functional Centre Management Committees were formed, comprising representatives from the local community, who are responsible for the day-to-day operations of the grassroots centres.

FUTURE PLANS

a. Forge strategic alliances with concerned stakeholders in sports.

b. Focus on improving the quality of implementation of programmes.

c. Spread awareness about implementing physical literacy programmes in schools.

d. Increase awareness of programmes through various channels, such as social media.

e. Explore research opportunities for development in sports.

BEST PRACTICES

a. A structured approach is being adopted for the development of sport, using a pyramid model,

starting with the lowest rung as physical literacy and going right up to strategic international partnerships for elite training provided to select beneficiaries.

b. Standard Operating Procedures are being documented; these would facilitate replication of efforts in new geographies.

CHALLENGES FACED

a. To expand initiatives across states, the Trusts work in close coordination with the respective State Sports Associations. However, working with these bodies is challenging, given the frequent changes in their composition. To overcome this issue, the Trusts have strategically chosen another partner (Department of Youth Affairs and Sport) within the state, so as to ensure that the programme does not suffer.

b. Recruiting experienced resources with the right backgrounds in the region of implementation is another challenge. Coaches are the key resource in all sports programs and coach education is an important component. The Trusts have partnered with technical experts for building capacity of the coaches/players from the region, so that they can impart quality training.





Coaching of a young aspiring team of cricketers.

Project aligns with SDG

10 REDUCED INEQUALITIES



IN CRICKET, EVERYONE IS EQUAL

Harnessing the power of sport

Children in the Mumbai suburb of Borivali struggled to find space and safe facilities to play cricket, their favourite game. Grounds with adequate facilities such as local gymkhanas would price them out of the market and local parks were unsafe, underdeveloped and unsuitable.

Schools of the area, on the other hand, were in a constant battle to motivate and inspire these children to attend regular classes and complete their schooling. The children themselves were naturally resilient, given their somewhat challenging backgrounds. They were rough gems, and all they needed was to be polished and set up for a brighter future.

The 'Life through Cricket' programme is a collaborative venture between the Tata Trusts and the Cricket Live Foundation from New Zealand. It aims to harness the power of sport, in particular Cricket, to develop the life skills and education of children from these marginalized urban communities.

It is vital for the programme to establish strong partnerships with local schools to ensure access to suitable, safe playing spaces. These schools also provide a credible platform to launch the selection process.

Initially shortlisted by the physical educators of the local schools based on their abilities and love for sports, children are finally selected on the basis of their current living situations. Children in extraordinary living circumstances, and children who show promise at school, but need a helping hand were given priority.

Coach education is a significant element of this programme. Teachers and Coaches of the Cricket Live Foundation travel to India from New Zealand to work with the local coach prospects, and help them develop their technical knowledge into a more holistic approach to coaching - with a focus on active learning, teaching

concepts through games, planning, questioning and importantly, mentoring.

The programme structures around a carefully selected set of values, known as the '5 Key Competencies', namely - Self Discipline, Respect for friends and family, Teamwork, Punctuality and Time Management, and Nutrition and Healthy Living. The coaches imbibe these life skills amongst the students during their training sessions. They help the children relate to these concepts and derive their importance in sports and life, through game play and question-answer sessions after the training.

Commencing this programme with 48 children in December 2017, it is the unquantifiable milestones that are most satisfying to see; increased self-confidence, developed leadership skills, seeing boys and girls interacting positively with one another. In 2018, the annual Cricket Live Premier League was held, where 96 boys and girls participated in a special three-day cricket tournament. For most, it was their first time playing on a proper pitch, with a leather ball. The teamwork and support displayed at this event was humbling for all to see.

One of the participants, Arbaz Shaikh, a student at Rajda School, Borivali, says "Through this programme, we have come to learn that sports have no boundaries, no race, religion or gender. It has the power to break down barriers, unite communities and most of all, teach us some of the most important life skills." The kids who were part of the programme, now have new dreams that they want to achieve.

"Joining this programme has taught me that there's more to sport than just becoming a professional player. My aim is to improve my cricket skills, complete my studies and become an official scorer for cricket matches. My dream is to take my parents to a stadium to watch India playing a match."



Skill Development



Youth working at a mobile repairing workshop (Udyog Mitra).

OUTREACH



27 states



200 districts



11,394 villages



448,000 individuals



3,017 teachers



566 skill development centres set up

HELPING INDIA'S YOUTH FIND THEIR CALLING

As one of the world's fastest growing economies, India's requirement of skilled people is unparalleled. With 12 million joining the workforce annually, this youthful population can contribute to industrial productivity and fuel the country's economic growth. If India fails, this large dissatisfied population could pose an economic and social challenge. Hence, skilling youth and linking them to a livelihood is a national imperative.

The Trusts have always been firmly embedded in solving challenges faced by the community, hence skilling for outcomes, namely - employment, entrepreneurship or community enterprise in both formal and informal sectors has been the purpose of the skilling initiative. Addressing these twin challenges of both quality and scale has been the aim of Tata STRIVE - the skill development initiative of the Trusts. A model built on innovation in pedagogy and methodology, while leveraging technology provides the necessary foundation for scale. Hence India needs to skill young people with 'Right Skills for the Right Job'.

The vision of Tata STRIVE is to provide 'livelihoods for every aspirant'. The mission is twofold - skill the disadvantaged for employment, entrepreneurship or community enterprise as well as collaborate to raise standards in the ecosystem. The goal is clear - to impact a million individuals by 2022, enabling and enhancing livelihoods directly or through eco-system strengthening.

The models for skilling include the following:

- a.** Skilling in Formal Sector - primarily involves skilling for employment in industry/ entrepreneurship through registered business activity.
- b.** Skilling in Informal Sector - primarily involves skilling for jobs, such as agriculture related, which are not necessarily formal, entrepreneurship/ community enterprises which are hyper local, not necessarily under the government tax purview or GST ecosystem.
- c.** Ecosystem strengthening - primarily involves raising the standards across the skilling ecosystem through collaboration with other players and supporting professional development of faculty, sharing of Tata STRIVE productivity assets, tools, technology platform, and conducting parallel research and advocacy to promote richer understanding of the skilling sector.

KEY ACHIEVEMENTS

- a.** Skill Mitra - Udyog Mitra was successfully scaled up across Rajasthan and Odisha with an outreach to over 50,000 individuals. This indigenously developed programme links youth to local entrepreneurs who train them as apprentices and help them acquire the necessary skills for earning a livelihood.
- b.** The Trainer Academy was launched - 3,500 trainers to be trained over 3 years across 4 academies; the first academy was launched in Pune in partnership with Edubridge.
- c.** The 'Phygital Model' - a unique training model that has both physical and digital elements brought together was launched, thereby providing flexibility to the learner.
- d.** Expansion of funding partnerships beyond private sector CSR to include major Public Sector Companies.
- e.** Foraying into skilling for Smart City initiatives such as 'MoBus' - the Bhubaneswar Smart City Public Transport system, where bus drivers and conductors are being upskilled to become city ambassadors.

FUTURE PLANS

- a.** Leverage Government schemes, such as Deen Dayal Upadhyay Grameen Kaushalya Yojana (DDUGKY), by partnering with the Ministry of Rural Development to subsidize expansion and build scale.
- b.** Selectively partner with forward thinking states, such as Odisha, and deepen the engagement to include a variety of innovative skilling programmes that help build prototypes that can be scaled in other states.



c. Focus on 'Future Forward' skills by identifying specific sectors that are high growth and are being disrupted by technology, addressing the skilling needs of these sectors.

d. Enable creation of formal skilling programmes, especially in the Agri sector, for example, by developing training programmes to meet the needs of Farmer Producer Organisations.

BEST PRACTICES

a. 'Personality Job fit' where an individual's interest is mapped using a picture-based app (Interest Inventory), thus enabling informed selection of courses based on interest. This is likely to result in greater stickiness on the job.

b. Youth Development Score card is a self-rating measure to track an individual's progress along social, emotional, behavioural and cognitive aspects. This tool helps counsellors to provide better mentorship to trainees, making them more self-reliant.

CHALLENGES FACED

a. With a large widespread ecosystem of centres across the country, data on the digital platform needs to be authentic. Taking attendance is a daily activity and can be time-consuming and prone to errors. Consequently, the use of 'Vidyarooha' - a facial recognition tool for student attendance - can capture attendance in a matter of minutes, thereby saving time and effort.

b. Recruiting quality faculty is a challenge and interviews by themselves can be limiting. Tata STRIVE assurance of quality of training rests on having enthusiastic, motivated and creative faculty. As a process, the potential applicants are asked to send 'teach back' videos, which provide a real experience of the teaching abilities, helping the selector make an informed choice.

Young women being trained as beauticians.





Project aligns with SDG

8 DECENT WORK AND ECONOMIC GROWTH



Aniruddha (the 'beneficiary'/learner) has graduated from the Android App Developer course at TSSDC (Tata STRIVE Skill Development Centre) at Pune, Maharashtra.



OFF TO A GOOD START(UP)!

Sustainable entrepreneurial livelihoods

"My father does farming and Ma assists him with it", says Aniruddha Ghongade – a young man who hails from Soegaon, Aurangabad. He adds that, despite being born into a family of farmers and seeing them engaged in farming day in and day out, he didn't develop an inclination towards farming. "It's not that I hate farming; but I have always had this dream – to start up a business of my own."

This dream, coupled with his fascination for technology, drove him towards pursuing his Bachelors in Engineering. Upon graduating, he realised that, while having a degree had armed him with the know-how of the domain, it alone was not enough to help him realise his dream start-up.

His quest made him restless. In his words, "I sought guidance from my professors. I looked for skill development centres for upskilling myself. This led me to the Tata STRIVE Skill Development Centre at Pune. Once I was there, I underwent the interest inventory process – a digitally-guided process that aligns a prospective learner's natural flair to the course best suited for him/her. The results revealed that the Android App Developer course was the one for me. And my skilling journey thus began!"

During the course, Aniruddha learnt about the hardcore concepts of his craft, along with the Youth Development Modules (YDM). These modules are a bouquet of lifeskill-based training, carefully curated with a mix of social and communication skills, character traits, attitudes and career attributes.

Unlike other courses at Tata STRIVE, the Android course nudges the learners to submit a fullfledged functional App. For Aniruddha, this was a chance to, as he puts it, "prove himself to himself". And he did. He not only developed an intuitive app, but made a business case for it as well. Aniruddha was now a certified Android App Developer.

But what about his start-up dreams?

Aniruddha's case posed a new challenge for the centre too – what can be done to nudge sustainable entrepreneurial livelihoods at the grassroots level? As a solution, an 'incubation centre' was set up within the TSSDC Pune premises. The idea was to offer an environment to develop, mature and, ultimately, take off. Aniruddha's dream start-up took shape here.

As fate would have it, that 'local institute in the vicinity' ended up becoming his 'first client'. As the clientele increased, so did the quantum of work. He hired employees. The incubation centre could no longer accommodate the wings he had grown – they were aching to take flight.

He now runs his company '43 Apps Mart' out of a humble rented office space, where he works with 3 employees. As he hands over his visiting card, he admits, rather honestly, "there aren't considerable profits yet. It's almost a no-profit, no-loss affair- but it is part of my initial business strategy. My focus is on establishing a clientele and on learning, not earning. I'm content with the fact that the profits are considerable enough for me to pay all my employees an average salary of Rs. 10,000 a month."



Project aligns with **SDG**

8 DECENT WORK AND ECONOMIC GROWTH



All-woman group breaking stereotypes and honing their painting skills at the Basic Painting Course, Dhanari Village, Pindwara, Rajasthan.



PAINTING A BRIGHT FUTURE

The story of self-made Kamla Sisodiya

"Ours is a lower middle class family," says Kamla Sisodiya, a young woman from Swaroopganj village in Sirohi district of Rajasthan. She adds, "I am 27, have an M.Com degree and an intent to work. But unfortunately, I have remained jobless for a long time".

Under the Skill Development Initiative of Tata Trusts, the Tata Strives' Fellows contacted Kamla, as a part of the outreach programme to bridge the gap between 'reach' and 'access' in various, often remote, parts of the country. The Fellows were quick to gauge her situation. Kamla recalls her meeting with the Fellows, "Getting those skills that could earn me a living seemed like a plausible, probable and possible option. I was curious, asked my share of questions and, once convinced, agreed to attend the counselling."

During the individual session, the counsellor mapped out Kamla's natural interest for artistic work; more specifically, sketching. To her surprise, she learnt that she was not alone. Out of those who attended the counselling, many more were found to have a similar flair. Precisely, 22 of them - all women.

The Trusts' team, who knew well to match interest with livelihood options, suggested painting as one skill that could be cultivated and developed further. Asian Paints, a leading paints company of the country, the partner for the painting programme, was offering a Basic Painting Course for which the training was scheduled at Dhanari Panchayat, in the area where these women resided.

All women agreed to attend the workshop. Kamla, beaming with joy, says, "We were ready to break stereotypes and storm the male bastion of painters. We were ready to paint a new future for ourselves. In the 12 days of training, we learnt the craft and were ready with the right skills but little did we know that gender would again come into play."

After their training, finding work seemed an uphill task. In the face of this common challenge, Kamla and three other friends collectively devised a new plan and figured out that what they lacked was marketing. As a rather innovative solution, they made their personal spaces - their homes - a canvas to demonstrate their painting skills. They painted both the interior and the exterior of their homes and almost everyone visiting noticed it. Many even commented on the finesse of their work. Most importantly, now the word was out.

Soon, they landed their first contract and every association ever since has served as a learning. Contracts range from anywhere between Rs.50,000 to Rs.100,000 based on the size of the job site. Very recently, two government schools in their area also approached them for undertaking the painting work.

"Today, I am a self-made painting contractor and I will not stop here. I want to upskill myself with the know-how of wall art, decals and stenciling - all advanced techniques that will let me grow in the market," shares Kamla with newfound self-confidence.





Migration & Urban Habitat





Migration

RESTORING THE HUMAN ASPIRATION FOR DIGNITY AND A BETTER FUTURE

The growing number of urban poor, and the fact that migrants could be defined with regard to all three categories of vulnerabilities—residential, occupational and social – led the Trusts to focus on Migration as an issue within the larger canvas of Urban Poverty, since 2006. The main objective of the Migration programme is to improve the quality of life of the urban poor, especially seasonal migrants and their families, who are at the base of the socio-economic pyramid, through: (a) ensuring financial inclusion for migrants; (b) facilitating linkages to various social security schemes and government services; (c) ensuring that migrants have decent living conditions, water and sanitation; (d) using technology and design innovations to address nutrition, housing, water and sanitation needs of migrant workers; (e) streamlining recruitment, eliminating occupational vulnerability and striving towards decent working conditions in the brick-kiln sector; and (f) introducing outreach methods to provide information, education and communication support to the migrant workers.

The Migration Initiative works in three source states; namely, Uttar Pradesh (UP), Rajasthan and Odisha and related destinations. At the source, Migrant Resource Centres called Apna Seva Kendra have been set up as service delivery platforms for migrants. The services include linkages to government entitlements and schemes, legal counselling in wage and worksite accident-related cases, linkages to skill training and employment opportunities, and facilitating financial inclusion. In each of the 3 source states, the MRCs are based on different models, which have evolved as per consultations with relevant stakeholders. In Rajasthan and UP, the MRCs are based on an entrepreneurship model, with local non-government

organisations and youth being trained as entrepreneurs with support to develop a viable revenue model. In Odisha, in partnership with the government, the MRCs are based at the lowest level of local self-government in the Gram Panchayats.

The Migration programme in destination states deals with the root cause of the occupational vulnerabilities of seasonal migrants through on-site service delivery at brick-kilns and construction sites, which have the largest concentration of migrant workers. In partnership with the brick kiln owners and the relevant state governments, crèches and bridge schools for children of migrant workers and multi service delivery centres have been operationalised in brick kiln clusters. At construction sites, on-site service delivery for migrants is provided in partnership with the construction industry. Regional teams at Lucknow, Bhubaneswar and Jaipur, along with field level teams, are implementing the programme.

KEY ACHIEVEMENTS

- a.** Operationalisation of the Migration portal across all Apna Seva Kendras in UP and Rajasthan, thereby facilitating easy flow of information, as well as efficient operations
- b.** Establishment of two Migration Resource Centres in Telangana and facilitating initiatives in 75 brick kilns spread across Karimnagar and Sircilla districts of Telangana.
- c.** Establishment of 61 Gram Panchayat Resource Centres in Nuapada, Kalahandi and Rayagada in Odisha, in collaboration with the Panchayati Raj Department, Government of Odisha, for providing

OUTREACH



5 states



13 districts



820 villages



77,825 households



348,290 individuals



290,588 services delivered

services like information & awareness building, social-security benefits, legal counselling, skill-employment linkages and financial services. 167,366 beneficiaries connected to services hitherto deprived of due to various reasons.

d. Establishment of 11 worksite schools in Odisha for migrant children. 805 migrant children were provided with early childhood care and education at worksites. Solar lighting and inverter systems set up in 15 seasonal hostels housing 1,202 children in Odisha, in collaboration with Schneider Electrical Limited, for uninterrupted power supply.

e. Operationalising 6 Apna Sewa Centres covering 6 blocks and 5 districts of Rajasthan which provided monetary benefits to the tune of Rs.60 million to 21,461 members during the year.

f. Increase in the number of children in the age-group of 3-6 years (from 80 to 103) during the second year of operations of the Model Brick Kiln site in Rajasthan. Pregnant women made aware about institutional delivery and ante-natal care, resulting in increased uptake of these services.

g. 86% reduction in severely malnourished children and 60% change in the moderately malnourished children due to the nutrition provided by the Udaan centres in Rajasthan.

FUTURE PLANS

a. Consolidate ongoing interventions and working towards sustainability and scale-up.

b. Launch the vulnerability software operation and collaborating with the Government of Odisha and the Trusts' livelihood team in the state for providing livelihood support to vulnerable families through Gram Panchayat Resource Centres.

c. Present a scale-up plan to the Labour Commissioner of Rajasthan with possible models of collaboration with Apna Sewa Kendras.

d. Collaborate with the Government of Rajasthan on prevention of Silicosis and rehabilitation.

e. Engage with Panchayati Raj Department, Government of Rajasthan for upscaling operations at the Panchayat level.

BEST PRACTICES

a. Converging with the Government at every level, ranging from state to the district administration has resulted in enhanced access and linkage to schemes for migrants.

b. Collaboration with key stakeholders (Brick kiln employer, the community and government departments) ensured improved living conditions and access to early childhood care for migrants and their families in brick kilns of Telangana (Karimnagar and Sircilla districts) and Rajasthan (Sri Ganganagar district).

c. The Apna Sewa Kendras' team is drawn from the community, which serves as a check on ineligible beneficiaries availing scheme benefits. The Kendras have strong community engagement, thus ensuring peer monitoring.

CHALLENGES FACED

a. Inaccessible terrain, threat of possible left wing extremism and poor infrastructure in the areas of operation makes operations challenging in the state of Odisha. Involving local youth and using community networks helped in mitigating this challenge.

b. Data capturing was one of the major challenges, as the Apna Sewa Kendra team lacked experience in data handling. Challenges in implementing the Migration Portal at field were also anticipated. Intensive handholding by the state level and technology teams helped overcome this.

A migrant avails a variety of services at an Apna Sewa Kendra in Shrawasti district, Uttar Pradesh





Nanhi Devi with her eighth child.

Project aligns with SDG

3 GOOD HEALTH AND WELL-BEING



SAFE DELIVERY FOR A MIGRANT MOTHER

Udaan - caring for the caregivers

Nanhi Devi is a brick kiln worker from Badau District in Uttar Pradesh. She has been working with her husband in different brick kilns in Gujarat and Rajasthan for the last 5 years to support her family.

While working in a brick kiln in Sri Vijayanagar block, Rajasthan she started visiting the Udaan centre to drop her two children, Rohan and Shivam before going to work. Udaan centres are set up by the Tata Trusts with the objective of providing on-site delivery of welfare services to brick-kiln and construction workers; also for institutionalising early childhood care and education for children of brick-kiln and construction workers at the sites.

Nanhi Devi was ignorant of the existence of any social security schemes, which could benefit her or her family and consequently did not seek any information about this. She considered the Udaan centre to be a place that provides early childhood care and nutrition to children and did not consider discussing any social security linkages with the team at the Centre.

The team at the centre noticed that there were many pregnant women who were unaware of any form of antenatal care and safe birth practices and decided to start providing counselling and support for antenatal care as one of its non-core activities.

Earlier, Nanhi Devi had told the team that she had two children. However, during the course of interactions, the team realised that she was a mother of 7, on the way to give birth to her 8th child. What surprised them

the most was that she had never had an institutional delivery or received any form of antenatal care. She said, "I am very scared of needles and all my children have been born at home. I don't need to get any immunisation."

The team at Udaan centre was relentless and repeatedly reached out to Nanhi Devi to convince her on the importance of institutional delivery. They even created peer groups constituting of pregnant mothers who had availed antenatal care to share their experiences and the importance of institutional delivery in maintaining the health and nutritional status of both the child and the mother.

The repeated efforts of the centre bore fruit when the ANM visited the Udaan centre for health checkup and vaccination and Nanhi Devi arrived at the centre to get herself registered and avail of the benefits of the Mamta Card [offered through the Integrated Child Development Services (ICDS) scheme of Ministry of Women and Child Development and the National Rural Health - a government scheme for mothers and children]. As her delivery date neared, she sent her eldest daughter to the centre to inform the hospital. The centre immediately called 104 and the ambulance came to take her to the hospital. Her youngest daughter, Neha was the first child born through institutional delivery and received vaccinations. The centre was able to convince Nanhi Devi of not only the importance of institutional delivery, but also the need for family planning and imparted proper care to her.



Urban Habitat

CHANGING THE CURSE OF URBAN SPRAWL INTO A BOON

From a country that lived in its villages, India is gradually acquiring an urban character. This is evident from the fact that the growth rate of the urban population at 6% over the last decade has far exceeded that of the rural population at 3.4%. Much of this high urban growth rate is due to the migration of poor people from rural to urban areas in search of better livelihood opportunities, and this also contributes to the growth of informal settlements called slums.

This increasing slum population poses high demands on the Urban Local Bodies (ULB) to provide land for housing and basic services. At present, over 65 million people live in informal settlements, up from 52 million in 2001. Lack of legal land tenure has a detrimental impact on their overall quality of life. Without a formal title, they are debarred from accessing credit from financial institutions, accessing basic services, getting admission in an educational institution or finding a formal job. With increasing pace of urbanisation, India's urban centres face numerous challenges. It is imperative for sustained, inclusive and planned growth of India's urban centres that multiple stakeholders work together, as the scale of issues and solutions required cannot be provided by any single entity.

The Trusts' engagement in the urban space seeks to promote socially and environmentally sustainable habitats for urban poor, so as to positively impact their quality of life. The current interventions under urban habitat portfolio focus on:

a. Providing access to basic services in informal settlements - demonstrating community led

intervention strategies that are sustainable and appropriate. The core implementation strategy is on working with ULBs and converging with government schemes.

b. Improving access to land and affordable housing - is one of the core areas of the Trusts' work in collaboration with the state government, technical service providers, academic institutions and sector experts to develop pilots for scale-up. The prototypes are developed through participatory and consultative processes involving communities and relevant stakeholders.

c. Supporting effective and participatory urban governance - where the Trusts work with state governments and ULBs to identify gaps in service delivery and build capacities of local bodies and civil society organizations. The Trusts also work towards creating a knowledge platform and strengthening existing platforms, wherever required.

These programmes are developed in close collaboration with urban local bodies, technical groups, innovators, academia, research institutes and civil society organisations to identify and test sustainable solutions.

KEY ACHIEVEMENTS

a. Creating a strong database in Odisha (comprising both spatial and household data) of 2,919 slums covering 412,000 households.

b. Granting land rights certificates to 51,041 households for in-situ settlement in slums under the Land Rights to Slum Dwellers Project.

OUTREACH



4 states



33 districts



112
urban
local bodies



53,600
households



225,120
individuals



32 partnerships

- c.** Providing support to 15,000 slum families for beneficiary-led construction of houses under the Pradhan Mantri Awas Yojana (PMAY) and State Awaas schemes in Odisha.
- d.** Operationalising the first model shelter home for urban homeless migrants in Surat, built by the Surat Municipal Corporation under the National Urban Livelihoods Mission. The operations and maintenance model of the home has been developed by the Trusts.
- e.** 18 slums (1,750 households) in Bhubaneswar and Cuttack achieved open defecation free status.
- f.** Selection and deployment of the first batch of Jaaga Fellows in ULBs in Odisha to support development of plans for slums redevelopment and implementation.
- g.** Completing an assessment of the Solid Waste system In Varanasi; thereafter, developing an action plan for implementation.

FUTURE PLANS

- a.** Provide toilets, access roads, covered drains, street lights and livelihood opportunities to 2,919 slums in Odisha with the objective of transferring these slums into liveable habitat.
- b.** Develop new habitat models for the slum dwellers living on untenable lands.
- c.** Develop a model for disaster-resilient slums in coastal districts of Odisha.
- d.** Set up a sanitation resource centre at Varanasi and pilot solid waste management in three wards.
- e.** Upscale the shelter home for urban homeless migrants in Surat to five more shelter homes.

BEST PRACTICES

- a.** As a strategy of inclusion, Slum Dwellers Association (SDA) were formed across all 1,886 slums (in medium and small towns), which were made responsible for drafting the final proposal to the empowered committee (Urban Area Slum Rehabilitation and Redevelopment Committee - UASRRC) for granting land rights. This ensured participation and consensus building at the community level.
- b.** The Odisha Land Rights to Slum Dwellers Project also used advanced technology (use of Unmanned Aerial Vehicles or drones for geo-fencing of the current slum boundaries) to

ensure high degree of accuracy and transparency, coupled with field validation to create a more accurate Record of Rights (RoR) and its integration with existing revenue records. Following the imagery acquisition by the drones, the technical agency integrated the imagery with GIS data to create a community overview, for which a household survey data was later integrated. This led to the creation of a household wise database. A convergent, updated and multilayered database has thus been created for all urban slums in Odisha.

CHALLENGES FACED

- a.** For the household survey, as part of the Land Rights to Slum Dwellers Project, the Government engaged 26 Non-Profit Organisations for facilitating door-to-door data collection. However, the Trusts' team realised that there was lack of capacity among the field facilitators for data collection through application and data digitisation. Consequently, a series of capacity building programmes were organised for more than 600 field facilitators by the Trusts' team. The impact of this was evident in improved data collection and validation, which led to 51,000 households getting land rights.
- b.** Given that the Land Rights project is operational across 109 ULBs across Odisha, ensuring coordination between different stakeholders was a major challenge. WhatsApp groups comprising important stakeholders, ranging from the Principal Secretary to Community Organisers, were formed for better coordination. This also helped in better and transparent flow of information, whilst removing misconceptions about the process of field execution.





Sangeetaben with her new-born.

Project aligns with SDG

11 SUSTAINABLE CITIES AND COMMUNITIES



BORN AT THE RIGHT TIME

How a shelterless woman gave her newborn baby a home

Sangeetaben, 25, was pregnant and had a very low haemoglobin count. She struggled every day under the open skies, in flimsy mud houses or under bridges and flyovers. Born in Mumbai, her life led her to several cities and towns until, eventually, she ended up on the streets of Baracha, Surat. A victim of extreme poverty, her children suffered daily and she herself had no means to manage her own pregnancy.

Until, unexpectedly for Sangeetaben, Surat Municipal Corporation and the Tata Trusts intervened with their Scalable Model of Permanent Shelter Home initiative, under Surat Urban Habitat Project, a DAY-NULM Scheme. Sangeetaben was rescued from the street and now had a shelter. In fact, many more such shelters for homeless migrant families are under construction. Here, all services and benefits are provided under government schemes, including a one-time meal.

She nursed herself back to health and delivered a healthy baby to everyone's joy, including the Commissioner of Surat Municipal Corporation, who offered his good wishes to the mother and the newborn.

In the shelter, at present, Sangeetaben and her children reside with 33 more families, comprising 88 males, 54 women, 32 children under 5 years, 3 pregnant ladies, 2 differently abled persons and 12 elderly individuals.

From those who have had a lifetime of experiences to those about to begin life itself, it's reassuring to know that they all have a place to call home.



Project aligns with SDG

11 SUSTAINABLE CITIES AND COMMUNITIES



Fishermen community observing and understanding a model for their market place and fishing stock area.



SOME FISHERMEN PUT FOOD ON OUR PLATES

These ones also helped rebuild their community

Near Chandrabhaga beach in Konark, a small town in the eastern part of Odisha, is a slum called 'Nolia Sahi'. 1,150 fishermen families have resided in this slum for over 50 years, but without permanent structures and basic facilities.

It is also one of the first communities where the Odisha Land Rights to Slum Dwellers Act, 2017 was implemented. A Slum Dwellers Association (SDA) was formed and, through this, the residents participated and contributed every step of the way - from the process of household level survey, identification of house boundaries to the preparation of a list of beneficiaries to give land titles to.

After the disbursement of land titles, the community worked closely with the Tata Trusts and technical experts from Norman Foster Foundation for preparing a vision map for the slum. The objective was to discover how the dwellers wanted to see their slum in the future.

Everyone contributed - women, children and the youth - with their vision: better access roads, aligned houses, shorter routes to the beach, etc. C. H. Saroni, a resident, comments, "I am very happy that they had discussions

with us women also, as we have certain demands - but, earlier, there had been nobody to listen to us."

The moment of truth came when the slum dwellers first saw the models of their slums. Joy rippled through the community. "I have grown old, but I am very happy that my children will have a better future with better facilities", said Chodipalli Kondamma.

After that, the pace quickly picked up, especially since shared interests gave the community greater impetus to assist and support the Odisha Liveable Habitat Mission.

Through this mission, the task was two-fold, to ensure access for all to adequate, safe and affordable housing and basic services; and upgrade slums, and enhance inclusive and sustainable urbanisation and capacity for participatory, integrated and sustainable human settlement planning and management.

However, the unsung heroes were the slum dwellers themselves - the fishermen and their families - who were so committed and involved in the rebuilding of their slum.



Social Justice & Inclusion



Child Protection Programme: A Police Officer maintains a diary of rescued children.

OUTREACH



8 states



68,481 beneficiaries

CREATING A SOCIETY WHERE NO ONE IS LEFT BEHIND

India is the world's largest democracy and is pacing to become a world leader. Yet, the Indian society faces grave issues that could hinder its development and growth. Specifically:

- 67% of the prison population in India are under trials.
- There are high levels of child abuse:
- 66% facing physical abuse
- 53% facing sexual abuse
- Trafficking of women and children is the 2nd largest organised crime
- 17.8% of the population live without basic amenities
- More than 3 crore cases are pending in courts in India

These are critical problems, adversely affecting 40% of people from marginalised communities. Women, children, Dalits, Muslims, Adivasis, prisoners and trans-genders, even today, face exclusion in terms of lack of voice in the development agenda and discriminatory access to public goods.

In order to address this, the Trusts aim to provide access to justice and dignity, reduce violence against children and women and build leadership and voices of the excluded communities. Some of the key projects under the portfolio focus on: welfare and rehabilitation of prisoners with the aim of advocating for policy change; introducing reforms for prisons; developing child-friendly practices in the juvenile justice system; rescue and restoration of runaway children; undertaking research on access to justice; implementation of the POCSO Act and after care services, and prevention of human trafficking.

The portfolio has 3 sub-areas:

Access to Justice – focuses on strengthening access to justice and the voice of the poor and excluded; particularly, Dalits, Adivasis, Muslims, women and children. It includes judicial reforms, prison reforms, police reforms, juvenile justice and victims' restoration.

Reducing violence against women and children – focuses on addressing exploitation and preventing violence in the most vulnerable conditions, mainly through building protection mechanisms. It also includes developing a framework for quality of care, besides strengthening systems and mechanisms to combat human trafficking.

Building leadership and strengthening voices of the excluded communities – focuses on developing and supporting fellowships from the most marginalised communities and working towards strengthening the ecosystem.

KEY ACHIEVEMENTS

Access to Justice

- a. Developing and piloting a court log tool in Delhi High Court as a part of 'Zero pendency courts' project to help reduce pendency of cases and facilitate creation of a judicial database.
- b. The Status of Policing in India Report (SPIR) 2018 brought out by Common Causes and supported by the Trusts analysed the performance and perceptions about policing in 22 states in terms of ranking of the best or worst performing states.
- c. Completing a study on the Galabhet programme, which will be presented as a best practice of Maharashtra prisons with recommendations finalized to be added in the draft Government Resolution.
- d. Facilitating the procurement of Jaipur Foot for 4 handicapped prisoners in Nasik Central Prison; consequently, the social worker from Nasik Central Prison received an appreciation letter from the Prison Superintendent for this work.
- e. Networking with Tata Consultancy Services (TCS) for procuring compact discs on Functional Literacy. Currently, 30 prisoners are attending literacy class regularly in Nasik Central Prison.
- f. The Jan Sahas-supported Dignity March, which started in Mumbai in December 2018 and culminated in Delhi in February 2019, included 10,000 survivors and their family members. Consequently, the Chief Minister of Madhya Pradesh announced the formation of a special police unit and fast-track courts for ensuring speedy justice to women and child survivors of sexual violence.



Child Protection and Anti-Human Trafficking

- a.** Supporting Tata Institute of Social Sciences to conduct a national study for identifying challenges and good practices vis-a-vis combating human trafficking in India.
- b.** Implementing personal safety education for over 6,600 children in 59 Zilla Parishad schools of Pombhoorna block in Chandrapur, Maharashtra, safeguarding them from risk of abuse.
- c.** Repatriating 1,275 runaway and missing children with their families.
- d.** 1,876 children in need of care and protection received care and support through childcare institutions.
- e.** Partnering with Udayan Care for conducting a study on aftercare in Rajasthan, Karnataka and Maharashtra to identify the scope for improving after care of children leaving child care institutions on attaining 18 years of age.

FUTURE PLANS

- a.** Conduct a study on the status of the Justice Delivery System for Children in Conflict with Law (CICL) in Maharashtra post the Juvenile Justice Act, 2015.
- b.** Create a volunteer team for facilitating emergency response in prisons through First-aid trainings undertaken by Indian Red Cross Society for welfare of prisoners.
- c.** Conduct a detailed empirical study on the budgets, planning and transparency of 10 High Courts that have shared information under the Right To Information (RTI) Act.
- d.** Conduct a study for promoting a safe environment for children in Ashramshalas of Gadchiroli district, Maharashtra through capacity building of teachers and awareness generation among children and community on child protection.
- e.** Facilitate sharing of knowledge with civil society organisation on combating human trafficking and on aftercare of children leaving institutional care after attaining 18 years of age.

BEST PRACTICES

- a.** Monthly Convergence Meetings with District Social Welfare Section, District Child Protection Unit, representatives of Child Care Institutions have resulted in institutionalising life-skills, sponsorship of children and effective implementation of the Juvenile Justice Act by conducting Social Investigation Reports (SIR) and Individual Care Plans (ICPs) for children in institution.
- b.** Three recreation programmes were organised in Nagpur, Aurangabad and Taloja prisons and attended by nearly 3,000 prisoners. Interestingly, the orchestra performing in these programmes comprised physically challenged individuals using music and dance to overcome their handicap. The objective behind this programme was to motivate prisoners to have a positive approach towards life and reform themselves.
- c.** The Personal Safety Education Module for age-appropriate and class-wise education of children on protection from abuse was incorporated in 59 schools of Pombhoorna block of Chandrapur district. Teachers conduct periodic sessions with children in classrooms, focusing on personal safety of children from risk of abuse.

CHALLENGES

- a.** The reluctance of the judiciary to share information is a key challenge. Since information is not readily available, RTI applications have to be filed with each High Court or State Law Department. This process consumes significant time and resources, given the volume of information that is requested from the judiciary.
- b.** Since there are children under the 'Children in Need of Care and Protection' category residing in children's homes across different states, their restoration is fraught with significantly challenging issues.



FINALLY, THEY FOUND HOME

A story of two sisters reunited with their family

In 2014, Kolkata Police rescued two girls, aged 8 and 9 from the streets and informed Childline that they wanted to go to their maternal uncle but didn't have address of his house. These girls were scared and not willing to trust anyone; even when they were taken to the Child Welfare Committee, they didn't say a word. Both girls were placed into the Sukanya Government Girls' Home. Not being able to recall their address, these girls' family could not be traced for 4 long years.

Arunima and Sunaina both spent 4 years in the same Home. Arunima recalls, "We felt there was no hope and had started living our lives within the confinement of the Children's Home. The days when any child was reintegrated with their family were the days when we all were happy but, at the same time, we were also in tears. It was more difficult for Sunaina than for me. I remember that, on such days, she used to speak less and hardly eat anything."

In February 2018, Sathi planned a Home Orientation & Removal of Substance Abuse camp in Kolkata supported by the Tata Trusts and shortlisted 25 children from Sukanya Government Girl's Home in Kolkata. These 25 children were either runaways or lost, were rescued and were living in the home for a long time. The purpose of this camp was to help children recall their families, eradicate fear of family reunification, offer day-to-day counselling support for their mental well-being and help them to understand the importance of family.

Most importantly, the 30-day camp would also use any knowledge they could gather from the children and help trace their families.

On the 20th day, Arunima was able to recall the names of 5 places, of which, 3 names Bangalpur, Narayanpur and Pherighat were recognised as places in Bengal. The counsellor provided this information to the team that would then try to trace their homes.

Five police stations were contacted to find information about any missing cases registered in their police station in 2014, but no such complaint was pending in the police stations. So, the team decided to take the girls to these areas and explore if they could identify any one area to start a village to village search.

Things changed when they reached Pherighat as Arunima herself remembered the place and showed the way to her village. The team went to the village and found their grandmother. It was a moment of joy and happiness for them after 4 years.

"These are the moments that keep encouraging team members, who always travel extra miles to achieve goals, these are the times that give us the motivation to keep working hard", says Shali Basavraj, Sathi Team Leader. Sathi has reintegrated more than 3,520 children in last 3 years and continues to make a difference in children's lives even as you read this story.



COURAGE AND COMMITMENT

How Suraiya changed her fate

Suraiya Khan (name changed) – a resident of Nabagram Block, Murshidabad, West Bengal, was appearing for her Class X board examination. However, her parents arranged her marriage without her consent.

Suraiya, who was dedicated to continuing her studies, informed Childline with the help of her headmaster, resulting in a case being filed against her parents at the local police station.

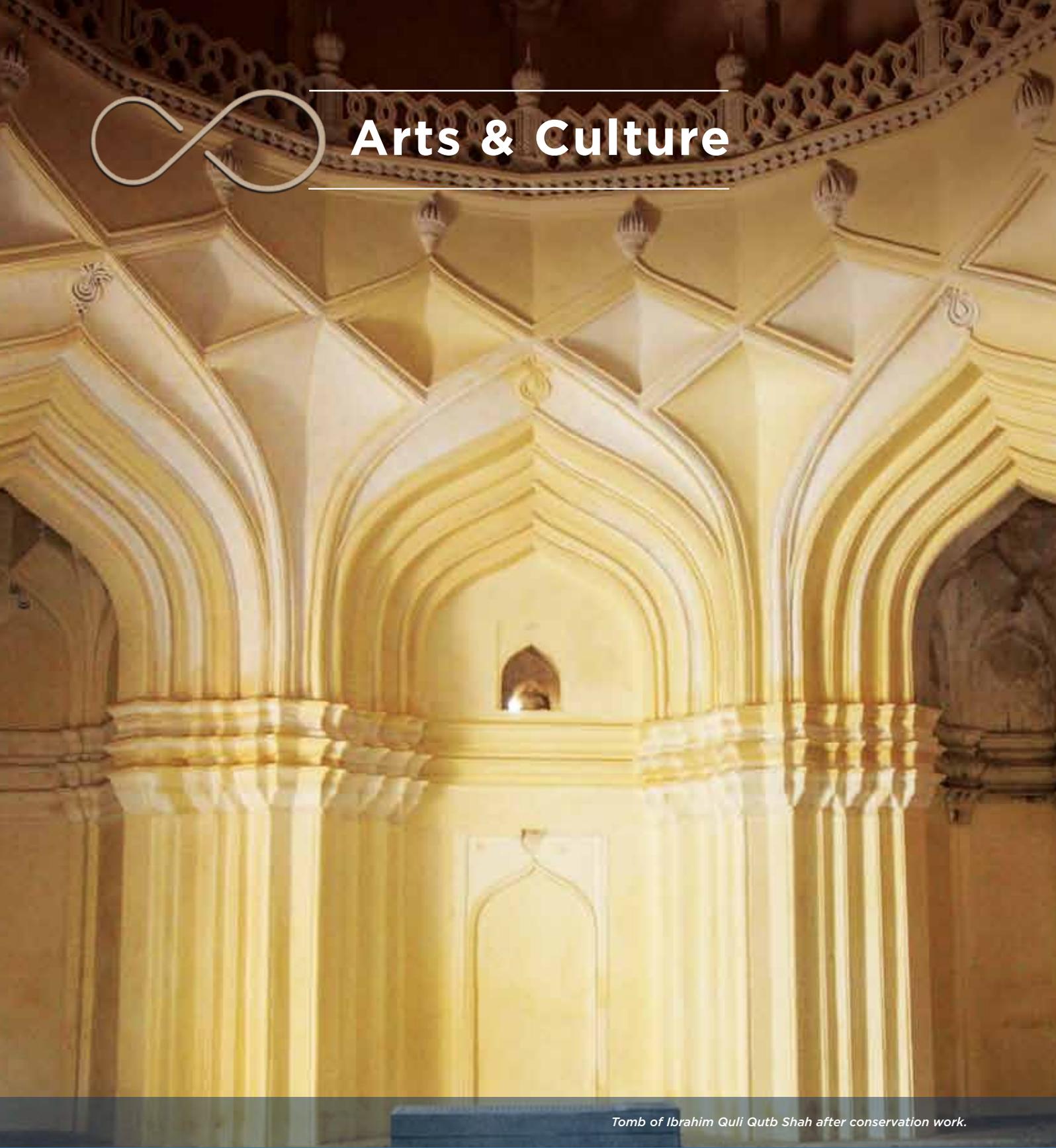
To help her complete her board exams, she was institutionalised at the Shilayan Home for Girls. Soon after, she showed an interest in honing her skills in designing ornaments and also in undergoing vocational

training in handloom, conducted by Child in Need Institute (CINI) a partner of the Tata Trusts based in Murshidabad district of West Bengal, in collaboration with the District Administration. Her courage and determination to chalk out her own path was recognised by the State Government and she was awarded the State Bravery Award in August 2019.

She has also learnt life skills and has been trained in self-defence. While she prepares for her Class XII examinations, she has become a role model for the girls in her area and has volunteered to mentor the new girls at the Institution.



Arts & Culture



Tomb of Ibrahim Quli Qutb Shah after conservation work.

OUTREACH



30 states



1,708 beneficiaries



2,449,595
indirect beneficiaries

THE ART OF PRESERVING ARTISTIC TRADITIONS

To support the arts in India is to support the millennia long cultural traditions that form the country's intricate past; and the contemporary art practices that will inform its future. The creation of art, and participation in it, is a crucial part of any community's development and a strong conduit for its expression. While India grapples with high intensity developmental problems like poverty, caste and gender discrimination, unemployment, hunger and ill-health, sanitation issues and others, support for the art sector makes the smallest piece of the pie.

Currently, the Arts and Culture portfolio focuses on three main areas: Conservation (built heritage, film preservation and art conservation); Performing Arts (music, dance and theatre); and Art Education at the tertiary levels.

2018-19 has been a productive year that saw several of the Trusts' projects achieve their outcomes –

a. Students' Biennale 2018, an educational platform for student-artists from across India, that runs parallel to the Kochi Muziris Biennale, successfully opened to the public in December 2018. With over 200 students participating from across 56 colleges in India, the Students' Biennale displayed over a 100 artworks across seven venues in Kochi.

b. Inspire India Programme: 15 students cleared the prestigious Trinity College London music exams, with eight receiving distinctions. These children from marginalised backgrounds from Dharavi, in Mumbai, are first-generation learners of Western Classical Music in guitar and piano.

c. Tata Trusts' Art Conservation Initiative commenced in December 2018, with five zonal centres across India coming on board the project, to train conservators and conduct annual, material conservation workshops.

d. Film Heritage Foundation's 4th annual film preservation and restoration workshop was successfully organised at ICCR, Kolkata in November 2018. With 57 participants, this workshop was more practically intensive, with groups of students working on film scanning and repair, preservation of posters and photographic materials, and sound and digital preservation.

e. Urban Design Research Institute's three-year project on pedagogical exhibitions on the State of Architecture and State of Housing came to a close in December 2018, with the launch of a two volume set that brought together the intensive research conducted for the State of Housing exhibition.

f. Mumbai Police Archives - The project was conceived to train the police staff to undertake the archiving and paper conservation of the records, instead of directly implementing. Thirty police volunteers were nominated, and have undergone training over six months by two teams that are experts in paper conservation (delivered by HIMSHACO – Himalayan Society for Heritage and Art Conservation) and archiving (delivered by Eka Archiving Resources Ltd.). Both the teams will prepare a procedures manual for the police that can be used as a guide when the inevitable police rotation occurs and new volunteers are introduced.

FUTURE PLANS

a. Implement the Art Conservation Initiative across the five zonal centres and preparing to establish a Master's degree programme in Art Conservation.

b. Build a performing arts pedagogy programme with fellowships for artists practitioners of endangered and nascent art forms.

c. Develop a specifications manual - an expert committee to research and arrive at standardised ratings for heritage buildings.

d. Implement the next 3 years of Performing Arts strategy – identifying sectors, organisations, and establishing an advisory panel.

BEST PRACTICES

Some of the best practices exhibited through the Trusts' programmes:

a. The year-long project with the Mumbai Police Foundation to archive and conserve its historical records dating to the early 1900s started in October 2018. Due to the sheer volume of the archive and its sensitive nature, the key objective of this project is to train the police staff in best practices of conservation and archiving so that the police can take ownership of their archives, and



more importantly, are able to train other police staff over the years. Currently, 30 police volunteers are under training, learning documentation, archiving and paper conservation.

b. Sameeksha Trust, the publishers of Economic and Political Weekly (EPW), with support of the Trusts, have operationalised a project to disseminate a selection of research from their archive in three different, but related ways to commemorate their 50th year of operations. The first component involves publication of nine readers (including three Hindi translations) on social policy, water, sectarian violence as a handy compendium of social science research and commentary published over several decades in EPW. The second component was to publish a three-volume set chronicling The Economic Weekly's and EPW's work from 1949 to 2017 with a set of articles from their archives on 'history' which are currently on publication. The third component of this project was to produce a documentary film on EPW that would encapsulate its contribution to intellectual dialogues and opinions in India.

c. In 2017, MS Swaminathan Research Foundation (MSSRF), Chennai, entered into a partnership with the Trusts to transform their central resource hub as a green and eco-friendly centre of learning, as per the mandate of the United Nations' Sustainable Development Goals 7, 'to afford and generate clean and renewable energy'. The Trusts' support saw MSSRF not only aiming to achieve all indicators of UN's SDG7 but aspiring to mentor a network of libraries across the state to follow similar operating models that are energy compliant. The World Library and Information Congress (WLIC) selected MSSRF's case study for presentation at their 85th convention in Athens where they aim to secure international support and expertise to further their green cause.

d. The ongoing conservation work of the Quli Qutb Shahi tombs in Hyderabad, in partnership with Aga Khan Trust for Culture, highlights excellence in built heritage conservation processes that incorporate traditional lime mortar to repair and restore the structures. Preparing lime mortar in the traditional way, as it would have been under the Qutb Shahi dynasty, is a labour-intensive process that combines locally sourced ingredients like jaggery, lentils, egg whites and pulp of the bel fruit being used in the lime plaster that is prepared at an on-site workshop. Lime mortar is not in popular use in modern architecture, but is a traditional material that protects a building from external heat and can survive up to 400 years with basic maintenance.

e. One of the key outputs of a recently concluded grant to Urban Design Research Institute was the publication of two readers on the State of Housing and its crisis in urban and rural India. It compiled the intensive research conducted by the team that includes a historic timeline of the development of housing in India, and a representation of numerous housing types prevalent in the country since 1947, for a comparative study. The readers are invaluable resources for architects, urban planners, municipal and government departments, students, etc., as they present a holistic compilation of the history (demonstrated in practice) of housing in India.

CHALLENGES FACED

Challenges faced in implementation of some of the programmes include:

a. Launching the MA Performance Practice (Dance) at Ambedkar University Delhi, a state-run mechanism, came with its own set of challenges. Not only were the Trusts trying to introduce a course that could not be measured against any set benchmarks – because none exist – but the course also required specific infrastructural requirements like a well-equipped dance studio. Negotiations were necessary to secure an off-campus site that was already equipped with a dance studio, a library and teaching space. Months of work went into seeking necessary approvals, filing necessary paperwork and ensuring the availability of off-campus student services. All this deferred the launch of this programme by a year.

b. The Inspire India Programme faced a series of programmatic challenges from the start. Lack of trained personnel, reluctance of prospective operational partners to onboard and limited understanding of grant-run projects delayed the rollout and core operations of the project. The Trusts began to guide the partner beneficiary - Shankar Mahadevan Academy (SMA) - on best practices of programme planning, reporting and finances. Once the implementation was on track, the Trusts foresaw the inability of SMA to achieve half of their outputs if they were to end as per the original two-year project timeline; consequently, the project period needed to be extended.



Project aligns with SDG

4 QUALITY EDUCATION



Students at the Learning Centre at DS School Sion, Mumbai, learning to play a guitar.



MUSIC TO ONE'S EARS

In tune with children and the musicians within them

In India, there is a lack of exposure and training in music pedagogy for children and young people from marginalized backgrounds. The inaccessibility of music education in underprivileged communities has led to a gap both in terms of understanding various art forms and in cultural inclusivity – a trend, which is diminishing globally, but lagging in India. Shankar Mahadevan Academy (SMA), one of India's premier music pedagogy institutions aimed to address this concern by bringing in a culture of music practice and discourse within marginalised grassroots communities in Mumbai. Here, they mentor young musicians to pursue a career as music educators.

This strengthens Tata Trusts' priorities of encouraging engagement of art forms within marginalised communities that may build skills for employability amongst young artists. A three-year support to SMA saw the rollout of the Inspire India Programme.

Through field research, three locations were chosen to run the project within the Dharavi precinct, comprising Sion, Govandi and Chembur. The locations fit within the project aim of work being implemented for grassroots and marginalised communities – a third of whom are based across the radius of Dharavi. The music pedagogy was mirrored from SMA's music education and training curriculum consisting of Indian Classical Music, Rhymes & Swaras, Bhajans and Western Classical instruments. Training of young musicians was done with in-house teacher mentorship modules involving training and

hands-on assessments. The pedagogy also followed a showcasing of outcomes – extremely popular in the community, which has helped SMA to sustain their enrolments. They built partnerships with education charities to run the project from their premises. These partnerships not only reduced platform costs, but helped develop student enrolments in the centres, owing to awareness created by their center partners.

The timely intervention of the Trusts yielded 'Inspire India', with a series of outcomes. Most importantly, 750+ students enrolled by the second year. The project team built a network of music advocacies across the three locations for sustainability and awareness of the project. Children from the communities now have access to quality training in music pedagogy. In December 2018, 15 students of Inspire India cleared the prestigious Trinity College London music examinations for western classical music in guitar and piano, with eight of them receiving distinction. These were first-time learners of western classical music having no access to formal training previously. As a model, Inspire India is being recognised across communities of the Dharavi precinct as an initiative that is making an impact on the lives of children and young people through music. At the end of the Trusts' seed support, SMA will look to onboard charities and like-minded partners to sustain the 'existing', while rolling out the 'new' - not only in Mumbai, but orbiting into newer cities as well.



Project aligns with **SDG**



An exhibit by a Biennale participant.



GIVING ART A WIDER CANVAS

Taking local art global

The Tata Trusts first partnered with the Kochi Biennale Foundation (KBF) in 2016 for supporting the Students' Biennale programme that runs parallel to the main Kochi Biennale and is a crucial component of their Art Education initiatives. The project also included support towards the Video Lab of the Foundation that is responsible for creating and disseminating videos that artistically document the Biennale. After a successful 2016 edition, the programme was tweaked to incorporate the learnings from the previous edition and the Trusts partnered with KBF again to support the Students Biennale 2018. This layered support was a strategic move by the Trusts to build on a programme that will, in time, address several issues. It is expected to bridge the gaps in art curricula in fine arts institutions across the country by giving them curatorial support to develop and produce their art works. Additionally, this should lead to international exposure through the exhibitions at the Biennale venues where they have the opportunity to see the work of other artists from across the world.

In 2018, the Students' Biennale programme was changed to reduce the number of curators and student projects and, instead of focusing on volume, it was agreed that the project needed to focus on quality of works produced and on curatorship. Towards this end, it was also decided to include modest production grants for the student artworks so that they could learn working within budgets and systems in the art world. It was also agreed to initiate an open call for the Students' Biennale, in the hope that the outreach could extend to all geographies. And a third edit in the 2018 grant was to

include grants to five Indian educators who would conduct workshops at art colleges in the country, designed as interventions in the traditional art curricula taught at fine art institutes that hadn't been revised to accommodate contemporary critical theory and practice.

As the exhibition came to an end in March 2019, the closing ceremony featured the Tata Trusts Students' Biennale National and International Awards. Instituted by the Tata Trusts, the Students' Biennale awards were introduced for the first time in 2016. They present an opportunity for emerging student artists to gain exposure to international exhibition-making and to develop their own projects via a residency format. During its last edition, three students were selected as recipients of the Tata Trusts Students' Biennale International Award and 11 students from University of Kashmir were selected for the Tata Trusts Students' Biennale National Award. The winning student artistes were selected by a jury comprising Deepika Sorabjee (Head, Arts and Culture, Tata Trusts), Bose Krishnamachari (Director, Kochi Biennale Foundation) and K.M. Madhusudhanan (Artist & Filmmaker).

The outcomes of the project till date include the showcasing of over 100 artworks produced by 200+ students from across 51 art institutes in India. These works were spread across seven venues in Fort Kochi in the historic Mattancherry precinct. The total number of videos produced by the Video Lab (till April 2019) is 175 with over 700k views across social media platforms such as YouTube, Facebook and Instagram. While the Students' Biennale SB 2016 was also produced as part of this project, a compilation of the 2018 catalog is underway.



Police staff undertaking archiving and paper conservation of their records.



THIS ONE IS FOR THE RECORD BOOKS

The Mumbai Police record books

Like most state institutions, the police force of Mumbai city too didn't have a practice of maintaining its own archives. The Crawford Market Office (Special Branch) of the Mumbai Police contains files and papers stacked from floor to ceiling in deteriorating condition. Largely in the form of handwritten and typed documents, supported by newspaper cuttings and other documentary evidence, including photographs and bound digests, these records are mostly encased in metallic, wooden and cardboard boxes and are stored atop metal racks. A bulk of the archive also consists of loose papers that are bundled together in large cloth sacks. Plagued by fish moths and atmospheric moisture, the records were in need of urgent conservation and archiving.

In May 2018, a MoU was signed between the Tata Trusts and the newly formed Mumbai Police Foundation to undertake the documentation and conservation of the Mumbai Police Archives. Subsequently, a grant was given to the Foundation that was designed keeping in mind not only the sheer volume of the archive (which prohibits a time-bound conservation project), but also the sensitive nature of the records – the collection comprises paperwork related to various political incidents, important individuals as well as political groups. Thus, the project was conceived to train police staff to undertake the archiving and paper conservation

of the records, instead of directly implementing the same. Thirty police volunteers were nominated and they underwent training for over six months by two expert teams in paper conservation (delivered by HIMSHACO – Himalayan Society for Heritage and Art Conservation) and archiving (delivered by Eka Archiving Resources Ltd.). Both the teams will prepare a procedures' manual for the police that can be used as a guide when inevitable police rotation occurs and new volunteers are introduced.

Being the first project initiated by the Mumbai Police Foundation, this has also helped set procedure and structure in place for the organisation. From figuring out vendor contracts to maintaining bill books and condition assessment reports, to the logging of daily work and maintaining a cleaning schedule – the police have had to step out of their comfort zone. For some, this has been an experience that has helped increase their motivation towards police work as well as created the desire for knowledge about their own history. Consequently, this project's long-term impact includes generating awareness of good conservation and archiving practices within the police force so that they are able to take ownership of their own material and records; and creating accessibility to a rich source of research for the police force themselves as well as for interested scholars.



Disaster Relief & Rehabilitation



A relief camp in Kerala.

The Trusts, along with teams from Group Companies, have been in the forefront in the wake of natural disasters occurring in the country (and neighbouring Nepal). Immediate relief operations have been followed up with long-term rehabilitation efforts.

FLOOD RELIEF EFFORTS IN KERALA

The catastrophic floods in August 2018 caused massive destruction in the state of Kerala, fondly called 'God's own country'. Taking away many lives and causing immense loss to property, this is possibly the biggest tragedy that the state has faced in the recent times. Though all 14 districts of the state bore the brunt of the disaster, Wayanad and Idukki in particular were the most adversely affected districts. The floods, along with severe landslides in these hilly terrains, led to people losing their houses as well as land. The Tata Group and the Trusts under the leadership of Tata Sustainability Group, deployed fullfledged teams to provide relief and rehabilitation across the affected areas of Kerala.

KEY ACHIEVEMENTS

- a.** Mobilising three mobile Reverse Osmosis units from Hyderabad and deploying them in flood-hit areas of Kerala, in association with Tata Projects Community Development Trust, Titan and other civil society organisations
- b.** Supplying over 200,000 litres of safe drinking water to approximately 6,500 households across the rural areas of Kochi, Alleppey, Wayanad and Idukki districts between August 19 and September 5, 2018.
- c.** Operationalising two "Water from Air" units with support from Israel based WaterGen Technologies, to supply safe drinking water to more than 200 households a day. These units provided water till the end of October 2018.
- d.** Working along with the Tata Group volunteers and the Department of Health, Government of Kerala to provide medical support and conduct medical camps and home visits in Wayanad and Idukki districts, directly benefitting a total of 1,233 individuals.
- e.** Administering appropriate medication to prevent outbreak of diseases such as leptospirosis.

SUPPORTING EARTHQUAKE VICTIMS IN NEPAL

Nepal was hit by major earthquakes, measuring 7.8 and 7.4 on the Richter scale on April 25, 2015 and May 12, 2015 respectively. Many parts of the country were severely affected with more than 9,000 casualties. Among the affected areas, Sindhupalchowk was the most affected district in terms of casualties. After undertaking immediate relief activities, the Trusts proceeded to undertake a long-term plan, focusing on restoration of infrastructure that was destroyed in the disaster.

The objectives of the project are: (a) to improve infrastructure for education by constructing permanent structures of six government schools for children in Sindhupalchowk district; (b) to increase the number of gender-friendly toilets in schools; (c) to strengthen the education system by providing school materials and psychosocial counselling for making learning fun; (d) to strengthen the education system by providing

FUTURE PLANS

- a. Complete and handover all ongoing constructions.
- b. Implement WASH activities as per plans.
- c. Implement E-WASH projects in an additional 10 schools with the funding support from Tata Sustainability Group.

KEY LEARNINGS

- a. Proper coordination with School Management Committees proves effective in case of any disputes.
- b. Given the huge gap between the knowledge level and the practice vis-à-vis WASH behaviour of the students, it would be efficacious to focus more on improving practices.
- c. Empowering child health clubs and school faculty is key for sustainability of the WASH programme.



Shree Sharada Secondary School, Sindhupalchowk district, Nepal, reconstructed and handed over to the community.

school materials and psychosocial counselling for making learning fun; and (e) to promote Water, Sanitation and Hygiene (WASH) behaviour among the students and the community in the catchment area. As part of this project, the Trusts are facilitating the reconstruction of 7 secondary schools and one health post.

KEY ACHIEVEMENTS

- a. Two reconstructed schools handed over to the community. The construction work for other five schools is also almost complete.
- b. Nine gender-friendly toilet units constructed; work on the remaining 11 units ongoing.
- c. 65 training sessions covering different aspects of E-WASH conducted in 7 schools. Wall paintings completed in 3 schools.

CHALLENGES FACED

- a. Geographical hindrances, road inaccessibility and adverse weather conditions.
- b. Obstacles due to exertion of local pressure for obtaining contracts of the construction works.





Institutions



TATA INSTITUTE FOR GENETICS AND SOCIETY (TIGS) GIVING NEW HOPE IN FIGHTING MALARIA.

Tata Institute for Genetics and Society (TIGS) is a non-profit institution focused on research training and capacity building of Indian scientists in the use of the latest genetic technologies to address food and healthcare security in India. TIGS has the overarching goal of advancing global innovative research in a socially-conscious and ethical manner to ultimately find solutions to some of the world's most pressing issues, ranging from public healthcare to agriculture. In short, the mission of TIGS is to synergize visionary philanthropy and outstanding science to serve humanity.

Operationally, the work within TIGS is accomplished via a collaboration between an institute located at the University of California San Diego (TIGS-UCSD), and a TIGS operation in India (TIGS-India), which currently functions primarily through a Center TIGS-CI (TIGS-Center at inStem) located at the Institute for Stem Cell Biology and Regenerative Medicine (inStem) in Bangalore, Karnataka, India. TIGS-CI has a unique advantage in that it has access to world-class infrastructure at inStem and through its location within the Bangalore Life Science Cluster, which comprises the National Centre for Biological Sciences (NCBS), the Centre for Cellular and Molecular Platforms (C-CAMP) and inStem. The work of TIGS, both at UCSD and in India, is currently funded by the Trusts.

Malaria is a life-threatening disease caused by parasites that are transmitted to people through the bites of infected female Anopheles mosquitoes. In 2017, a total of 219 million cases of malaria was reported globally, an increase of 2 million cases over the previous year (World Malaria Report 2018, WHO). The global tally of malaria deaths reached 435,000, about the same number reported in 2016. Currently, no vaccine exists, and mosquitoes are rapidly evolving resistance to common pesticides and anti-malarial treatments. India has targeted malaria for eradication by 2030, making it a challenging and critical national priority.

Pioneering experiments conducted at TIGS-UCSD have demonstrated that the malaria vector mosquito *Anopheles stephensi* can be genetically engineered using new genetic technologies (such as gene editing and Active Genetics) to express genes targeted against, and aimed at blocking the transmission of the malarial parasite, *Plasmodium falciparum*, effectively immunising the mosquitoes. This represents a novel approach since immunisation of humans against malaria has not yet been successful, despite decades of effort. Additionally, this new trait is inherited by nearly all of the progeny mosquitoes through the

use of Active Genetics. The research at TIGS aims to reduce the burden of mosquito vector-borne diseases on humans by introducing and disseminating genes that prevent the transmission of pathogens, hence reducing human infections. To accomplish reduction of malaria infections, a detailed understanding of the mosquito genome is required. The objective of scientists at TIGS-India is to afford mosquitoes with resistance to pathogens, and rapidly "drive" these genes into wild mosquito populations. A phased approach will be followed to test both safety and efficacy of the strains, as work progresses in accordance with regulatory requirements.

In addition, this approach may also be leveraged against other mosquito-borne disease agents, including dengue, chikungunya and Zika virus.

Another major thrust at TIGS is capacity building through training of scientists in the latest genetic approaches so as to make India a leader, rather than a follower, in such research. TIGS-India has recruited 15 Ph.D. scientists who have been sent to UC San Diego, and other UC locations, for training in the practice and applications of genetic technologies, informatics, modeling, population biology, etc. TIGS-India is collaborating with TIGS-UCSD on research projects, methods and technology improvements, as well as with many Indian academic and government institutions.

Several other potentially impactful applications of genetic technologies are also being explored at TIGS-India as future objectives, and include developing the platform for use in other invertebrates and plants to achieve cell engineering, control of crop pests, and development of new agricultural crop strains to address food security.

AREAS OF FOCUS IN TIGS-INDIA

a. Genetic engineering for sustainable control of mosquitoes to reduce the incidence of malaria and other viral diseases such as dengue.



- b. Reversing antimicrobial resistance.
- c. Developing plant strains resistant to biotic and abiotic stresses.
- d. Studying human hematopoiesis to model and cure diseases.
- e. Engineering antibodies that block disease transmission through immunisation.
- f. Advocating the ethical use of genetic technologies.

KEY ACHIEVEMENTS

a. State-of-the-art laboratory and insectary facilities have been established, the Department of Scientific and Industrial Research has obtained various Government approvals to establish TIGS as a Scientific and Industrial Research Organisation.

- b. Safety and training modules and committees have been put in place, and breeding colonies of *Anopheles stephensi* and *Aedes aegypti* strains have been created in the TIGS Insectary.
- c. TIGS-India launched its presence by conducting a TIGS Inaugural Symposium in November 2018, which brought in national and international experts and 150-200 local researchers.
- d. In June-2019, TIGS was recognised by the organisation Malaria-No-More for its innovative efforts in attempting to eradicate malaria.
- e. Research work is in progress in the various areas of focus and exciting advances are being made, which should accelerate further as the team of 45 scientists and administrative support staff settle in to deliver on the exciting mission of TIGS-India, all enabled by the generosity and vision of the Trusts.

THE MITTAL INSTITUTE

ONE INSTITUTE. SEVERAL REASONS TO BE HOPEFUL.

Founded in 2003, The Mittal Institute is a university-wide research institute at Harvard University that engages faculty members, students, and Indian institutions through interdisciplinary programmes to disseminate knowledge, build capacity, inform policy, and engage with issues that are shaping South Asia today. The Mittal Institute's programme titled 'Multidisciplinary Approach to Innovative Social Enterprises' identifies and steers innovative social enterprises, based on rigorous academic research that seeks to address issues which keep India's vulnerable populations in a cycle of poverty, unemployment, and illiteracy. Through 7 key projects that translate research to practice

and policy, the Institute has engaged in creating and improving rural livelihoods, advancing education, bettering health outcomes and disseminating science nationwide.

Improving Public Health Access and Sanitation

India faces a dual burden of nutrition-related diseases, with high levels of mortality and morbidity directly related to under-nutrition and infectious diseases along with a growing incidence of non-communicable diseases. The public healthcare system in India is plagued with poor quality of service and lack of healthcare access. The Mittal Institute's aim to increase access to

Fuel efficient cookstoves that also decrease emissions and enhance health of communities being piloted.



healthcare through a comprehensive understanding of existing problems and evidence-based practices in the areas of health has been made achievable through 3 key projects.

By surveying over 2,000 people and organising over 12 eye screening camps in the past six months, Project Prakash has gained a deep understanding of eye health in Uttar Pradesh and restored the sight of over 500 individuals. It currently works towards creating 2 vision centres in Gorakhpur to provide access to optometric facilities. Moving forwards, the Institute's larger goal of knowledge creation will be aided by the dissemination of the eye health data collected to the larger scientific community, that will inform policy making nationwide.

Project Sanitation Infrastructure has charted base plans, conducted site assessments and built sustainable sanitation models for various areas within Mumbai, after understanding socio-cultural factors through extensive community meetings with stakeholders. The project is in the process of developing an evaluation rationale for sanitation infrastructure, based upon the study of various public and community toilets in national and international case studies on sustainable sanitation models. It moves towards being a national exemplar.

Further, The Mittal Institute works towards improving health through working on multiple nodes to develop local capacity. This includes building and seeding India's digital health data ecosystem. The 3T Project is developing an 'EHR-lite', a small-footprint customisable electronic health record for primary care clinics in India to capture health data. It has been launched in Community Health Centres and ENT clinics in Karnataka this year, with feedback being gathered to understand physician data needs, and gather feedback related to software use. India's National Digital Health Blueprint (NDHB), released by the Government of India, outlines its vision for moving forward with the major health digitization programme created by project 3T, that will affect millions of citizens. Moving forward, the electronic health record can be used in clinics across India to build and sustain health data exchange.

Science Education

The Mittal Institute is working on bettering education outcomes through disseminating science and emphasising the importance of Science, Technology, Engineering and Mathematics (STEM) research within the nation. There is a need for science professionals to be multidisciplinary and be trained in translational research, in order to translate scientific discoveries into policy.

The Bangalore Boston Nutrition Collaborative (BBNC) conducted 9 successful courses in

nutrition research methodology from 2010-2018, with over 350 participants trained. BBNC is currently developing a massive online open course (MOOC), that is free of cost, aimed to build a global community of online students and improve the education and training for all. E-learning and distant learning courses can transcend geographic boundaries, leverage knowledge and influence evidence-based decisions in community settings. This course can reach community health personnel such as Anganwadi workers and Accredited Social Health Activists and spearhead bottom-up change throughout India.

The Soft Robotics Toolkit Project aims to lower the barrier of entry for students to participate in STEM by developing a line of soft robotic activities, such as building a robotic arm using coding and assimilation, to engage students in science disciplines. It has been successfully piloted in 2 Delhi private schools and will be introduced in Delhi government schools and eventually the nationwide system, thus influencing critical thinking and encouraging science-based learning in India's youth.

Improving Rural Livelihoods and Living

From cooking food using open fires or rudimentary stoves that release toxic pollutants, to drinking unsafe water, daily life in Rural India involves exposure to various hazards. The Mittal Institute seeks to better standards of living in Rural India through influencing behaviour change within individuals and increasing access to basic resources.

Project Fuel Efficient Cookstoves presents a cookstove that decreases emissions and therefore prevents emission-related premature deaths. After understanding the cultural context and implementing behaviour change practices, the cookstoves have been supplied to 78 households in Karjat and Khardi, (in Maharashtra) with 50 more in production. Moving forward, the cookstoves can be piloted across India, thus reducing emission-based deaths and inculcating healthy cooking practices nationwide.

Project Defluoridation of Water looks at scalable and affordable methods of removing fluoride from drinking water in fluoride heavy rural areas within Madhya Pradesh by using bauxite filters. The filters are currently in development and the aim is to create a prototype of community-scale defluoridation facility that uses 50 to 100 kilograms of adsorbent powder daily and delivers 5,000 – 10,000 litres of fluoride-safe drinking water. Thousands of villages in India suffer from a lack of access to safe drinking water. Thus, the project's future direction involves scaling up the production of these economically priced and easy-to-use filters to enable the provision of safe water in villages across the nation.

CENTRE FOR SPATIAL ANALYTICS

ENHANCING FARMING EXPERTISE WITH ADVANCED TECHNOLOGIES.

The Centre for Spatial Analytics and Advanced GIS (C-SAG) is an independent entity under the aegis of National Institute Of Advanced Studies (NIAS) Council of Management, located on the campus of the Indian Institute of Science, Bangalore and is supported by the Trusts.

C-SAG was operationalised in September 2017 and has the following key objectives:

- a. Developing high-end advanced knowledge in geographical science, thus creating Knowledge Assets (KA) in Spatial Analytics (SA) and advanced Geographic Information Systems (GIS) technology in different application areas.
- b. Developing and maintaining a state-of-the-art GIS knowledge-base – data, information, apps, projects, facility, KA, models, etc., thereby building inherent capability within the country.
- c. Education Networking – creating a common platform for universities/institutions for expanding and enhancing the research capabilities in SA.
- d. Specialised advanced training and orientation programmes in SA and advanced GIS – for government, private industry and for faculty training.
- e. Consulting to government and industries, thereby creating assessments/evaluation and independent documents/reports related to SA and advanced GIS technology.
- f. Forging partnerships at an international level with high-capability SA and GIS institutions; partnerships at national level with government/industries for specific SA and advanced GIS activities and research/skill development

C-SAG is undertaking the following 2 major activities for the Trusts:

- g. Development of Agri-GIS for South Odisha from Kharif 2018 to Kharif 2020.
- h. Prototype development of a GIS Dashboard for monitoring and implementation of the Rail Wi-Fi project.

KEY ACHIEVEMENTS

a. C-SAG is developing Agri-GIS in 532 villages of South Odisha, with an intent to make an impact on farmers and their quality of life, using advanced Spatial Analytics and GIS technology. The ultimate aim is to help the Trusts' beneficiary farmers to enhance incomes - through improved cropping and allied agricultural activities, coupled with sustainable agricultural practices based on scientific and logical Spatial Analytics and GIS information. Agri-GIS is a direct input to the Trusts and indirectly,

through the Trusts, to farmers. From Kharif-2019 onwards, Agri-GIS is also being given to the Department of Agriculture – Government of Odisha and to Odisha Agricultural University and Technology (OUAT), Bhubaneswar.

b. C-SAG and the Trusts have jointly designed the concept of plot - or farmer-centric Agri-GIS, which is a comprehensive and holistic advisory. A process to build, manage, analyse and generate real-time GIS-based advisories at the individual plot-level has been put in place and is being implemented in 532 villages of South Odisha. The process involves a 360° evaluation of a farmer; high-end image analytics; advanced met analytics; crop suitability analytics; indexing analytics for social and economic assessments; agri practice assessments; beneficiary analytics based on field survey; and market analytics. All of these are ultimately integrated into a "customised" advisory for a plot in real-time on a daily basis, so that advisory information is current and to date.

c. C-SAG designed a GIS Dash Board and 3 stage GIS-based project implementation monitoring mobile App for implementing Wi-Fi across nearly 4,700 railway stations across 18 railway zones in India. The Wi-Fi network is being established by various project teams across the country in railway zones in a methodical manner to cover all railway stations.

d. C-SAG developed a GIS based dashboard for monitoring the progress of implementation of the Rail-Wi-Fi project on a Pan-India level on real time basis. The GIS dashboard is compatible on desktops and mobile devices and provides real-time status of the Rail Wi-Fi implementation activity.

e. C-SAG also developed an Android based mobile app for implementing/monitoring the complete cycle of deployment of Wi-Fi, right from site planning to instrument deployment and operations. The app enables real time data collection for Rail Wi-Fi activity by contractors and displays real time on a dashboard.

FUTURE PLANS

- a. Intensify involvement of the Government of Odisha for Agri-GIS dissemination during Kharif 2019.
- b. Direct dissemination of advisory to farmers through smart phones/feature phones.
- c. Attempt differential advisories for subsistence and commercial farming activity and for farmers.
- d. Undertake a "micro-climate analysis of Odisha" along with meteorological experts - something that is essential and very unique.
- e. Use of Unmanned Aerial Systems (UAS) imaging/ data for obtaining precise real-time crop data in Kharif 2019.

TATA CENTRE FOR TECHNOLOGY AND DESIGN

TECHNOLOGY BY DESIGN. SOCIAL IMPACT BY CHOICE.

Tata Centre for Technology and Design, at IIT Bombay (TCTD, IITB), has been working with the purpose of developing technology solutions that are designed to take on the unmet needs of resource-constrained communities within India and across the world. Using an end-to-end innovation approach, TCTD, IITB is now in its sixth year since inception, acting as a virtual Centre with research, academic and immersive components that draw faculty members and graduate students from across IIT Bombay.

Research Activities: With TCTD, IITB's support to seed and translational research projects, the IITB faculty-led project teams from across the Institute have been designing technological solutions for social challenges in the domains of Food & Agriculture, Energy, Education, Healthcare, Housing, Water and Waste Management. Having received an overwhelming number of project ideas, the estimated number of approved projects over the past five years has been 85, with about 45 being currently active. A host of 30 applications has been noted in the invention disclosure process for relevant patents, copyrights and trademarks, and publications on the Creative Commons platform. TCTD, IITB is working at translating several of them in terms of design, business innovation and technology transfer frameworks. About six projects have translated their work into start-ups with entrepreneurs stemming out of the research teams. More than 10 projects have gone to the field, acquiring customers' feedback towards improvement in their proposed solution.

Academic Activities: Human resources, in the form of Tata Fellows, have shown an encouraging trend with the total number growing significantly to 95 students. Close to 20 fellows graduated in the last year. TCTD, IITB hopes to support and train these M Tech students and PhD scholars into future leaders with a familiarity to the development challenges in the socio-political context. The Centre has completed two successful trips of the TCTD Yatra where Tata Fellows experience the community living experience by observing how social enterprises upscale using technology, operational efficiencies, trained human resources and how all these aspects combine into innovations for social impact. Fellows, along with faculty members, travelled a distance of more than 2,000 kilometres to visit the relevant places and facilities in the country. Field visits have contributed immensely to the academic course pedagogy and based on their observations and

learnings, the students conduct need identification exercises to solve the identified problems.

Infrastructure: The current Product Realisation Lab, with its extensive array of mechanical and electronic equipment and machines, supports the Centre's projects in the product development process. An area for an integrated waste management facility to house all the waste management projects at TCTD, IITB will address the domain-based challenges using the campus as a test bed. The plan to build a separate laboratory for sophisticated instruments has been prepared and submitted for approvals.

Ancillary Activities: As outreach to the relevant segments, TCTD, IITB has been conducting courses in End to End Innovation for the academic circles outside IIT Bombay. As a part of the Continuing Education and Quality Improvement Programmes at IIT Bombay, the Centre organises five-day courses - a unique combination of lectures, case studies, project exercises and lab sessions put together. With over 1,250 faculty and students from engineering colleges of non-premier cities participating in these workshops, the courses offer a fair share of hands-on experience to the non-IIT aspirants in the field of social innovation and designing technology solutions. The annual TCTD Symposium in IIT Bombay is another conclave that draws stakeholder groups from across the country. More than 10 teams participated in intensive seven week-long programmes called iCUBATE and IDEAS that are designed to identify the customer need and validate the need hypothesized at the start of the project. This has helped the teams to redefine their scope of work and helped the Centre to assess the potential in the proposed solution in a better way.

FUTURE PLANS

The Centre is also identifying new partners and supplementing its own facilities, to help with accelerated prototyping. Getting on-board champions who can take the lead in connecting the existing solutions to the users and bringing in new stakeholder groups that would define the need for Centre-initiated projects is being targeted. The research, academic and immersive components at TCTD, IITB have reached a stage where their social impact is waiting to be measured. It is just a matter of time before the innovations can validate the efforts, intent and involvement of the researchers, and make an impact with their field partners to the larger community.

INDIAN INSTITUTE OF SCIENCE HOPING FOR A FUTURE WITHOUT ALZHEIMER'S.

The Indian Institute of Science (IISc) is undertaking a research study titled: 'Alzheimer's disease: Understanding Mechanisms for Early Diagnosis and Treatment'. Notably, 50 million people suffer from Dementia, worldwide. The incidence of this condition is expected to increase in developing countries, specifically India and China. There is this pressing need to identify risks, enable early diagnosis and discover cutting-edge therapies.

The study aims to understand the pathophysiological changes occurring early in life that result in Dementia, including Alzheimer's disease (AD) during aging. This is a holistic study examining changes from molecules to behaviour, including structural changes in the brain in model systems and human subjects. The study also aims to examine the risks and protective factors of Dementia in the urban Indian population. The need for the study stemmed from the fact that no longitudinal study has comprehensively examined the risk and protective factors of cognitive change, Alzheimer's disease and other related disorders in India.

A longitudinal design is being employed by recruiting subjects above 50 years of age, from community settings in Urban Bangalore and examining them every year.

KEY ACHIEVEMENTS

- a. 360 subjects recruited so far (middle-class, well-educated) of whom 112 people have undergone the first follow-up. (Tata Longitudinal cohort of Aging).
- b. All study procedures such as Carotid Doppler & Ultrasonography, clinical examination, Cognitive examination, Biochemical investigations & Genetic studies have been digitized end-to-end in a platform developed in-house by IISc.

THE TATA CENTRE FOR DEVELOPMENT THE ECONOMICS OF SUSTAINABLE HOPE.

The Tata Centre for Development (TCD) is an Indian institution, founded in 2016, that combines the unrivaled research capacity of the University of Chicago economics community, home to more Nobel Prize-winning economists than any other university in the world, with sophisticated outreach and partnership to identify solutions to India's most pressing social and economic challenges.

c. Siemens Prisma 3 Tesla MRI Scanner - the first 3 Tesla scanner in India has been set up. It will be used for the study of brain function and dysfunction in Dementia and will be a National facility, accessible to researchers from across the country.

d. This investment has led to the setting up of Centre of Brain Research (CBR) at IISc and start of another longitudinal study of rural population in Srinivasapuram, Kolar District, Karnataka called SANSCOG (Srinivasapuram Aging, Neuro-senescence and Cognition Study). The CBR is supported by a commitment of ₹2.75 billion over 10 years from Pratiksha Trust.

e. A new generation sequencing platform is being set up to carry out whole genome sequencing of subjects in the Tata cohort. This initiative has enabled IISc to bring together 22 institutes across the country and form a Genome India consortium. This consortium aims to carry out whole genome sequencing of 10,000 individuals representing the ethnic diversity of India. A ₹3 billion project proposal has been submitted to the Department of Biotechnology, Government of India and has been defended successfully in 2 rounds of review.

FUTURE PLANS

- a. Continue recruiting subjects to the Tata cohort, engaging with up to 1,000 individuals in the next 2 years, while continuing to follow up on the people already in the study. Data analysis will begin since adequate information on 400 subjects is available.
- b. Genome-wide arrays and whole genome sequencing will be carried out on the subjects in the study to identify genetic risk factors. Together, this will help in identifying risk and protective factors, which will be used to plan the intervention studies that need to be done.

THE MODEL

Research: UChicago Economics faculty conduct research jointly with government and other partners to generate solutions to a wide variety of social challenges, ranging from healthcare and education to innovation and pollution.

Outreach: Academic research is often inaccessible outside academia, so the TCD works relentlessly

and creatively to make research findings accessible to policymakers, NGOs, social entrepreneurs, and the general public to build support for reform and innovation.

Scale-up: To achieve maximum impact, the TCD works with policymakers and social entrepreneurs across India to scale-up successful, evidence-based policy innovations.

Today, more than 50 UChicago faculty are engaged in projects across India, the vast majority of whom had never conducted research in India before the TCD. The TCD is using digital, print, video, interactives, and other tools to make the insights from academic research broadly accessible, an approach that represents a significant innovation in communicating research findings for impact.

Most importantly, the TCD is improving the quality of life for people across India in a wide range of areas, including:

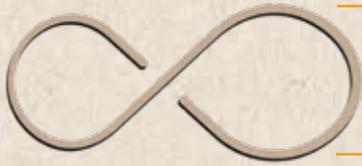
Air Pollution: The average person in India loses 4.3 years of life expectancy to air pollution. Launched in 2017 by the Chief Minister of Maharashtra, the Star Rating Programme is the world's first effort to scientifically evaluate whether mandatory public disclosure causes firms to reduce pollution. Large industrial plants are publicly rated based on their emissions, and these ratings are made available to the public at mpcb.info, as well as through a variety of other outlets. This successful programme has already scaled to Odisha and Jharkhand. TCD aims to scale-up to six additional states by 2020.

Water Pollution: Many of India's waterways suffer from high levels of pollution, placing human health at risk. Using advanced, real-time monitoring, TCD researchers are helping policymakers in Delhi, Telangana and West Bengal identify possible solutions. In 2019, TCD will launch an interactive website that will provide citizens with the first-ever national database on water quality throughout the country.

Diabetes: Many non-communicable diseases like diabetes can be triggered or exacerbated by lifestyle choices. In Tamil Nadu, TCD researchers discovered that reminders sent through wearable devices can 'nudge' high-risk individuals to make smarter lifestyle choices, leading to improved health outcomes and lower costs. The Government of Tamil Nadu is now considering expanding the pilot state-wide.

Oral Cancer: Head and neck squamous cell carcinoma (HNSCC) is the leading cancer among men in India. Early detection is critical, resulting in substantially better prognosis and sharply lower costs, but is often missed. In partnership with Tata Memorial Hospital, TCD is producing and testing a low-cost salivary kit that could be deployed among high-risk populations. It is a marriage of frontier medical research and simple technology that could allow millions of people to lead longer lives across India.





Individual Grants

While the Trusts have been engaged in major philanthropic activities, they have not lost sight of the 'individual'. Since their inception, great emphasis has been laid on assisting in the health and education costs of needy and meritorious individuals. The Individual Grants Programme across the various Tata Trusts endeavours to use a comprehensive, systematic and most importantly, fair and humane approach to identify individuals in need and deserving of financial assistance.

Financial assistance is provided for:

- a) Need-based education grants directly to applicants and indirectly via duly approved NGOs working for the benefit of marginalized groups, with a fresh emphasis on helping children with special needs.
- b) Merit based scholarships and grants for studies in India and abroad; professional enhancement grants for training, observerships (for the medical fraternity) and workshops; and funding for research in certain areas such as autism, dyslexia, public health and making of Rudraveena.
- c) Spectrum grants given to encourage sportspersons in certain identified sports, including para-sports, and musicians in rare music streams.
- d) Overseas and domestic education through partnership agreements with four Universities totaling to more than Rs. 50 million
- e) Meeting the cost of medical treatment, often towards critical cases.

EDUCATION

During 2018-19, the Trusts sanctioned ₹ 279.13 million (US \$ 3.93 million) towards education grants.

Details of Education Grants sanctioned / disbursed from April 2018 to March 2019

| Ailments | Number of Applications Sanctioned* | Amount Sanctioned (Rs. Million) | Number of Disbursals Made# | Amount Disbursed (Rs. Million) |
|---|------------------------------------|---------------------------------|----------------------------|--------------------------------|
| Studies in India, including research scholarships | 177 | 147.13 | 180 | 155.68 |
| Studies abroad, including loan scholarships and research scholarships | 193 | 132.00 | 219 | 126.89 |
| Total | 370 | 279.13 | 399 | 282.57 |

* Sanctions may also relate to applications received during the previous year, in addition to those received during the year under review.
 # Amount disbursed includes grants sanctioned during the previous year, as well as the year under review.

MEDICAL

A medical emergency, for most families, causes tremendous emotional and financial stress. Escalating hospitalisation bills and medicine costs have rendered decent medical attention beyond the realm of even the middle class population of the country. Though medical insurance is becoming increasingly popular in India, it does not cover the entire cost of treatment, especially for cases such as cancer, heart ailments, cochlear implants and kidney diseases, etc. Charitable trusts and benevolent individuals have been the only recourse for these families to help them overcome their financial burden.

The Trusts are utilising their network of medical professionals and social workers at various prominent government, municipal, private and charitable hospitals within the country. The linkages with the hospitals help in assessing the socio-economic condition of the family. The Trusts have active linkages with over 36 hospitals as on March 2019.

During 2018-19, the Trusts received a total of 6,283 applications for medical grants. ^ A sum of ₹391.96 million (US \$5.60 million) was sanctioned.

Details of Medical grants sanctioned / disbursed from April 2018 to March 2019

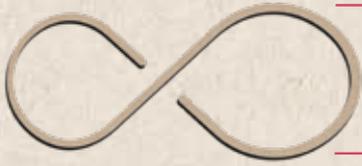
| Ailments | Number of Applications Sanctioned | Amount Sanctioned (₹)* | Number of Disbursals Made | Amount Disbursed (₹)# |
|--|-----------------------------------|------------------------|---------------------------|-----------------------|
| Aid to differently abled individuals | 7 | 1,043,000 | 6 | 26,425,000 |
| Burns | 18 | 5,117,021 | 17 | 3,661,000 |
| Cancer | 787 | 194,375,555 | 697 | 134,911,714 |
| Chronic Illness | 56 | 8,933,089 | 70 | 9,442,440 |
| Cochlear Implant | 166 | 71,556,409 | 121 | 51,516,654 |
| General Surgery | 3 | 122,000 | 4 | 143,000 |
| Heart | 470 | 52,546,142 | 458 | 48,603,839 |
| ICU Treatment | 24 | 7,289,400 | 29 | 6,348,255 |
| Kidney | 34 | 6,208,981 | 51 | 4,281,000 |
| Liver Disease | 28 | 11,345,000 | 23 | 7,192,000 |
| Neurology | 29 | 4,772,000 | 37 | 5,224,000 |
| Neurosurgery | 38 | 7,838,000 | 49 | 8,194,750 |
| Neo Natal Intensive Care Unit (NICU) Treatment | 21 | 4,532,000 | 18 | 4,002,000 |
| Orthopedic | 95 | 9,127,000 | 83 | 8,211,000 |
| Respiratory | 4 | 507,000 | 7 | 1,316,475 |
| Tuberculosis | 4 | 473,000 | 4 | 675,000 |
| Others | | 6,169,600 | | 6,169,600 |
| Total | 1,784 | 391,955,197 | 1,674 | 326,317,727 |

^ The number of applications received are across Sir Ratan Tata & Allied Trusts and Sir Dorabji Tata & Allied Trusts.

(*) Sanctions may also relate to applications received during the previous year, in addition to those received during the year in review.

(#) Disbursals include grants sanctioned during the previous year, as well as the year in review. The same are gross amounts and do not include refunds aggregating to ₹8,186,389/- received during F.Y. 2018-19.





Financial Highlights

SIR RATAN TATA TRUST

| INCOME | | | | | | |
|------------------------------|------------------|--------|--|------------------------------|------------------|--------|
| For the year ended 31.3.2018 | | | Particulars | For the year ended 31.3.2019 | | |
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 768.65 | 11.83 | 20.55 | Dividend | 761.69 | 10.88 | 21.02 |
| 219.05 | 3.37 | 5.86 | Interest | 155.25 | 2.22 | 4.29 |
| 815.78 | 12.55 | 21.81 | Donation / Earmarked Grants (including interest) | 397.17 | 5.68 | 10.96 |
| 0.11 | - | - | Property Income | 0.13 | - | - |
| 5.67 | 0.08 | 0.15 | Sundries | 0.06 | - | - |
| 654.51 | 10.07 | 17.50 | Amount transferred from Earmarked Funds | 201.77 | 2.88 | 5.57 |
| 1,276.87 | 19.65 | 34.13 | Excess of Expenditure over Income | 2,107.14 | 30.10 | 58.16 |
| 3,740.64 | 57.55 | 100.00 | | 3,623.21 | 51.76 | 100.00 |

| EXPENDITURE | | | | | | |
|------------------------------|------------------|--------|---------------------------------------|------------------------------|------------------|--------|
| For the year ended 31.3.2018 | | | Particulars | For the year ended 31.3.2019 | | |
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 2,682.92 | 41.28 | 71.72 | Expenditure on Objects of the Trust | 3,050.11 | 43.57 | 84.18 |
| 245.91 | 3.78 | 6.58 | Administrative Expenses | 139.61 | 2.00 | 3.86 |
| 6.10 | 0.09 | 0.16 | Property Expenses | 6.56 | 0.09 | 0.18 |
| 805.71 | 12.40 | 21.54 | Amount transferred to Earmarked Funds | 426.93 | 6.10 | 11.78 |
| 3,740.64 | 57.55 | 100.00 | | 3,623.21 | 51.76 | 100.00 |

*1 US\$ = ₹65 as on 31st March 2018 and 1 US\$ = ₹70 as on 31st March 2019

SOURCES OF FUNDS

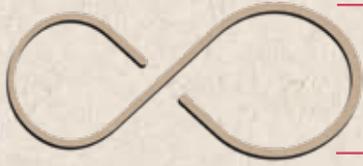
| As on 31.3.2018 | | | Particulars | As on 31.3.2019 | | |
|-----------------|------------------|--------|----------------------------------|-----------------|------------------|--------|
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 782.74 | 12.04 | 21.05 | Trust Fund | 782.74 | 11.18 | 38.80 |
| 151.20 | 2.33 | 4.07 | Earmarked Funds | 376.37 | 5.38 | 18.66 |
| 2,761.78 | 42.49 | 74.27 | Reserves and other Funds | 835.61 | 11.94 | 41.4 |
| 22.90 | 0.35 | 0.61 | Current Liabilities & Provisions | 22.55 | 0.32 | 1.12 |
| 3,718.62 | 57.21 | 100.00 | | 2,017.27 | 28.82 | 100.00 |

APPLICATION OF FUNDS

| As on 31.3.2018 | | | Particulars | As on 31.3.2019 | | |
|-----------------|------------------|--------|------------------|-----------------|------------------|--------|
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 4.48 | 0.07 | 0.12 | Immovable Assets | 4.25 | 0.06 | 0.21 |
| 3.32 | 0.05 | 0.09 | Movable Assets | 3.42 | 0.05 | 0.17 |
| 1,561.96 | 24.03 | 42.00 | Investments | 1,270.61 | 18.15 | 62.99 |
| 2,148.86 | 33.06 | 57.79 | Current Assets | 738.99 | 10.56 | 36.63 |
| 3,718.62 | 57.21 | 100.00 | | 2,017.27 | 28.82 | 100.00 |

*1 US\$ = ₹65 as on 31st March 2018 and 1 US\$ = ₹70 as on 31st March 2019





Financial Highlights

NAVAJBAI RATAN TATA TRUST

| INCOME | | | | | | |
|------------------------------|------------------|--------|-----------------------------------|------------------------------|------------------|--------|
| For the year ended 31.3.2018 | | | Particulars | For the year ended 31.3.2019 | | |
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 21.37 | 0.33 | 14.17 | Interest | 11.69 | 0.17 | 69.75 |
| 129.39 | 1.99 | 85.83 | Excess of Expenditure over Income | 5.07 | 0.07 | 30.25 |
| 150.76 | 2.32 | 100.00 | | 16.76 | 0.24 | 100.00 |

| EXPENDITURE | | | | | | |
|------------------------------|------------------|--------|-------------------------------------|------------------------------|------------------|--------|
| For the year ended 31.3.2018 | | | Particulars | For the year ended 31.3.2019 | | |
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 21.75 | 0.34 | 14.43 | Expenditure on Objects of the Trust | 12.56 | 0.18 | 74.94 |
| 1.59 | 0.02 | 1.05 | Administrative Expenses | 3.12 | 0.04 | 18.62 |
| 127.42 | 1.96 | 84.52 | Taxes Paid | 1.08 | 0.02 | 6.44 |
| 150.76 | 2.32 | 100.00 | | 16.76 | 0.24 | 100.00 |

*1 US\$ = ₹65 as on 31st March 2018 and 1 US\$ = ₹70 as on 31st March 2019

SOURCES OF FUNDS

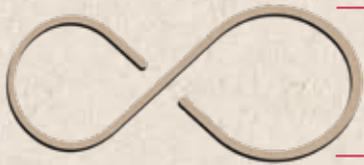
| As on 31.3.2018 | | | Particulars | As on 31.3.2019 | | |
|-----------------|------------------|--------|-------------|-----------------|------------------|--------|
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 148.75 | 2.29 | 100.00 | Trust Fund | 143.69 | 2.05 | 100.00 |
| 148.75 | 2.29 | 100.00 | | 143.69 | 2.05 | 100.00 |

APPLICATION OF FUNDS

| As on 31.3.2018 | | | Particulars | As on 31.3.2019 | | |
|-----------------|------------------|--------|----------------|-----------------|------------------|--------|
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 1.25 | 0.02 | 0.84 | Movable Assets | 1.02 | 0.01 | 0.71 |
| 119.60 | 1.84 | 80.40 | Investments | 119.60 | 1.71 | 83.23 |
| 27.90 | 0.43 | 18.76 | Current Assets | 23.07 | 0.33 | 16.06 |
| 148.75 | 2.29 | 100.00 | | 143.69 | 2.05 | 100.00 |

*1 US\$ = ₹65 as on 31st March 2018 and 1 US\$ = ₹70 as on 31st March 2019





Financial Highlights

TATA EDUCATION & DEVELOPMENT TRUST

| INCOME | | | | | | |
|------------------------------|------------------|--------|---|------------------------------|------------------|--------|
| For the year ended 31.3.2018 | | | Particulars | For the year ended 31.3.2019 | | |
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 4,307.78 | 66.27 | 58.73 | Interest | 3,829.57 | 54.71 | 33.43 |
| 67.15 | 1.03 | 0.92 | Donations/Earmarked Grants (including interest) | 2,576.65 | 36.81 | 22.49 |
| 40.01 | 0.62 | 0.55 | Sundries/Write-back | 4.18 | 0.06 | 0.03 |
| 14.75 | 0.23 | 0.20 | Amount transferred from Earmarked Funds | 2,530.85 | 36.15 | 22.09 |
| 2,904.89 | 44.69 | 39.60 | Excess of Expenditure over Income | 2,515.68 | 35.94 | 21.96 |
| 7,334.58 | 112.84 | 100.00 | | 11,456.93 | 163.67 | 100.00 |

| EXPENDITURE | | | | | | |
|------------------------------|------------------|--------|---------------------------------------|------------------------------|------------------|--------|
| For the year ended 31.3.2018 | | | Particulars | For the year ended 31.3.2019 | | |
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 7,096.32 | 109.17 | 96.75 | Expenditure on Objects of the Trust | 8,705.13 | 124.36 | 75.98 |
| 171.61 | 2.64 | 2.34 | Administration Expenses | 187.70 | 2.68 | 1.64 |
| 66.65 | 1.03 | 0.91 | Amount Transferred to Earmarked Funds | 2,564.10 | 36.63 | 22.38 |
| 7,334.58 | 112.84 | 100.00 | | 11,456.93 | 163.67 | 100.00 |

*1 US\$ = ₹65 as on 31st March 2018 and 1 US\$ = ₹70 as on 31st March 2019

SOURCES OF FUNDS

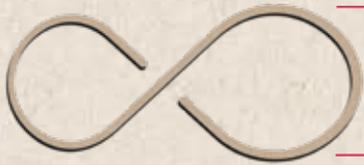
| As on 31.3.2018 | | | Particulars | As on 31.3.2019 | | |
|-----------------|------------------|--------|----------------------------------|-----------------|------------------|--------|
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 48,469.64 | 745.69 | 98.55 | Trust Fund | 46,482.87 | 664.04 | 99.72 |
| 63.08 | 0.97 | 0.13 | Earmarked Funds | 96.32 | 1.38 | 0.21 |
| 613.88 | 9.44 | 1.25 | Reserves & other Funds | - | - | - |
| 34.99 | 0.54 | 0.07 | Current Liabilities & Provisions | 34.19 | 0.49 | 0.07 |
| 49,181.59 | 756.64 | 100.00 | | 46,613.38 | 665.91 | 100.00 |

APPLICATION OF FUNDS

| As on 31.3.2018 | | | Particulars | As on 31.3.2019 | | |
|-----------------|------------------|--------|----------------|-----------------|------------------|--------|
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 19.61 | 0.30 | 0.04 | Movable Assets | 17.54 | 0.25 | 0.04 |
| 47,991.14 | 738.33 | 97.58 | Investments | 45,838.20 | 654.83 | 98.34 |
| 1,170.84 | 18.01 | 2.38 | Current Assets | 757.64 | 10.83 | 1.62 |
| 49,181.59 | 756.64 | 100.00 | | 46,613.38 | 665.91 | 100.00 |

*1 US\$ = ₹65 as on 31st March 2018 and 1 US\$ = ₹70 as on 31st March 2019





Financial Highlights

BAI HIRABAI J. N. TATA NAVSARI CHARITABLE INSTITUTION

| INCOME | | | | | | |
|------------------------------|------------------|--------|-----------------------------------|------------------------------|------------------|--------|
| For the year ended 31.3.2018 | | | Particulars | For the year ended 31.3.2019 | | |
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 5.23 | 0.08 | 85.04 | Interest | 5.25 | 0.07 | 82.29 |
| 0.43 | - | 6.99 | Sundries | 1.13 | 0.02 | 17.71 |
| 0.49 | 0.01 | 7.97 | Excess of Expenditure over Income | - | - | - |
| 6.15 | 0.09 | 100.00 | | 6.38 | 0.09 | 100.00 |

| EXPENDITURE | | | | | | |
|------------------------------|------------------|--------|-------------------------------------|------------------------------|------------------|--------|
| For the year ended 31.3.2018 | | | Particulars | For the year ended 31.3.2019 | | |
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 5.48 | 0.08 | 89.11 | Expenditure on Objects of the Trust | 4.50 | 0.06 | 70.53 |
| 0.67 | 0.01 | 10.89 | Administration Expenses | 0.46 | 0.01 | 7.21 |
| - | - | - | Excess of Income over Expenditure | 1.42 | 0.02 | 22.26 |
| 6.15 | 0.09 | 100.00 | | 6.38 | 0.09 | 100.00 |

*1 US\$ = ₹65 as on 31st March 2018 and 1 US\$ = ₹70 as on 31st March 2019

SOURCES OF FUNDS

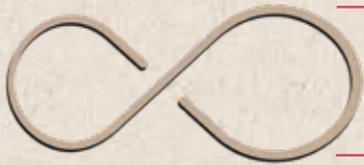
| As on 31.3.2018 | | | Particulars | As on 31.3.2019 | | |
|-----------------|------------------|--------|--------------------------|-----------------|------------------|--------|
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 62.87 | 0.97 | 83.45 | Trust Fund | 62.87 | 0.90 | 81.90 |
| 12.47 | 0.19 | 16.55 | Reserves and other Funds | 13.88 | 0.20 | 18.10 |
| 75.34 | 1.16 | 100.00 | | 76.75 | 1.10 | 100.00 |

APPLICATION OF FUNDS

| As on 31.3.2018 | | | Particulars | As on 31.3.2019 | | |
|-----------------|------------------|--------|----------------------|-----------------|------------------|--------|
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 8.32 | 0.13 | 11.04 | Immovable Properties | 8.27 | 0.12 | 10.77 |
| 0.08 | - | 0.11 | Movable Assets | 0.13 | - | 0.17 |
| 61.95 | 0.95 | 82.23 | Investments | 61.95 | 0.89 | 80.72 |
| 4.99 | 0.08 | 6.62 | Current Assets | 6.40 | 0.09 | 8.34 |
| 75.34 | 1.16 | 100.00 | | 76.75 | 1.10 | 100.00 |

*1 US\$ = ₹65 as on 31st March 2018 and 1 US\$ = ₹70 as on 31st March 2019





Financial Highlights

SARVAJANIK SEVA TRUST

| INCOME | | | | | | |
|------------------------------|------------------|--------|-------------------|------------------------------|------------------|--------|
| For the year ended 31.3.2018 | | | Particulars | For the year ended 31.3.2019 | | |
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 3.17 | 0.05 | 79.85 | Dividend | 3.17 | 0.05 | 76.57 |
| 0.80 | 0.01 | 20.15 | Interest | 0.87 | 0.01 | 21.01 |
| - | - | - | Income Tax Refund | 0.10 | - | 2.42 |
| 3.97 | 0.06 | 100.00 | | 4.14 | 0.06 | 100.00 |

| EXPENDITURE | | | | | | |
|------------------------------|------------------|--------|-------------------------------------|------------------------------|------------------|--------|
| For the year ended 31.3.2018 | | | Particulars | For the year ended 31.3.2019 | | |
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 3.19 | 0.05 | 80.35 | Expenditure on Objects of the Trust | 2.01 | 0.03 | 48.55 |
| 0.03 | - | 0.76 | Administration Expenses | 0.02 | - | 0.48 |
| 0.32 | - | 8.06 | Taxes Paid | 0.24 | - | 5.80 |
| 0.43 | 0.01 | 10.83 | Excess of Income over Expenditure | 1.87 | 0.03 | 45.17 |
| 3.97 | 0.06 | 100.00 | | 4.14 | 0.06 | 100.00 |

*1 US\$ = ₹65 as on 31st March 2018 and 1 US\$ = ₹70 as on 31st March 2019

SOURCES OF FUNDS

| As on 31.3.2018 | | | Particulars | As on 31.3.2019 | | |
|-----------------|------------------|--------|--------------------------|-----------------|------------------|--------|
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 3.15 | 0.05 | 32.24 | Trust Fund | 3.15 | 0.05 | 27.09 |
| 6.62 | 0.10 | 67.76 | Reserves and other Funds | 8.48 | 0.12 | 72.91 |
| 9.77 | 0.15 | 100.00 | | 11.63 | 0.17 | 100.00 |

APPLICATION OF FUNDS

| As on 31.3.2018 | | | Particulars | As on 31.3.2019 | | |
|-----------------|------------------|--------|----------------|-----------------|------------------|--------|
| ₹ in million | US\$ in million* | % | | ₹ in million | US\$ in million* | % |
| 8.67 | 0.13 | 88.74 | Investments | 8.67 | 0.13 | 74.55 |
| 1.10 | 0.02 | 11.26 | Current Assets | 2.96 | 0.04 | 25.45 |
| 9.77 | 0.15 | 100.00 | | 11.63 | 0.17 | 100.00 |

*1 US\$ = ₹65 as on 31st March 2018 and 1 US\$ = ₹70 as on 31st March 2019





Partners

HEALTH CARE

Aarogya Vahini Trust, Kolkata | ABHA, Bokaro | Action for Community Organisation, Rehabilitation and Development, Gudalur | Aditya Jyot Foundation For Twinkling Little Eyes, Mumbai | Aga Khan Foundation, Delhi | AIIMS, Nagpur | Alamelu Charitable Foundation, Vijayawada | Association for Health Welfare in Nilgiris, Gudalur | Ayyappa Bhajana Samithi, Kannur | BD Global Health, India Divison, New Delhi | BD Global Health, New Jersey, USA | Bill and Melinda Gates Foundation, New Delhi | Charutar Arogya Mandal, Karamsad | Children's Kidney Care Centre, St. Johns Medical College Hospital, Bangalore | Christian Hospital, Bissamcuttack | Collective Good Foundation (Nadathur Trust), Bangalore | Communication Developmental Eclectic Approach to Language Learning, Bangalore | Cuddles Foundation, Mumbai | Covacare, Coimbatore | Deepam Educational Society for the Health, Chennai | DELL India, Bangalore | DP Dhar Memorial Trust, Srinagar | Department of Senior Citizens, Telangana | Dobara, Hyderabad | Extension for Community Health Care Outcomes, Delhi | Family Planning Association of India , Mumbai | Forum for Health System Design & Transformation, Mumbai | Forum for Medical Ethics Society, Mumbai | Family Welfare Agency, Mumbai | FISE, Bangalore | Gilead Sciences, Inc, Foster City, California, United States | Govt. of Maharashtra, Mumbai | Government of Maharashtra, Maharashtra | Govt. of Orissa, Bhubaneshwar | GVK EMRI, Telangana | Harvard School of Public Health, Boston | HelpAge India, New Delhi | ILBS, Delhi | ILS College, Pune | Impact India Foundation, Mumbai | Indian Council of Medical Research, Delhi | Indian Institute of Cerebral Palsy, Kolkata | Institute of Psychological Health, Thane | Jan Chetna Manch, Bokaro | Kalap Trust, Dehradun | Kalike, Bangalore | Janseva Gramin Vikas va Shikshan Pratishtha, Yavatmal | Lala Chaman Lal Educational Trust for Boys and Smt. Bhagwan Devi Educational Trust for Girls, New Delhi | Livolink Foundation, Bhubaneshwar | Maharogi Sewa Samiti Warora, Chandrapur | Manjari Foundation, Dholpur, Rajasthan | Marrow Donor Registry India, Mumbai | Medical Research Foundation, Chennai | MedPrime Technologies, Thane | Mission Smile, Kolkata | MOBILITAS Technologies, Bangalore | MS Sharma Family Charitable Trust, Hyderabad | Multi-Organ Harvesting Aid Network Foundation, Chennai | National Institute of Research in Tribal Health, Jabalpur | North Bank Baptist Medical Association, Tezpur | Olirum Erodu Foundation, Erode | Ottapalam Welfare Trust, Ottapalam, Kerala | Parkinson's Disease and Movement Disorder Society, Mumbai | Prashanti Cancer care Mission, Pune | Public Health Foundation of India, New Delhi | Public Health Department, Karnataka | Public Health Department, Maharashtra | Public Health Department, Telangana | R.G.Manudhane Foundation for Excellence, Mumbai | Ramaiah Institute of Nursing Education and Research, Bangalore | Ramakrishna Mission Sevashrama, Mathura | Ramakrishna Mission Sevashrama, Vrindavan | Regional Medical Research Centre (ICMR), Odisha | Roshni Trust, Hyderabad | SAMHITA, Mumbai | Save LIFE Foundation, New Delhi | Schizophrenia Research Foundation (SCARF), Chennai | Schizophrenia Research Foundation, Chennai | Shree Bhagwan Mahaveer Viklang Sahayata Samiti, Jaipur | Society for Education, Action and Research in Community Health, Gadchiroli | Spastic Society of Karnataka, Bangalore | Sri Aurobindo Society, Puducherry | Sri Ramachandran Trust, Bangalore | Sri Satya Sai Institute of Higher Studies, Anantapur, Andhra Pradesh | Sri Satya Sai Orphanage Trust, Trivandrum | Swasth Foundation, Mumbai | Sanctus Rehabilitation Care Foundation, Pune | Smt. Ramabai Keshav Thackrey Vishvastha Santha , Mumbai | Sri Aurobindo Institute of Culture, Kolkata | St. John's Medical College, Bangalore | Studionext, Delhi | Symbiosis Institute, Pune | Tata Consultancy Services, Bangalore | Tata Institute of Social Science, Mumbai | Technical resources from Stanford University, Stanford, USA | The Banyan, Chennai | The Deaf Aid Society, Bangalore | The Hans Foundation, New Delhi | The Lepira India Trust, Delhi | The National Association for the Blind, Mumbai | United Care Development Services, Hyderabad | University of WARWICK, UK | Vijayavahini Charitable Foundation, Vijayawada | Vijayavahini Charitable Trust, Hyderabad | Yugrishi Shriram Sharma Acharya Charitable Trust, Kolkata

NUTRITION

Alwar Mewat Institute of Education and Development (AMEID), Alwar | Amhi Amchya Aarogyasathi, Gadchiroli | Antara Foundation, New Delhi | BMGF, New Delhi | CECOEDECON, Jaipur | Centre for Microfinance (CmF), Jaipur | Centre for Unfolding Learning Potentials (CULP), Dausa | Dharmalife Foundation, New Delhi | DWCD, Rajasthan | Food Safety Authority of India (FSSAI), New Delhi | Global Alliance for Improved Nutrition (GAIN), New Delhi | Good Nutrition 4 All Foundation (GN4AF), Mumbai | Government of Andhra Pradesh, Andhra Pradesh | Government of Maharashtra, Maharashtra | Harvard University, Cambridge | India Impact Foundation, Mumbai | Indian Institute of Health Management Research (IIHMR), Jaipur | Karnataka Health Promotion Trust (KHPT), Bangalore | Mars Catalyst, Hyderabad | Mars Inc., Hyderabad | MCF - DoFPD, New Delhi | MHRD - DoSE&L, New Delhi | MoHFW, New Delhi | MWCD, New Delhi | National Dairy Development Board (NDDB), Anand, Gujarat | NITI Aayog, New Delhi | POSHTIK Network, New Delhi | Prayatr Sanstha, Dholpur | RGMVP Rae Bareilly, UP | Sakal Social Foundation, Pune | Shiv Shiksha Samiti Ranoli, Tonk | Solutio Global, New Delhi | St. John's Research Institute (SJRI), Bengaluru | Tata Consultancy Services (TCS), Mumbai | The India Nutrition Initiative, New Delhi | Tribal Development Department, Maharashtra | UNICEF, New Delhi | University of California, California | University of Toronto, Toronto | Vijayavahini Charitable Trust (VCF), Vijayawada | World Bank, New Delhi

WATER

Arghyam, Bengaluru | Bharat Petroleum Corporation Limited, Mumbai | Bhartiya Jain Sangathan, Pune | Bill and Melinda Gates Foundation, New Delhi | Centre for Microfinance, Jaipur | Clinton Health Access Initiative, Delhi | Coastal Salinity and Prevention Cell, Ahmedabad | Collectives of Integrated Livelihoods, Jamshedpur | Conrad N. Hilton Foundation, LA, USA | Drinkwell Technologies, USA | Harsha Trust, Bhubaneswar | Himmothan, Dehradun | Hindustan Petroleum Corporation Limited, Mumbai | HT Parekh Foundation, Mumbai | IIT Bombay, Bombay | Jaldhaara Foundation, Delhi | Kalike, Yadgir, Karnataka | Maharogi Sewa Samiti, Chandrapur | MIT, USA | NEIDA, Kohima | One Drop Foundation, Montreal, Canada | Pani Foundation, Delhi | Reviving the Green Revolution (RGR), Ludhiana | Swades Foundation, Mumbai | Swasthya Foundation, Mumbai | Tata Projects Community Development Trust, Hyderabad | Titan, Bengaluru | University of New South Wales, Australia | Vijayavahini Charitable Foundation, Vijayawada, Andhra Pradesh | World Bank, Washington D.C., United States of America

LIVELIHOOD

Access Livelihoods Foundation, Hyderabad, Telangana | Aga Khan Rural Support Programme, India (AKRSP), Ahmedabad, Gujarat | Centre for Microfinance (CMF), Jaipur, Rajasthan | Centre for Microfinance and Livelihoods (CML), Guwahati, Assam | Coastal Salinity Prevention Cell (CSPC), Ahmedabad, Gujarat | Collectives of Integrated Livelihoods Initiative (CINI), Jamshedpur, Jharkhand | CML, Guwahati | Daksh Society, Bengaluru, Karnataka | Darbar Sahitya Sansad, Bhubaneswar | Dastkar Andhra, Hyderabad | DHANII, Mumbai, Maharashtra | Foundation for Ecological Security (FES), Ahmedabad, Gujarat | Himmothan Society (HMS), Dehradun, Uttarakhand | International Institute of Water Management (IWMI), New Delhi | Kalike, Bangalore, Karnataka | Kamalnayan Jamnalal Bajaj Foundation, Mumbai, Maharashtra | Livolink Foundation, Bhubaneswar, Odisha | Mahashakti Foundation, Bhubaneswar | NABARD, Mumbai, Maharashtra | NEIDA, Kohima | North East Initiative Development Agency (NEIDA), Kohima, Nagaland | Odesh, Thoubal, Manipur | Panjabrao Deshmukh Krishi Vidyapeeth (PDKV), Akola, Maharashtra | Professional Assistance for Development Action (PRADAN), New Delhi | Punjab Agriculture University, Ludhiana, Punjab | Reviving Green Revolution Cell (RGR), Ludhiana, Punjab | Srijani Foundation, Patna, Bihar | SHARE - Society to Heal Aid Restore Educate (SWADES), Mumbai, Maharashtra | Syngenta Foundation India (SFI), Pune, Maharashtra | TITAN, Bangalore, Karnataka | Transforming Rural India Foundation (TRIF), New Delhi | TRISHULII, Dehradun, Uttarakhand | Vijayavahini Charitable Foundation (VCF), Vijayawada, Andhra Pradesh | Vikasanvesh Foundation (VAF), Pune, Maharashtra | WomenWeave Charitable Trusts, Mumbai | YUVA Mitra, Nashik, Maharashtra

EDUCATION

Ambedkar University, New Delhi | Avasara Leadership Institute, Maharashtra | British Council, Maharashtra | Centre for Microfinance & Livelihood (CML), Assam | Centre for Microfinance (CMF), Rajasthan | Collectives for Integrated Livelihood Initiatives (CINI), New Delhi | Edelgive, Maharashtra | Himmotthan Society, Uttarakhand | Inter-University Centre for Astronomy & Astrophysics (IUCAA), Pune | Jamia Milia, New Delhi | Kalike, Karnataka | Khan Academy India, Delhi | Livolink Foundation, Odisha | Massachusetts Institute of Technology, USA | Shantilal Muttha Foundation, Maharashtra | Sumitomo Mitsui Banking Corporation (SMBC), Maharashtra | Tata Institute of Social Sciences, Maharashtra | Tata Trent, Maharashtra | USAID, New Delhi

DIGITAL TRANSFORMATION

BGVS, Bhubaneswar | Bill and Melinda Gates Foundation, Seattle | CINI, Ranchi | Dhvani, Delhi | Fields of View, Bangalore | FRIEND, Delhi | IIT, Madras | Innodatatics, Bengaluru | Janseva Gramin Vikas va Shikshan Pratishthan, Yavatmal | PwC, Mumbai | Vikas Anvesh Foundation, Pune

ENERGY

Centre for Microfinance and Livelihood, Guwahati | Clean Cooking Alliance, Washington D.C | Collectives for Integrated Livelihood Initiatives, Jamshedpur | Dharma Life Foundation, New Delhi | Foundation for Innovation and Social Entrepreneurship, Bangalore | GE India Industrial Pvt. Ltd., Bangalore | Grameen Intel Social Business Ltd., Dhaka, Bangladesh | Grassroots Trading Network for Women, Ahmedabad | McCann Health India, New Delhi | Nexleaf Analytics, Los Angeles | Prayas Juvenile Aid Centre, New Delhi | Sambodhi Research & Communications, New Delhi | SELCO Foundation, Bangalore | Tata Power Delhi Distribution Limited, New Delhi | TERI, New Delhi

SPORTS

Aizawl Diocesan Education Society | All India Football Federation | All Manipur Polo Association | Atletico de Madrid | Bhaichung Bhutia Football School, Delhi | Bovelander Hockey Academy, Netherlands | Collectives for Integrated Livelihood Initiatives (CINI), New Delhi | Centre for Microfinance & Livelihood (CML), Assam | Colaba Sports Academy, Mumbai | Cricket Live Foundation, New Zealand | Directorate of Education, GoM | Goals for Girls, United States of America | Golf Foundation, Delhi | Himmothan Society (HMS), Dehradun, Uttarakhand | Hockey Ace Foundation (HAF), Jharkhand | Kalike, Yadgir, Karnataka | Mary Kom Regional Boxing Foundation, Manipur | Meghalaya Football Association | Mizoram Badminton Association | Mizoram Football Association | Mizoram State Sports Council | North East Initiative Development Agency (NEIDA), Kohima, Nagaland | Olympians Association of India, Mumbai | Pragatee Foundation, Mumbai | Pro Sport Development Trust, Delhi | Pullela Gopichand Badminton Foundation | Society for Rehabilitation of Visually Challenged, Kerala | South United Sports Foundation, Mumbai | Tata Steel | Tata Strive | Youth Affairs and Sports, Govt. of Manipur

SKILL DEVELOPMENT

ALEAP, Hyderabad | Bharat Petroleum Corporation Limited (BPCL) – Mumbai Refinery, Mumbai | Bharat Petroleum Corporation Limited (BPCL), Mumbai | Bolineni Mediskills Pvt. Ltd., Hyderabad | Centre for Microfinance (CMF), Jaipur | Centre for People's Forestry (CPF), Hyderabad | Cipla Foundation, Mumbai | EduBridge Learning Solutions Ltd, Mumbai | Gem Learning Services Pvt. Ltd. (NIBF), Raipur | Grameen Evam Samajik Vikas Sansthan, Ajmer | HCL Foundation, Noida | Himmotthan Society, Dehradun | Hindustan Petroleum Corporation Limited (HPCL) – Mumbai Refinery, Mumbai | ICA Eduskills Pvt. Ltd., Kolkata | Indian Hotels Company Limited, Mumbai | Industree Crafts Foundation, Bengaluru | KWatt Solutions Pvt. Ltd, Bengaluru | L&T - Electrical & Electronics, Mumbai | L'Oréal India, Mumbai | Mindtree Foundation, Bengaluru | National Thermal Power Corporation, Noida | OSDA – Mobus, Bhubaneswar | People Awareness for the Rural Development Agency, Nuapada | Premier Centre

for Competency Training (PCFCT), Chennai | Sahyadri Farms, Nashik | Sastra University, Chennai | Sattva, Bengaluru | Seed Infotech, Pune | SELCO Foundation, Bengaluru | Skill Development and Entrepreneurship Department, Govt. of Maharashtra, Mumbai | Skills Tech, Chennai | SLS Learning Solutions Ltd., Mumbai | Susmita Bagchi, Bhubaneswar | SVP Philanthropy Foundation, Bengaluru | Tata Capital Financial Services Ltd., Mumbai | Tata Chemical, Mumbai | Tata Communications, Mumbai | Tata Community Initiatives Trust, Mumbai | Tata ELXSI, Mumbai | Tata Global Beverages Limited, Nashik | Tata Institute of Social Sciences (TISS), Mumbai | Tata Projects Community Development Trust, Hyderabad | Tata Projects Community Development Trust (TPCDT), Hyderabad | TechnoServe, Mumbai | Valuable Edutainment, Mumbai | Voltas Limited, Mumbai | Wipro GE Healthcare, Mumbai

MIGRATION

Aga Khan Foundation (AKF), Delhi | Government of Odisha | Government of Telangana | Grameen Development Services (GDS), Lucknow | Grameen Evam Samajik Vikas Sansatha, Ajmer | Kalahandi Organisation for Agriculture and Rural Marketing Initiative (KARMI), Kalahandi | Livolink Foundation, Bhubaneswar | Neural Bits | PARDA, Nuapada | Rajasthan Shram Sarathi Association, Udaipur | Sahbhagi Shikshan Kendra, Lucknow | Schneider Electric, New Delhi | Trust Community Livelihood (TCL), Lucknow | Urmul Khejri Sansthan, Nagaur | Youth Council for Development Alternative (YCDA), Boudh | Youth for Unity and Voluntary Action, Mumbai

URBAN HABITAT

Brick Eagle Social Housing Foundation, BESHF | Cadasta Foundation, Washington | Centre for Urban and Regional Excellence, New Delhi | Indian Housing Federation, Bengaluru | Livolink Foundation, Bhubaneswar | Norman Foster Foundation, Spain | Omidyar Network, Silicon Valley | SPARC Pvt. Ltd, Bhubaneswar | Tata Institute for Social Sciences, Mumbai | Urban Design Research Institute, Mumbai | Youth for Unit and Voluntary Action, Mumbai

SOCIAL JUSTICE AND INCLUSION

Arpan, Mumbai, Maharashtra | Association for Rural and Urban Needy, Delhi | Bhartiya Samaj Seva Kendra, Pune, Maharashtra | Child in Need Institute, West Bengal | Common Cause, Delhi | DAKSH, Karnatak | Disha, Maharashtra | Indian Council for Child Welfare Assam, Assam | Jan Sahas, Madhya Pradesh, Rajasthan | Jan Seva Gramin Vikas Va Shikshan Pratishthan, Yavatmal, Maharashtra | Prisons Department and Correctional Services, Government of Maharashtra, Maharashtra | Resource Cell for Juvenile Justice, Maharashtra | Society for Assistance to Children in Difficult Situation (SATHI), Bengaluru, Karnataka | TANDA, West Bengal | Tata Institute of Social Sciences, Mumbai, Maharashtra | The Aangan Trust, Mumbai, Maharashtra | TISS Fellows, Maharashtra | Udayan Care, Delhi | Vidhi Centre for Legal Policy, Delhi | Wings2Fly, Gujarat

ARTS & CULTURE

1947 Partition Archives, Delhi | Aga Khan Trust for Culture, Delhi | Ambedkar University, Delhi | Anamika Kala Sangam Trust, Kolkata | Chhatrapati Shivaji Maharaj Vastu Sangrahalaya, Mumbai | Dhruvad Sansthan, Bhopal | Film Heritage Foundation, Mumbai | Forum for Knowledge and Social Impact, Mumbai | Haffkine Institute for Training, Research & Testing, Mumbai | Himalayan Society for Heritage and Art Conservation, Nainital | India Foundation of the Arts, Bengaluru | Indian Writers' Forum, Delhi | Kattaikkuttu Sangam, Kanchipuram | Kochi Biennale Foundation, Kochi | Mehrangarh Museum Trust, Jodhpur | MS Swaminathan Research Foundation, Chennai | Mumbai Police Foundation, Mumbai | Museum of Art and Photography, Bangalore | Ninasam, Heggodu | Sameeksha Trust, Mumbai | Shankar Mahadevan Academy, Mumbai | The Marg Foundation, Mumbai

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TATA TRUSTS

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