“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 a suffering fellow being. 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
For over a century now, the Trusts have endeavored to achieve lasting positive change in the lives of many, especially those subsisting on the margins. These efforts are at the heart of our core philosophy to use philanthropy as an instrument for social transformation.

A tradition that has strongly engendered efforts to affect not just change but build strong and resilient communities that are equipped to counter the serious challenges that lie ahead, such as growing income and social inequality, the wide-ranging impacts of climate change, and resulting scarcities and deprivations.

The continuing impacts of the global Coronavirus pandemic include considerably reversing crucial development gains made in some key areas, such as gender equality, poverty alleviation, food security, education, health, and nutrition. During the year under review, the Trusts have continued their ongoing efforts to rebuild what has been lost during the last two years, strengthen the foundational work done in other verticals, and foray into new projects guided by hope in the immeasurable capacity of our communities to regenerate and thrive.

The Trusts are advancing their efforts to provide quality and affordable cancer care in India through the novel “Distributed Model of Cancer Care,” which envisions opening 17 cancer care facilities across Assam, Jharkhand, Maharashtra, and Andhra Pradesh. The cancer care programme screened over 64,000 individuals for oral, breast, and cervical cancer during 2021-2022, besides training over 22,000 frontline workers, along with 980 physicians and Ayush practitioners.

As with any attempt to affect enduring change, sustainability is key. The stark reality of a world coping with a climate emergency has reiterated this more cogently and is an urgent reminder of the destructive and irreversible results of delayed action. Seeded by the Trusts, the India Climate Collaborative aims to position India as a global climate change movement leader. It has launched programmes in critical sectors, including air...
quality, land use, water, sustainable energy, sustainable agriculture, climate data, and risk assessment.

Forging ahead with the core commitment towards continued engagement with grassroot-level communities, the Trusts’ numerous field teams and partner organisations closely collaborated with multiple levels of government, like-minded organisations in the corporate and social development sectors, NGOs, and civil society groups to implement programmes effectively and on a large scale.

The Trusts’ livelihood-based interventions helped establish 82 federations with 155,000 members, achieving a cumulative annual turnover of ₹980 million, while 29 Farmer Producer Organisations with a membership of 115,000 members reported a total turnover of ₹3.79 billion across project areas.

The Trusts’ engagements in the field of nutrition focus on addressing malnourishment and undernourishment amongst children and young mothers covering villages and Anganwadi centres through the National Nutrition Resource Centres and provision of data analytics support to the Women and Child Development division of the NITI Aayog. One hopes to influence and improve the nutritional status of the vulnerable sections of our population thereby positively impacting health, increasing individual potential and productivity, and supporting economic development.

The Trusts also initialised collaborations with 14 state governments for the implementation of community-centric safe drinking water programmes under the scope of the centre’s Jal Jeevan Mission. This aims to provide safe, assured, and adequate drinking water to all rural households across the country by 2024. Over a three-year period, the Trusts will also work to cover over 3,500 villages across 32 districts, benefiting more than 1.25 million individuals (250,000 households).

While there is no denying the power of individual thought—the immense capacity of a single person to envision change on a grand scale—it is only through the power of community that we can realise our collective vision of building an equitable and inclusive future. This hopeful reimagining of future possibilities cannot be possible without the Trusts’ employees, partners, and donors, who are passionately invested in the shared purpose of building resilient communities and empowering the most disadvantaged and dispossessed. For it is their work that is driving positive change and uplifting communities across India.
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A FINANCIAL OVERVIEW
SIR RATAN TATA TRUST
AND ALLIED TRUSTS
The year that was:
The total disbursals made by the Trusts during the year were ₹8,604.62 million (US $ 113.22 million). Disbursals of ₹7,858.27 million (US $ 103.40 million) were made on all programme grants during the year and small grants touched ₹21.25 million (US $ 0.28 million). The total disbursals to individuals amounted to ₹725.10 million (US $ 9.54 million).

Details of grant disbursals: 2021-2022

<table>
<thead>
<tr>
<th>Type of grant</th>
<th>₹ in million</th>
<th>US$ in million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution:</td>
<td></td>
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<tr>
<td>Programme grants</td>
<td>7,858.27</td>
<td>103.40</td>
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<tr>
<td>Endowment grants</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Small grants</td>
<td>21.25</td>
<td>0.28</td>
</tr>
<tr>
<td>Individual grants</td>
<td>725.10</td>
<td>9.54</td>
</tr>
<tr>
<td>Total</td>
<td>8,604.62</td>
<td>113.22</td>
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</table>

₹10 million is ₹1 crore; 1 US $ is approximately equal to ₹76

Institutional grant disbursals / Direct Implementation Project Expenses (Theme wise): 2021-2022**

<table>
<thead>
<tr>
<th>Thematic Area</th>
<th>₹ in million</th>
<th>US$ in million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>5,778.60</td>
<td>76.03</td>
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<tr>
<td>Water</td>
<td>141.21</td>
<td>1.86</td>
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<tr>
<td>Energy</td>
<td>17.60</td>
<td>0.23</td>
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<tr>
<td>Rural Upliftment</td>
<td>563.01</td>
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<tr>
<td>Urban Poverty Alleviation</td>
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<tr>
<td>Education</td>
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<tr>
<td>Arts Craft and Culture</td>
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<tr>
<td>Institutions</td>
<td>348.90</td>
<td>4.59</td>
</tr>
<tr>
<td>Innovation</td>
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<tr>
<td>Total</td>
<td>7,879.52</td>
<td>103.68</td>
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**The figures in the table reflect spend in the financial year.

Grant Disbursements & Direct Implementation Projects: 2021-22

Individual grant disbursals: 2021-2022

<table>
<thead>
<tr>
<th>Type of grants</th>
<th>₹ in million</th>
<th>US$ in million</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Medical</td>
<td>308.90</td>
<td>4.06</td>
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<tr>
<td>Education</td>
<td>416.20</td>
<td>5.48</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>725.10</td>
<td>9.54</td>
<td>100</td>
</tr>
</tbody>
</table>
A FINANCIAL OVERVIEW
SIR DORABJI TATA TRUST
AND ALLIED TRUSTS
The year that was:
The total disbursals made by the Trusts during the year were ₹1,443.52 million (US $ 18.99 million). Disbursals of ₹1,091.30 million (US $ 14.36 million) were made on all programme grants during the year. Small grants touched ₹3.64 million (US $ 0.04 million). The total disbursals to individuals amounted to ₹348.58 million (US $ 4.59 million).

Details of grant disbursals: 2021-2022

<table>
<thead>
<tr>
<th>Type of grant</th>
<th>₹ in million</th>
<th>US$ in million</th>
</tr>
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<tbody>
<tr>
<td>Institution: Programme grants</td>
<td>1,091.30</td>
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<tr>
<td>Institution: Endowment grants</td>
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<td>-</td>
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<tr>
<td>Institution: Small grants</td>
<td>3.64</td>
<td>0.04</td>
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<tr>
<td>Individual grants</td>
<td>348.58</td>
<td>4.59</td>
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<tr>
<td>Total</td>
<td>1,443.52</td>
<td>18.99</td>
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</tbody>
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10 million is ₹1 crore; 1 US $ is approximately equal to ₹76

Institutional grant disbursals / Direct Implementation Project Expenses (Theme wise): 2021-2022**

<table>
<thead>
<tr>
<th>Thematic Area</th>
<th>₹ in million</th>
<th>US$ in million</th>
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<tbody>
<tr>
<td>Healthcare</td>
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<tr>
<td>Water</td>
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<tr>
<td>Energy</td>
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<td>-</td>
</tr>
<tr>
<td>Rural Upliftment</td>
<td>503.14</td>
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<tr>
<td>Urban Poverty Alleviation</td>
<td>4.56</td>
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<tr>
<td>Education</td>
<td>111.03</td>
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<tr>
<td>Arts Craft and Culture</td>
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<td>Institutions</td>
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<tr>
<td>Innovation</td>
<td>5.31</td>
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<tr>
<td>Total</td>
<td>1,094.94</td>
<td>14.40</td>
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**The figures in the table reflect spend in the financial year.

Grant Disbursements & Direct Implementation Projects: 2021-22

2021-22

<table>
<thead>
<tr>
<th>Thematic Area</th>
<th>%</th>
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<tbody>
<tr>
<td>Rural Upliftment</td>
<td>46.0%</td>
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<td>Urban Poverty Alleviation</td>
<td>0.4%</td>
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<tr>
<td>Education</td>
<td>10.1%</td>
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<tr>
<td>Arts, Crafts and Culture</td>
<td>1.1%</td>
</tr>
<tr>
<td>Institutions</td>
<td>18.4%</td>
</tr>
<tr>
<td>Innovation</td>
<td>0.5%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>23.4%</td>
</tr>
</tbody>
</table>

Individual grant disbursals: 2021-2022

<table>
<thead>
<tr>
<th>Type of grants</th>
<th>₹ in million</th>
<th>US$ in million</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>239.96</td>
<td>3.16</td>
<td>69</td>
</tr>
<tr>
<td>Education</td>
<td>108.62</td>
<td>1.43</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>348.58</td>
<td>4.59</td>
<td>100</td>
</tr>
</tbody>
</table>

ANNUAL REPORT 2021-22
BUILDING CAPACITIES TO ADVANCE HEALTH SYSTEMS

Coverage (up to March 2022)

- 28 States and 8 Union territories
- 630 Districts
- 29,326 Villages
- 346,520 Households
- 21,102,614 Beneficiaries
OVERVIEW

The biggest barrier to healthcare planning and delivery is a lack of real-time data on healthcare needs, disease burden and its spread, poor governance, and monitoring of existing facilities, especially in Primary Health Centres (PHCs) and Community Health Centres (CHCs). Training and capacity building at government health facilities is limited only to select health programmes. Interpersonal communication skills, administrative skills, monitoring and supervision, and soft skills are largely absent in the health system and this lacuna directly affects service delivery to the community. The sub-optimal provision of healthcare services at primary and secondary care centres further burdens tertiary care centres, resulting in patient dissatisfaction and inflated out-of-pocket expenditures for poor patients. That a significant gap exists in healthcare human resources in terms of availability, distribution, capacities, and medical infrastructure, is widely known.

The Trusts are endeavours to address these challenges by helping build a healthy nation where quality, affordable, and patient-centric healthcare is accessible to all Indians. The focus remains on improving access to, and quality of primary healthcare, by addressing the underlying challenges in human resources, infrastructure, technology adoption, etc. These levers will assist in better planning and delivery of healthcare in a cost-effective manner. A considerable change management effort, aimed at technology adoption and better management practices among care providers, is crucial for the success of these initiatives. Considering the need for supporting public health systems and minimising disease burden in the community, the Trusts are implementing health interventions under four themes, with a need to create timely access to primary care and improve quality of care in project areas. These include:

**Health Systems Strengthening:** It involves collaborating with central and various state governments, providing technical and technological support for capacity building among a public health workforce, improved utilisation of health facilities, and data driven decision making through technical support units. Interventions are currently ongoing in Maharashtra, Telangana, Madhya Pradesh, and Chhattisgarh.

**Non-Communicable Diseases (NCDs):** To prioritise early detection of non-communicable diseases across large populations, the Trusts partnered with the Government of India to provide technical support for a pan-India NCD screening initiative. NCD technical support units provide expertise at the national level for policy making, issue guidelines, as well as support over 25 state governments in capacity building for staff and the adoption of technology for efficient NCD screenings. The Trusts are also implementing community-based screening initiatives with the help of Mobile Medical Units (MMUs) and have adopted telemedicine as an approach in Uttar Pradesh and Andhra Pradesh. Mental health initiatives under this theme are being implemented for face-lifting government-run mental hospitals and undertaking district-level screening for mental health issues in the Nagpur region of Maharashtra.
Communicable Diseases: The focus here is on preventing the spread of communicable diseases through various initiatives. For example, the Malaria-Free Odisha programme ensures community empowerment to fight Malaria with resources and awareness, while grants given to academic organisations ensure research and advocacy to combat diseases, such as Tuberculosis and AIDS.

KEY ACHIEVEMENTS

• 52,206,553 screenings were undertaken; 600,676 referrals were made, 7,058,274 individuals were examined, 2,415,904 individuals were diagnosed, and 2,933,771 individuals underwent treatment using CPHC (Comprehensive Primary Health Care) software.

• Trainings conducted on the NCD app: 22,112 health professionals were trained during FY 21-22 across 20 states and union territories. Between November 2021 and March 2022, 830,894 health IDs were created using CPHC software, as part of the Government of India’s Azadi ka Amrit Mahotsav programme.

• The Government of India sanctioned ₹27 million for replication of the model Urban Primary Health Centre (UPHC) project at three other corporations and requested the Government of Maharashtra to expand, as well as deepen the reach of the project. Notably, the model UPHC project was selected as a best practice at an Intercity Forum under the PPP (Public Private Partnership) model for strengthening UPHCs.

• Over 200,000 telemedicine consultations have been undertaken thus far under the Health System Strengthening (Hyderabad) programme.

• As part of an MoU signed with the Government of Chhattisgarh, the Trusts, through a grant to Sanjeevani Hospital (a Nodal Centre for treatment of Congenital Heart Diseases (CHDs)), supported the development of a model programme for continuum of care in the screening, early detection, linkage, and treatment of CHDs. Around 13,000 children were screened, and 540 CHD surgeries have been conducted so far under the programme.

• A rehabilitation centre was operationalised for long-stay patients at the Regional Mental Hospital, Nagpur for building local civil society collaboration and setting up community-based processes. 17 enrolments have been conducted so far.

• The Hospital Augmentation Initiative of the Trusts, operationalised in the wake of the second wave of the Covid-19 pandemic, addressed some critical healthcare gaps, with a focus on high case-load geographies in some of the underserved and vulnerable communities. This initiative had a very specific goal, which was to ensure that hospital beds in tier 2 and tier 3 towns were made ‘Covid Ready’ in adequate numbers, leading to a multiplier effect in terms of the number of humans lives saved. This included repurposing existing hospital beds in different specialties to deal with Critical Covid Care Management, and providing sustainable Oxygen generation methods to cater to Covid-induced respiratory distress. In total, 975 beds were set up for treatment of Covid-19 at 7 hospitals across 4 states.
GOING FORWARD

• A five-year strategy for the Healthcare portfolio will be developed by working groups that have been constituted for conducting desk research, collating secondary data, documenting learnings, collaborating with other verticals to gain regional team insights, etc.

• Based on successful pilot projects in various components of healthcare, the Trusts have finalised a five-year strategy that will scale up successful health interventions, including Health Systems Strengthening (HSS) through the establishment of Care Coordination Centres (CCCs), ASMAN (RMNCH+A), Model UPHCs, etc.

BEST PRACTICES

• Activation of 16 outpatient departments at the Primary Health Centre level and 1 rural hospital under the District Mental Health Programme to provide medical consultations nearer to patients’ homes, thereby improving accessibility to services and reducing indirect costs.

• The Trusts’ teams across various states have helped government counterparts (the key stakeholders) in monitoring their performance by sharing daily updates on programme achievements.

CHALLENGES FACED

The Covid pandemic has deeply impacted the programme. Many government health facilities and personnel were occupied with the treatment of Covid cases and related work, which affected the pace of implementation of the Trusts’ programmes.

ELDER SPRING PROGRAMME

Considering the success of the Elder Spring Programme and its ability to fill in a much-needed care gap for senior citizens, the Government of India’s Ministry of Social Justice and Empowerment decided to scale up the pilot and set it up as a national helpline, with Tata Trusts and the NSE Foundation acting as technical and knowledge partners. Elder Spring was rebranded as Elder Line, with the same toll-free number (14567), and expanded to other states. Elder Line provides free information, guidance, emotional support, field interventions, and rescues in cases of abuse to improve the quality of life of senior citizens. Since Elder Line’s pan-India launch in May 2021, over 576,000 calls have been received in 23 states/UTs, and over 59,000 callers have been serviced directly. Elder Line was dedicated to the nation by the Hon'ble Vice President, M. Venkaiah Naidu on October 1, 2021, during the Vayo Naman 2021 function at New Delhi. As of March 2022, Elder Line is fully operational in 23 states/UTs, with over 790 professionals taking calls from the connect centres established in the respective states/UTs in local languages, along with the use of Hindi, English, and delivering services on-field.
Improving primary healthcare access in India through technology interventions

The use of technology to consolidate and harness health data of a large and varied population, such as in India, has been instrumental in improving access to primary healthcare, especially for rural and remote communities.

To that end, Tata Trusts have supported the development of a digital platform for screening of Non-Communicable Diseases (NCDs) in collaboration with the Dell Foundation. This online health portal is a tool to access timely medical consultation for many. One such case is of a woman residing in Churu district of Rajasthan who was able to access medical care on time. The woman had been coping with acute stomach pain for an extended period and had also experienced sudden and inexplicable weight loss.

Unable to treat either condition with the home remedies she had been advised to use initially, she was enrolled in the Trusts’ Non-Communicable Diseases (NCDs) Portal, enabling easy access to a physician. Upon examination, she was diagnosed with Extrapulmonary Tuberculosis, followed by a nine-month treatment programme leading to a complete recovery.

India has registered a marked increase in the number of Non-Communicable Diseases (NCDs), such as cardiovascular disease, diabetes, hypertension, cancers, etc. in the recent decades, which has only reinforced the need to strengthen access to, and delivery of, primary healthcare across the country. While government efforts include the introduction of the National Programme on Prevention and Control of Cancer, Diabetes, CVD and Stroke (NPCDCS) and the ‘Ayushman Bharat’ healthcare insurance programme, the Trusts have also been working in close concert with government and non-government agencies to improve primary healthcare facilities.

The Trusts’ interventions aim to strengthen government programmes by focussing on early screening, diagnosis, and referral management for Non-Communicable Diseases (NCDs), through skill building of frontline workers, such as ASHAs and ANMs, stepping up technology adoption, providing a continuum of care through access to regular treatment, and follow-ups and access to appropriate medicines in a timely manner.

The combined efforts of state and district officials, and the Trusts’ team have led to the enrolment of more than 10 million individuals on the Non-Communicable Diseases (NCDs) portal. This is valuable and significant health data, which has also allowed this large cohort to access primary healthcare with just a click of a button, especially during the physical restrictions imposed by the pandemic.
While disrupting healthcare access in an unprecedented manner, the COVID-19 pandemic has also proved to be a game changer in primary and secondary healthcare delivery for rural and remote communities through the successful expansion of telemedicine. The Tata Trusts have been instrumental in this expansion through a successful collaboration with the Government of Telangana to set up Care Coordination Centres (CCCs) and telemedicine units across the state.

Laxmaiah P, a 45-year-old farmer from Raghupatiipeth village in the Nagarkurnool district of Telangana experienced this first-hand. The hard physical labour involved in his daily farming routine resulted in a back injury, rendering him incapable of farming his land. Home remedies proved futile, and he was advised to visit Mahbubnagar for consultation. But the long travel time and expenses involved kept him from making the visit.

Someone then told him about consulting a specialist through a video at the local government-run Primary Healthcare Centre (PHC) in his village. During the initial physical examination, the medical officer at the PHC booked an appointment for Laxmaiah on the same day for a video consultation with an Orthopaedic specialist—Dr Parmeshwari at the Government General Hospital in Mahbubnagar.

During the video session, Laxmaiah explained his condition, also demonstrating the physical pain and disability he was experiencing. After reviewing the information provided, Dr Parmeshwari issued an electronic prescription to the PHC, along with further advice relating to physical therapy for Laxmaiah.

“Speciality telemedicine services in government health facilities are benefiting thousands of people from lower socio-economic sections. They also help reduce their out-of-pocket expenses spent on travel, consultation fees for private specialist, and medicines,” says Dr. Parmeshwari.

Incorporating an innovative hub and spoke model in Telangana, the state government provided the CCC infrastructure, hubs, and spokes for the programme, while the Trusts pitched in with IT infrastructure, handled software development, implementation, and training. This ensured that speciality and virtual health services were delivered seamlessly to remote parts of the state, through a network of 71 hubs and 1,249 spokes, during the last 15 months.

The programme has also successfully onboarded 981 specialists on to its telemedicine platform, with an average of 60 percent of them providing virtual speciality consultations. PHCs were also connected with district hospitals in 33 districts of Telangana under the programme, facilitating a total of 2.05 lakh telemedicine consultations.

With regular follow-ups conducted in a similar manner, Laxmaiah recovered quickly and resumed his daily farming chores. “This was especially helpful for a poor farmer like me, as I was in a lot of physical pain and could not undertake travel and was also unable to afford the expense. But through telemedicine, we now have access to such good doctors sitting here in the village.”
The social stigma surrounding mental health illnesses in India continues to prevent constructive and much-needed healthcare delivery in the field, as does the absence of supporting and accessible infrastructure. This was the primary reason for Sadik Ali Shah’s (name changed) illness remaining undiagnosed and untreated for years. His family’s poor financial condition and negligible access to mental health resources at the primary care level further worsened his condition.

A resident of Kamptee in Nagpur, Sadik lost his father at an early age. Having had a troubled childhood, he was forced to start earning a living from the age of 12 years to support his family of four, including his mother and three siblings. He found employment in nearby factories and as a result missed out on any formal education.

Around the age of 16, Sadik started experiencing certain psychotic symptoms, including lethargy, unconsciousness, irritability, sleeplessness, lack of appetite, etc. His family found him muttering to himself and claiming to hear voices that others around him could not. In the absence of any formal clinical examination and given his family’s general lack of awareness about how to address his illness, Sadik’s condition exacerbated, and he took to wandering aimlessly, very often losing his bearings and having to be located and brought back home.

Following a similar incident, Sadik’s family was advised to visit the Regional Mental Hospital in Nagpur (RMHN) to get help, where he was diagnosed with schizophrenia. The family had to discontinue treatment after some time, given the time and expense involved in travelling to RHMN on a regular basis.

But a chance visit to the sub-district hospital in Kamptee put Sadik’s mother in touch with an ASHA worker who made the family aware about the ongoing District Mental Health Programme (DMHP) being run under Tata Trusts’ Udaan—an innovative health initiative—to help the Maharashtra state government develop and implement critically needed mental health programmes. As a result, Sadik was able to resume regular visits to the hospital for check-ups and counselling, as well as procure his regular dose of medication.

This has resulted in a huge difference in Sadik’s condition, with most of his psychotic symptoms having subsided. He has also started working again at a nearby factory, and is in regular touch with the Udaan team, who continue to conduct psychosocial counselling with him, along with making his family more aware about his condition and the importance of family support, maintaining regular medicine intake, and physical exercise for his eventual recovery.
CANCER CARE

MAKING IT MORE ACCESSIBLE AND AFFORDABLE

- 430 Camps conducted
- 152 Trainings conducted at Tobacco Free Educational Institutes
- 37,137 Youth sensitised through anti-tobacco campaign
- 64,581 Individuals screened for oral, breast and cervical cancer

Coverage (up to March 2022)
OVERVIEW

With over 1.4 million new reported cases of cancer every year, India has an increasing burden of cancer. Most of these cases are reported in later stages of the disease, leading to a high mortality rate of about 50%. This problem of high incidence and delayed detection is aggravated by:

• Poor infrastructure and low availability of skilled medical expertise to treat the disease.

• Existing cancer care facilities being concentrated in metros and tier-1 cities, resulting in patients having to travel long distances to seek treatment and care. This leads to high out-of-pocket expenses and consequently, high dropout rates along the treatment pathway.

• Increasing adoption and spread of unhealthy lifestyle habits.

• Lack of awareness related to benefits of early detection.

The novel “Distributed Model of Cancer Care,” has been implemented under the Cancer Care Programme of Tata Trusts to provide cancer patients and their caregivers better access to quality and affordable care that is closer to their homes, and to reverse the early to late detection ratio of cancer from 30:70 to 70:30. The model follows a four-pronged approach.

• The Access pillar of the model focuses on making quality infrastructure and medical professionals available closer to patients’ homes. A step-down model of infrastructure has been put in place, under which Apex Centres, Comprehensive Cancer Care Hospitals, and Day Care Centres are being developed. Varied approaches have been adopted to ensure the successful operation of these units. These include direct operations, build and handover, and the units acting as knowledge partners for similar initiative entities. A comprehensive sourcing strategy has also been developed to recruit and train medical professionals doctors, nurses, and technicians. Fellowships and certificate programmes have been started to upskill and cross-skill these professionals.

• The Affordability pillar has been deployed to make central and state government insurance schemes available at all network cancer care health establishments. Bulk buying of state-of-the-art cancer care diagnostic and treatment equipment and centralised rate contract pharmacy services have further reduced costs.

• The Quality pillar ensures standardised guidelines are available and practiced for diagnosis and treatment. All the centres will be guided by National Cancer Grid (NCG) treatment guideline protocol, and are networked via digital technology for virtual tumour boards, telemedicine consults, etc.

• The Early Detection pillar works to reverse the early to late detection ratio of cancer. Multi-pronged approaches have been adopted to enhance awareness, cancer screening, and to discourage tobacco and alcohol consumption—a major risk factor for many cancers. Palliative care is being made available for improving quality of life of cancer patients and their caregivers.
KEY ACHIEVEMENTS

• Infrastructure units (Cancer Care Centres) are nearing completion. Over 500 domain-trained doctors, nurses, and technicians have been recruited for seven centres at Barpeta, Dibrugarh, Jorhat, Darrang, Kokrajhar, Lakhimpur, and Tezpur in Assam; Tirupati in Andhra Pradesh, Ranchi in Jharkhand, and Chandrapur in Maharashtra.

• Four categories of doctors have been recruited for Cancer Care Centres to be operated by the Cancer Care Programme under the “Distributed Cancer Care Model.” These include:
  
  i) 45 oncology specialists, including medical oncologists, surgical oncologists, radiation oncologists, nuclear medicine consultants, radiologists, onco-pathologists, and anaesthesia specialists.

  ii) Post-graduate doctors from multiple specialities hired as fellows to undergo training for three years, wherein they spend a year at a high-volume cancer centre and two years at Cancer Care Programme Centres working as specialist registrars. Upon completion of the fellowship, these doctors will be absorbed by the programme as per suitability, eligibility, and requirement.

  iii) Doctors with MBBS degrees are hired as general duty medical officers to assist oncology specialists in consultation and treatment of patients at day care, OPD, IPD, post-operative, and palliative care.

  iv) Dentists are working as public health doctors in community outreach programmes in Assam, Tirupati, Ranchi, Chandrapur, and Cuttack. They are engaged at the ‘Swasth Kiosks’ and in community outreach activities for cancer screening and awareness. These public health doctors are also engaged in the training and capacity building of frontline health workers for oral cancer screening.

• 235 nurses have been hired at Tirupati, Ranchi, Chandrapur, and Assam. These include oncology specialist nurses, palliative care nurses, and outreach nurses. All freshly recruited nurses undergo a mandatory 12 week-long Nursing Induction Programme, while experienced nurses undergo a two-week long Nursing Induction Programme. The Cancer Care Programme has also designed a special 11-month Nursing Fellowship Programme to upskill registered nurses as oncology specialist nurses.

• 176 technicians have been recruited for the Cancer Care Centres in Assam, Mumbai, Tirupati, and Ranchi and are being trained in onco-pathology, radiology, radiation therapy, laboratory, anaesthesia, and to work in the Central Sterile Supply Department (CSSD).

• There has been a renewed impetus in ‘early detection’ efforts made by the outreach teams across locations. Frontline workers are being trained to promote cancer awareness messages deeper into the community, with the aim of increasing cancer screening. Staff at the Health and Wellness Centres (HWCs) are being trained to conduct screenings for oral, breast, and cervical cancers. The kiosks continue to provide screening services to patients, caregivers, and visitors at the respective hospitals.
GOING FORWARD

• Seven Cancer Care Centres will be commissioned in Assam (Barpeta, Dirugarh, Jorhat, Darrang, Kokrajhar, Lakhimpur, and Tezpur) during the first quarter of FY 22-23.

• Sri Venkateswara Institute of Cancer Care and Advanced Research (SVICCAR), Tirupati, will start operations in the first quarter of FY 22-23.

• Oncology centre at Yenepoya will become operational in the first quarter of FY 22-23.

• Ranchi Cancer Hospital and Research Centre (RCHRC) will be commissioned in the second quarter of FY 22-23.

• The State Cancer Institute (SCI) in Guwahati, which is an apex institute, two Cancer Care Centres in Silchar and Diphu in Assam, and the Chandrapur Cancer Centre in Chandrapur, Maharashtra will start operations during FY 22-23.

• The Public Health Programme will be scaled up in multiple districts of Jharkhand and Andhra Pradesh.

CHALLENGES FACED

• Administrative delays in the grant of mandatory licences and compliances.

• Infrastructural requirements impeded by labour and material shortages.

• Delayed medical equipment delivery from abroad due to chip shortage/shipping challenges.
With India experiencing a marked increase in the incidence of cancer cases in the recent past, ramping up healthcare and palliative care infrastructure for the treatment of various types of cancer has become crucial. At the same time, a paucity of adequate human resources, especially the shortage of trained nursing staff has slowed progress in this direction.

Tata Trusts’ first-of-its-kind Nursing Fellowship Programme (NFP) to upskill Registered Nurses (RNs) as Oncology Specialist Nurses (OSNs) aims to plug this crucial gap, which provided both Shaik Salma and N. Syamala with exactly the kind of professional fillip they were looking for.

Alumni of the Sri Venkateswara Institute of Medical Sciences (SVIMS) in Tirupati, Andhra Pradesh, both Salma and Syamala were lucky to find professional breaks soon after graduation. While Salma was invited to work in SVIMS’ Radiation Oncology Department, Syamala was placed in the Medical Oncology Department of her alma mater.

After acquiring considerable experience working as junior nurses for six years, both found openings at the Sri Venkateswara Institute of Cancer Care & Advanced Research (SVICCAR) to further advance their nursing skills by undergoing training at the Tata Memorial Hospital (TMH), Mumbai.

Syamala and Salma became eligible for the Trusts’ nursing fellowship as they had already been a part of SVICCAR’s ongoing Cancer Care programme. The free-of-cost fellowship helps selected nursing staff develop specialised knowledge, skills, and experience in Oncology nursing. The experience proved valuable, allowing the participants to advance their clinical skills for effective use in SVICCAR’s cancer care unit.

Salma is now a part of the team that set up the inaugural Radiation Therapy Department at SVICCAR, and says, “The NFP programme has been great for my professional development as trainings are provided by experts in the field. Learning objectives are achieved through assignments, case presentations, and participation in health talks. I have now gained experience and confidence as a senior staff nurse to be able to help my juniors.”

A certified Palliative Care Nurse from the Indian Association of Palliative Care, Syamala feels privileged to be working at SVICCAR, which has been instrumental in her career growth providing her new pathways to learning. She says, “I received special training on how to use a chemotherapy port needle and feel confident about practising my skills in the day-care centre. I have also been trained to provide counselling and health education to my patients.”

Based on a public-private partnership model, SVICCAR has been set up in collaboration with the Alamelu Charitable Foundation (ACF), a Tata Trusts’ associate organisation set up in 2017, to transform cancer care in India.
India's north-east region has seen a marked increase in tobacco-related cancers, such as oral and lung cancers, with the number expected to increase significantly going forward. Many of these cancers are curable through screening and early detection, but a general lack of awareness and poor supporting infrastructure has prevented meaningful behaviour change.

Such a scenario has proved to be a hindrance in the treatment of thousands of patients, such as 60-year-old Jalal Uddin, diagnosed with suspected oral cancer, basis community screening at a government Health and Wellness Centre (HWC) in Hatizuzua, Nagaon district of Assam. He was subsequently referred to the Guwahati Medical College and Hospital (GMCH) in 2021, where he was advised by the attending physician to undergo an ultrasonography (USG)-guided fine needle aspiration cytology (FNAC) procedure and a sputum test.

The local ASHA and frontline worker informed the Trusts’ Patient Navigator about Jalal Uddin, who facilitated an appointment and visit to the State Cancer Institute (SCI).

Jalal Uddin’s diagnosis was delayed due to the pandemic, but in May 2021 he was told he had metastatic carcinoma, or an advanced stage of oral cancer. He was then referred to SCI for further treatment, where he was advised to undergo further tests, including an endoscopy-guided biopsy.

Unable to endure the physical discomfort during the biopsy, Jalal Uddin refused to do the procedure again, which delayed his treatment by many months. A patient navigator’s efforts to make him more aware about his condition and the treatment involved also proved futile.

The Trusts’ community-based awareness programmes use different cohorts working in the community, such as Accredited Social Health Activists (ASHAs), Auxiliary Nurse Midwives (ANMs), NGOs, Panchayats, community leaders, and student bodies, to improve knowledge and awareness about cancer.

These programmes also aim to boost participation in screening camps conducted at local Primary Health Care (PHCs) Centres, hold awareness talks, rallies, and focus group sessions to promote early detection and bring about community-wide behaviour change, especially among patients strongly resisting treatment, such as Jalal Uddin.

It is the concerted efforts of local health practitioners and community workers that eventually convinced Jalal Uddin to commence his radiation therapy. He is now on his way to recovery, albeit a delayed one.
The Tata Trusts have been pioneers in the field of cancer care in India, with the establishment of the Tata Memorial Hospital (TMH) in Mumbai in 1941. In the subsequent years, and especially more recently, the Trusts have stepped up efforts to launch initiatives that encompass the entire range of cancer care from preventive to palliative. These include efforts to deliver affordable and standardised care closer to the patients’ homes.

This proved to be a boon for Usha Rajeshwar Devgade, a resident of Mul near Chandrapur, Maharashtra. After feeling unwell for an extended period, she decided to undergo a screening exam in Chandrapur, where she was diagnosed with ovarian cancer and was referred to the National Cancer Institute (NCI) at Jamtha in Nagpur district.

In 2018, the Trusts had helped NCI to upgrade hospital infrastructure and equipment, as part of its country-wide interventions to support the formation of a National Cancer Grid—a pan-India network of major cancer centres, research institutes, patient groups, and charitable institutions that work towards establishing uniform standards of patient care for the prevention, diagnosis, and treatment of cancer.

After undergoing nine cycles of chemotherapy at NCI, Usha also underwent surgery in November 2020. Unfortunately, she relapsed nine months later, following which she had to undergo further chemotherapy. Her deteriorating health given the extreme side effects of her radiation treatment, and the mounting travel and treatment costs incurred during this time, forced her family to halt treatment.

In February 2021, a medical officer at the Mul rural hospital advised Usha to visit the Trusts’ health kiosk set up at the Government Hospital in Chandrapur, which was nearer to her home. The cancer care team admitted her to the day-care center set up in hospital, where she was attended to by the resident oncologist. Upon examination, Usha was advised to undergo further treatment with the assurance that this would involve much less travel and associated costs, which has reassured her family and given her a renewed hope for recovery.
NUTRITION
ADDRESSING MALNUTRITION TO IMPROVE HEALTH OUTCOMES

Coverage (During 2021-22)

- Pan India (Anganwadi centres, NNRC and provision of Data Analytics support to Women and Child Development division of the NITI Aayog)
- 35 villages (Andhra Pradesh) Providing field-level support through Poshan Sakhis under the “Yes to Poshan” programme
- 840 samples tested for Vitamin D
OVERVIEW

Malnutrition remains a major threat to the survival, growth, and development of children. Good nutrition is an essential requirement for leading a healthy life and achieving one’s full growth potential. Malnutrition can very often lead to disease and morbidity and is an important marker for determining inequality. Though India’s nutritional outcomes have improved consistently over the years, the country is still grappling with child malnutrition, as reflected in the high prevalence of low birth weight, stunting, wasting, and severe wasting. Adequate nutrition during infancy and early childhood is essential to ensuring that children are healthy and reach their full growth and development potential.

Malnutrition is a complex condition caused by multiple factors. In India, it has taken the magnitude of a silent emergency. Undernutrition and micronutrient malnutrition in children, adolescents, and women of reproductive age are rampant, resulting in severely constraining the country’s potential. Hence, it is important to break this cycle to transform the lives of the country’s citizens and catalyse societal development.

The Trusts recognise that undernutrition in children is a complex problem. Efforts are underway but will yield results only when combined with serious attention to promoting the adoption of correct child feeding practices during the first 1,000 days of life of a child. Serious efforts need to be made, not only by the Integrated Child Development Services (ICDS) or public health departments, but also the private health sector, including as part of corporate social opportunities (CSOs), by non-profit and community-based organisations, industry, and media in disseminating information.

Improving nutrition lies at the core of global development and is central to achieving the United Nations’ Sustainable Development Goals (U.N. SDGs). Success in nutrition is linked to each of the SDGs; consequently, improving nutrition is foundational to achieving sustainable global development.

Tata Trusts’ Nutrition portfolio works towards improving the coverage of nutrition services, leveraging technology to improve nutrition governance, supporting capacity building among key functionaries, as well as conducting research to achieve better dietary and nutrition outcomes. The key focus areas of the portfolio are:

1. Food fortification to address the growing burden of malnutrition and hidden hunger - Fortification of staple foods has been identified as an important intervention for tackling the high levels of micronutrient deficiency prevalent in the country. The focus is on creating an enabling environment for staple food fortification in the country.

2. Maternal Infant and Young Child Nutrition (MIYCN) - High-impact interventions are being implemented to reduce the prevalence of stunting, wasting, and underweight in young infants and children, whilst prioritising the comprehensive management of Severe Acute Malnutrition (SAM) in India.

3. Gathering data for nutrition governance, policy, and advocacy for sustainable development.
KEY ACHIEVEMENTS

YES TO POSHAN IN ANDHRA PRADESH

• Adoption of Participatory Learning and Action (PLA) as an approach for all key functionaries, which can help bring the community together to identify, understand, and address nutrition problems of the community. The process comprises a series of meetings, in which community groups are encouraged to discuss, learn, and engage in participatory decision-making that will enable them to take action to address malnutrition problems.

• Revamping the capacity of actors, such as Anganwadi Workers (AWW), Accredited Social Health Activist (ASHA), family members, and members from community-based organisations, such as mothers’ groups, etc. through education to ensure essential nutrition, including breastfeeding and complementary feeding.

• Providing technical support to key programme functionaries on growth monitoring/promotion, dietary diversity, i.e., different foods and food groups as a good source for various macro and micronutrients to ensure nutrient adequacy.

• Popularising the adoption of nutri-gardens at Anganwadi Centres (AWCs) at the community level. This has been done by enhancing dietary diversity through a constant supply of micronutrients in the form of fruits and vegetables, which are sufficient to meet a family’s nutritional requirements.

TSU-WCD DIVISION OF NITI AAYOG FOR STRENGTHENING THE IMPLEMENTATION OF MISSION POSHAN 2.0

• Reviewing the erstwhile Poshan Abhiyaan and now Mission Poshan 2.0 for monitoring and evaluation guidelines through the technical support provided to the Niti Aayog, the team was able to provide data to support the findings of the National Family Health Survey (NFHS) for individual states and union territories (UTs). In addition, a few specific states have been supported in developing the action plan for addressing weight and anaemia-related deficiencies.

• Preparation of a booklet on Gender and Nutrition by the Women and Child Development division of the NITI Aayog with the technical support of Tata Trusts’ Nutrition team. The booklet:
  (a) emphasises the role of women as the nutrition gatekeepers of society
  (b) provides a situational analysis and strategy for improving health and nutrition outcomes among women, adolescent girls, and children
  (c) advocates best practices followed in aspirational districts relating to gender and nutrition
  (d) provides state-specific salient features and recommendations for improvement in gender and nutrition

• Facilitation of the compilation of best practices for Early Child Development (ECD) along with the NITI Aayog. This has been done by reviewing the status of ECD in India, gathering scientific evidence, programmes and policies, and through coordination with States/UTs. The team collected detailed
• To technically support the Central Project Management Unit (CPMU) of POSHAN Abhiyaan, MoWCD for quality implementation, periodic monitoring, and other programmatic areas, the NNRC provided Big Data Analytics (BDA) support, developing Behaviour Change Communications (BCC) and Jan Andolan Monitoring & Evaluation (M&E).

• The Nutrition team members at NNRC coordinated with state-level ICDS functionaries and consolidated the findings of national/regional-level consultations on early childhood development for children (0-3 years).

• Development of the governance dashboard for generating pan India factsheets and reports for analysing programmatic performance against various nutrition indicators.

GOING FORWARD

• Operationalising a comprehensive large-scale Child Malnutrition Programme with a special focus on Severe Acute Malnutrition (SAM).

• Providing technical and functional support to the National Nutrition Week (NNW)/Poshan Maah and aim to increase the knowledge and practice of consuming nutritious food, while fostering a healthy diet among mothers and children.

• Initiating the work plan for the Tata Trusts and Bill & Melinda Gates Foundation (BMGF) joint platform and providing technical support to the NNRC.

• Targeting fortification in social safety-net programmes, such as Mid-Day Meals and the Take-Home Ration programme of ICDS.

• Developing policy recommendations and publications as per the key findings of research studies on Vitamin D fortification of milk and oil on serum Vitamin D concentrations.

BEST PRACTICES

• Undertaking monthly review meetings with Technical Support Units at MoWCD and NITI Aayog, which gave insight into national-level policymaking and programme plans for nutrition.

• Undertaking monthly review meetings with Research Study Partners for programmatic updates and course correction.

• Participating in national and international consortiums, such as Development Partners Forum, IM/SAM and Stronger Foundations Global. These platforms provide perspectives on how the Trusts can differentiate and innovate.

SETTING UP AND SUPPORTING THE NATIONAL NUTRITION RESOURCE CENTRE (NNRC) AT THE MINISTRY OF WELFARE AND CHILD DEVELOPMENT (MOWCD)

• Reviewing the erstwhile Poshan Abhiyaan and now Mission Poshan 2.0 for monitoring and evaluation guidelines through the technical support provided to the Niti Aayog, the team was able to provide data to support the findings of the National Family Health Survey (NFHS) 5 for individual states and union territories (UTs). In addition, a few specific states have been supported in developing the action plan for addressing weight and anaemia-related deficiencies.

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• Facilitation of the compilation of best practices for Early Child Development (ECD) along with the NITI Aayog. This has been done by reviewing the status of ECD in India, gathering scientific evidence, programmes and policies, and through coordination with States/UTs. The team collected detailed information on ECD-related initiatives for children in the age group of 0-3 years and a document on best practices was compiled for nutrition functionaries of aspirational districts.
CHALLENGES FACED

• The guidelines for Mission Poshan 2.0 have been pending approval for a long time. Besides, these do not clearly mention the appetite test, frequency, and platform for a medical check-up, and the distribution of antibiotics, such as Amoxycillin, through the health system.

• Amendment in the FCRA Regulation Act and short-term license renewals.

EVALUATION OF NEWER TECHNOLOGIES FOR THE PREVENTION OF ANAEMIA IN PREGNANT WOMEN AND WOMEN IN THE REPRODUCTIVE AGE GROUP USING BIOCHEMICAL PARAMETERS

To investigate the impact of the use of iron-fortified iodised salt on haemoglobin levels, the Nutrition Foundation of India (NFI) undertook a community-based and open randomised study of two formulations: iron-fortified iodised salt and iodised salt, in 750 families. Families who were willing to participate in the study were provided with iodised salt, or one of the two approved formulations of iron-fortified iodised salt. Blood samples were collected from women in the reproductive age group at zero, six, and 12 months of use. The impact of the use of iron-fortified iodised salts and iron status is being assessed, and examinations for ferritin and Vitamin C reactive protein assays have also been done.

NFI also collected blood samples from pregnant women to assess their micronutrient nutritional status prior to, and after micronutrient supplementation. Besides, it sent coded samples in duplicate to a path lab for evaluation. The quality assurance tests for all the assays have been completed and were found to be satisfactory. The data analysis is being undertaken and the final reports are expected by December 2022.

VITAMIN D FORTIFICATION OF MILK AND OIL AND ITS IMPACT ON SERUM VITAMIN D CONCENTRATIONS

There have been very few effectiveness studies conducted globally to examine the effect of Vitamin D fortification on Vitamin D status, and in India, no such study has been undertaken. Given this scenario, an effectiveness study was commissioned by the Hirabai Cowasji Jehangir Medical Trusts (HCJMRI) to present and publish a comparative analysis of change in Serum 25(OH)D over a two-year period of consuming foods fortified with Vitamin D, compared with consuming unfortified foods.

This study is likely to provide conclusive results on: (a) whether the vehicles for fortification are appropriate or whether the fortificant or its amount needs to be changed; and (b) whether campaigns for buying fortified milk and oil are necessary, given that the fortified products are not more expensive than their non-fortified counterparts.
WATER SANITATION AND HYGIENE
SUSTAINABLE SOLUTIONS TO ADDRESS AN EMERGING NEED

Coverage (up to March 2022)

- 14 States
- 800 Villages
- 54,000 Households
- 30 Districts
- 8,000 Individuals trained on WaSH
- 200 Drinking water schemes completed
- 249,000 Individuals
OVERVIEW

India accounts for about 16% of the world’s population, but possesses only 4% of the global freshwater resources. Over the past few decades, the country has consistently drawn upon critical groundwater resources, which account for 40% of India’s water supply. Today, it is undergoing the worst water crisis in its history and is projected to touch critical water scarcity levels in the absence of any change or remedial measures.

Currently, over 600 million people face high to extreme water stress, with 75% of households having no access to drinking water on their premises. A McKinsey and Water Resources Group report estimates that in a business-as-usual scenario, the country’s water demand is expected to rise to a level that is twice the available supply, by 2030. This would translate into more than 40% of the population not having access to drinking water, and 6% of the country’s GDP being lost due to acute water scarcity by 2050. This would result in the biggest humanitarian crisis in the history of independent India.

Apart from microbial water contamination, the occurrence of diseases due to chemical contaminants, such as fluoride, arsenic, iron, nitrates, etc., is becoming highly prevalent in rural and urban areas due to the over exploitation of groundwater and other human induced problems like excessive usage of fertilisers, improper disposal of industrial waste, etc.

During the recent past, the institutional landscape for water in India has become somewhat fragmented, with about seven ministries and more than 10 departments having a say on different aspects of water management and use, with overlapping roles and responsibilities. The centre has facilitated, legislated, regulated, and funded states for implementing programmes dealing with various aspects of water, ranging from ground and surface water management, service delivery in urban and rural areas, to water for irrigation, which have been apportioned among a number of ministries with little to no coordination among themselves.

The Trusts’ Tata Water Mission (TWM) aims to create a healthy and water secure future for underserved communities by providing access to safe, assured, and adequate water and improved hygiene services through sustainable approaches covering 42 districts across 14 states.

OBJECTIVES OF Tata Water Mission

- Provide functional household tap connectivity to every household, by creating a user-centric and sustainable drinking water service delivery mechanism.

- Address water quality challenges through innovative context-specific and affordable solutions at the community and household levels.

- Promote water security approaches to make communities self-reliant for their water needs (drinking, domestic, and agricultural).

- Provide information and sustainable solutions across the value chain to promote safe and effective menstrual hygiene management.

- Create awareness among stakeholders through social behavioural change communication.

- Build a resilient ecosystem by developing an institutional structure and social capital.
**KEY ACHIEVEMENTS**

- Initialising collaborations with the state governments of Gujarat, Uttarakhand, Himachal Pradesh, Ladakh, Maharashtra, Karnataka, Jharkhand, Andhra Pradesh, Uttar Pradesh, Assam, Tripura, Punjab, Mizoram, and Nagaland for the implementation of community-centric safe drinking water programmes under the scope of the centre’s Jal Jeevan Mission (JJM). This ambitious programme promises to provide safe, assured, and adequate drinking water to all rural households across India by 2024. The Trusts’ Tata Water Mission will endeavour to cover over 3,500 villages across 32 districts, benefiting more than 1.25 million individuals (250,000 households) over a three-year period.

- Building sectoral capabilities through training and capacity building interventions for project teams. Over 300 personnel from the Trusts and associate organisations engaged in the JJM programme were trained on the planning, implementation and operation, and maintenance aspects of the project. Key thrust areas included mobilisation of the community through a participatory approach to develop strong village action plans at the village level, monitoring and surveillance of water quality, and the development of water security plans to ensure year-round water availability, along with improved service delivery.

- Developing a comprehensive gender strategy and operational plan to enhance women’s engagement in JJM, including playing an important role at various stages of programme implementation. Further, monitoring indicators were designed to learn progress and impact of this gender-balanced approach.

- Piloting Internet of Things (IoT) in rural settings, given that the changing IT landscape can help fulfil the aspiration of implementing ‘Smart Water Management’ in rural India. More than 20 villages across diverse remote geographical regions were selected and sensor-based systems were deployed for providing information about the quantity of water supplied to each household, data on quality parameters, such as residual chlorine, groundwater table, pressure of water supply at tail-end households, etc. on a real-time basis. The information has been put up in the public domain to promote transparency and accountability and more importantly, ensure that users are provided the necessary information to resolve the ground challenges posed to safe and assured drinking water on an equitable basis for all households.

- Enhancing work on springsheds as part of the Water Security Programme of TWM in Nagaland, Mizoram, and Uttarakhand. In the north-east, 106 springs were revived in 96 villages leading to an increase in spring discharge and improved water quality. Notably, there was an increase in the number of months of water available in 65% of the springs treated. Springshed management interventions were also undertaken in Uttarakhand and their impact measured.
GOING FORWARD

• Ideating, implementing, upscaling, and advocating the “One Water” concept through a water value chain approach. This will entail: (a) reducing and reforming water demand; (b) restoring and recharging water availability; (c) operating and maintaining water supply systems; and (d) ensuring continuation of safe sanitation, hygiene, and waste management, including menstrual waste.

• Providing support to the community for creating infrastructure at the grassroots level for drinking water supply, water conservation, storage, recharge, and wastewater reuse, as well as community sanitary complexes.

• Building capacity and strengthening institutions.

• Focusing on changing behaviours of the community and getting them involved in the process of efficient water management, which is critical to the success of the programme.

• Leveraging technology throughout the value chain of water, right from assessment to delivery to monitoring. The use of sensors to measure supply system efficiencies, identify damages, and reduce wastage will be an important aspect as well.

BEST PRACTICES

• “Smart Water Management” has been one of the important projects undertaken by the Trusts in partnership with Tata Community Initiatives Trust. Adoption of advanced technologies to improve consumer-centric service delivery mechanisms will help in charting new paths for building transparency. The power of information can be realised by users to seek better services to fulfil basic human needs, such as access to drinking water.

• Adoption of menstrual hygiene management interventions in some of the mainstream programmes undertaken by the government.
**MENSTRUAL HYGIENE MANAGEMENT – PHASE 1**

Phase 1 of the Trusts’ Menstrual Hygiene Management programme covered over 200,000 women and adolescent girls across seven states. The programme addresses the social taboos and culture of silence surrounding the issue at a societal level, along with health aspects linked to unhygienic menstrual practices resulting from a lack of awareness and resources at the community level. Phase 1 concluded in March 2022 and has been well received by various stakeholders, including the government, local institutions, and most importantly, rural women.

**IMPACT**

95% of the women have been made aware about menstruation being a biological process in areas of intervention, compared with 50% in non-intervention (controlled) areas.

65% of the women have shifted to using eco-friendly reusable pads during periods in the intervention areas, against just 20% in the controlled areas.

71% of the women in the intervention areas have started changing their pads during their monthly cycle at least three times a day, compared with only 13% of the women in the non-intervention areas.

80% of women using reusable pads in the intervention areas have started washing and drying it directly under the sun, compared with just 10% practicing such behaviour in the controlled areas.

83% of women appear to have become more comfortable about discussing menstrual issues with their family members post-intervention, compared with 36% in the controlled areas.

**CHALLENGES FACED**

- The Covid-19 pandemic resulted in a sharp drop in income levels among rural communities, prompting an unwillingness to pay for basic services, such as water.

- Erratic rainfall due to climatic change has also impacted groundwater availability, with sources drying up fast and in the absence of structured rainwater harvesting efforts, source sustainability will be a critical issue, going forward. Similarly, springs which are a major source of water supply to hilly regions are drying up fast and discharge in most of the central and western Himalayan region has fallen rapidly. Given this scenario, both climate mitigation and adaptation strategies need to be advocated among the local communities to enhance their resilience level.
Ever since she can remember or at least since she began to live in the small hamlet of Bamniya Faliya in Gujarat after her marriage, 42-year-old Champaben has been making a daily arduous trek to the nearby rivulet to fetch water. A trek that would often go waste as the rivulet dried up quickly during the long and hot summer months.

Poor access to safe and clean drinking water is a challenge that many communities living in the remotest parts of India, including tribal hamlets like Bamniya Faliya, face on a regular basis. Even as millions of people continue to face this challenge, the problem is only further exacerbated by a lack of toilets and abysmal sanitation, which is not only a serious quality of life issue but also has serious health implications for the vast population impacted by this deficit.

For women like Champaben and other residents of Bamniya Faliya, the irony of nursing aspirations to have a running supply of drinking water—something that a lot of us take for granted—is not lost. Tata Trusts, through its associate organisation Collectives for Integrated Livelihood Initiatives (CInI), has been working to transform the lives of tribal households in the central India tribal belt through targeted interventions.

CInI’s drinking water and sanitation intervention commenced in the village in 2015-16 through a collaboration with the Water and Sanitation Management Organisation (WASMO), Government of Gujarat, to ensure tap connectivity at each household. To achieve this, a new borewell was installed in 2018, and efforts made to ensure regular water supply through a stable electricity connection.

Further progress was made in last year, thanks to solarisation of the water connection and community-centred efforts made by the village’s Pani Samiti members, including the installation of chlorination units to ensure a safe water supply. The Trusts’ and CInI’s efforts have ensured access to water supply, besides construction of toilets for each household in Bamniya Faliya. Further, the Menstrual Hygiene Management intervention in the village is building awareness about safe and hygienic management of menstruation, focusing not only on women and adolescent girls, but also, on adolescent boys, as well as men in the hamlet.

Champaben no longer needs to trek for miles to fetch water every day.
For many adolescent girls and women in India, a general lack of awareness and the stigma attached to discussing menstrual hygiene acts as a significant barrier to promoting safe and healthy menstrual practices.

Tata Trusts’ Menstrual Hygiene Management (MHM) intervention aims to change this by fostering greater awareness and promoting the use of eco-friendly and sustainable MHM practices through a supply chain involving local Self-Help Groups (SHGs) and Cluster Resource Persons (CRPs), who help ensure access to good quality and eco-friendly menstrual absorbents for women and girls in under-resourced communities.

That is how 22-year-old Nazreen, a resident of Tendava Alpimishr village in the Bahraich district of Uttar Pradesh, learnt to use a home-based matka incinerator to dispose disposable sanitary napkins. Attending a session conducted by CRP Beenu helped Nazreen learn how to create an earthen pot incinerator. She also attended other information sessions based on the MHM programme’s Social Behaviour Change Communications (SBCC) campaign.

This has clearly impacted Nazreen’s personal approach to menstrual hygiene as she now buys and uses reusable cloth pads stitched by the MHM-run Shakti Stitching Centre. By introducing Nazreen and other women and girls in the village to an easy-to-use technology, such as the matka incinerator, along with the use of reusable cloth pads, has helped the Trusts’ teams to address issues of access, availability, and affordability of menstrual products in rural and remote communities.

The programme’s promotion of only reusable products with effective disposal techniques also ensures the safe disposal of used absorbents, thereby empowering women to make informed decisions about their menstrual health.
OVERVIEW

The wide-ranging environmental impacts created by climate change are among the biggest global risks today. Four of the top five global risks of 2018 were related to the environment, compared with 2012, when only one of the top five risks was environmental. India figures among the countries that are most vulnerable to climate change, given its high-risk exposure and limited ability to respond. The government has been leading efforts to meet this challenge by setting ambitious targets. Currently, India is the only country among the top 10 polluters globally to reaffirm its commitments made under the Paris Climate Agreement. But India’s climate response has been beset by challenges related to resources, awareness, and expertise.

Given this scenario, Tata Trusts has striven to align and support solutions that help create a stable climate, enabling sustainable development on all counts — ecosystems, economies, and communities. It has also committed resources to solutions, which strengthen the resilience of vulnerable communities and make them adaptable to the impact of climate change. The team has evolved an innovative and collaborative model of philanthropy to build and scale up adaptive and resilient models, which equip communities to face environmental challenges and mitigate future impact.

The focus is on

• Facilitating collaboration for human and ecological welfare
• Building the capacity of communities to equitably manage natural resources
• Funding research and thought leadership on tackling systemic environmental challenges

In due course, it has become increasingly clear that it is necessary to create societal platforms to address each issue in a thoughtful and collaborative manner to achieve maximum impact. The Trusts acknowledge that solving these problems would be more effective if it could bring in partners—whether from the government or the private sector—to maximise the reach of the impact. To meet this objective, the Trusts have seeded the India Climate Collaborative (ICC), an India-led platform, bringing philanthropies together to accelerate the country’s development, while exceeding its climate goals. The ICC envisions a thriving world where India shapes the global climate change movement. The Trusts’ belief is that this platform will substantiate the necessity for India to contribute to the global climate agenda and its impact on the populations of developing nations. The Trusts also collaborate with a wide range of NGOs, corporates, government agencies, communities, and climate experts to accelerate climate action. In the long run, partnerships and such collaborations will ensure a strong foundation for achieving global progress.

The Trusts’ goal is to advocate for policy, facilitate alignment in solutions among international and local institutions and individuals, in which each leverages their strengths to accelerate change, solve the climate challenge, and ensure a sustainable future.

KEY ACHIEVEMENTS

• Incubating programmes in spaces characterised by under-action or no action: The ICC has identified, co-created, and launched programmes in critical sectors, including air quality, land use, water, sustainable energy, sustainable agriculture, climate data, and risk assessment. These have been operational for the past 8 to 16 months, with a projected cumulative impact on 1 million lives over five years.

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1 Global Risks Landscape, World Economic Forum, 2018
2 HSBC Report, Fragile Planet, 2018
• **Building a cohort of domestic climate donors in India, both corporates and individuals:** The network has seen a six-fold growth, including the addition of 12 domestic and 6 international funders, who have pledged support to fund climate action through the ICC. In addition to directly funding 14 projects and research studies, the ICC has mobilised nearly ₹578 million (of which international funding constitutes ₹473 million) for climate action across over 25 funding opportunities through introduction and facilitation.

• **Building a cohesive network and platform for collaboration:** The ICC currently has a network of over 100 ecosystem partners willing to join hands and work together. The ICC has also built partnerships with various state governments, including Telangana, Andhra Pradesh, Himachal Pradesh, Maharashtra, Karnataka, and Odisha, as well as the Ministry of Home Affairs, by incorporating a Climate Risk Atlas (CRA) tool. The CRA is a sector-wise vulnerability assessment tool for Indian districts, which assesses risks, informs disaster plans, and helps with designing institutional capacity building.

• **Cementing India’s thought leadership at crucial international platforms:** The ICC has represented India at global forums to develop a Global South-focused narrative helmed by Indian leadership to influence key decisions in the developing world. Keeping this in mind, the ICC has led discussions and hosted round tables at several global climate-focused initiatives, including The Sustainable Markets Initiative by His Royal Highness (HRH) Charles, Prince of Wales, the Giving Pledge, UNFCCC Climate Dialogues, Project Drawdown’s Global Collaborative, and the U.S. Consulate’s Opportunities for U.S.-India Collaboration on Sustainability, among others.

## GOING FORWARD

**Over the next five years, the ICC will:**

• Aid the reduction of emissions and carbon intensity in critical, identified sectors, including agriculture, industrial decarbonisation, and state-level climate planning.

• Ramp up resilience of vulnerable populations through adaptation measures, including working towards building climate resilient cities, building a water diagnostic toolkit to enhance water security, and scaling ecosystem-based adaptation.

• Augment climate and environmental justice by building grassroots capacity to co-create just transition pathways and support communities through re-skilling and livelihood diversification.

• Accelerate climate finance by building a flourishing ecosystem for domestic climate funding in India by co-creating a pooled fund and platform for Nature-Based Solutions (NBS).

• Mainstream the climate narrative in India.

## CHALLENGES FACED

• Shifting the focus of other domestic donors towards a unique climate narrative, which is specific to and invests in, impactful climate solutions.

• Building capacity and enabling implementor organisations to solve for relevant problem statements.
BEST PRACTICES

• Knowledge creation – Defining climate research agenda and commissioning foundational research and unified metrics to drive action in India.

• Technical assistance and expertise - Synthesising priority expertise gaps in the sector.

• Building partnerships and networks - Building a connected ecosystem of all climate actors to improve decision-making and foster greater collective investments and partnerships.

• Developing sectoral and individual leadership - Encouraging philanthropies and influential individuals to engage in policy advocacy in India and on a global scale.

Designing scalable business models for clean energy-based cold storage solutions

As the planet warms at an unprecedented pace, posing a grave risk to global food security, the need to develop eco-friendly solutions to counter the far-reaching impacts of climate change has never been more urgent. Farming communities in Odisha have demonstrated the strong potential of scaling clean energy-based solutions into agricultural practices.

Rising temperatures have serious implications for the agriculture sector, where cooling underpins the ability of millions of farmers to practice horticulture, floriculture, and dairy farming. In India, inadequate access to farm-level cold storage facilities results in a high proportion of post-harvest agricultural losses, adversely affecting farming incomes.

Tata Trusts-led India Climate Collaborative (ICC) launched a pilot project to foster greater resilience and sustainability in the cold storage infrastructure used in the farming sector in Odisha. The project involved a collaboration with the SELCO Foundation to pilot three innovative, community-level Decentralised Renewable Energy (DRE)-based cold storage projects, which demonstrated the impact of these solutions on horticulture-practicing communities. A marked increase in farming incomes and a reduction in post-harvest losses reflected the success of the project.

“As climate change picks up speed, ICC has acted as a beacon of hope for numerous stakeholders, be it business or civil society. ICC is helping propel India towards balanced development and growth, without compromising on either. SELCO has collaborated with ICC to showcase models that synergise agriculture with sustainable energy to benefit cold storage chain capacity, proving that poverty eradication solutions that balance social and environmental sustainability are possible,” says Dr Harish Hande, founder and chief executive, SELCO Foundation.

Scaling such solutions to benefit other farming communities is also essential for reducing the carbon footprint of conventional technologies used in the sector. Currently, there are many barriers to doing so, such as high upfront costs, farmer’s access to financing, and poor market linkages. The Trusts have therefore commissioned a comprehensive and one-of-its kind study to assess cooling needs at a cluster level and to design a community-based business model framework that can replicate these solutions to scale, across clusters and agricultural value chains. Data collected during the study will form the basis of a blueprint for a new Tata Trusts initiative aimed at catalysing and improving access to affordable DRE-based cooling infrastructure.
Among the far-reaching impacts of accelerating climate change is a looming global water crisis, with India figuring among the worst-affected nations globally. With nearly six in 10 people depending on the agricultural sector for their livelihood in India, ramping up clean energy solutions that offer lasting resolutions for these problems is crucial.

Despite substantial investments, success in implementing interventions at scale has been limited as they largely fail to account for regional ground realities. Allowing local communities to manage and build capacity for their resources is critical for the success of any such intervention.

Based on a similar rationale, Tata Trusts-led India Climate Collaborative (ICC) has been working with the Ashoka Trust for Research in Ecology and Environment - Centre for Social and Environmental Innovation (ATREE-CSEI) to develop a water diagnostic toolkit. It uses open-source data to create tools that facilitate community programmes to improve water security (for instance, using digital tools to estimate the groundwater levels in the local watershed), plug in missing data layers, and develop training material for better design solutions.

As part of this project, CSEI launched Jaltol in November 2021—a free, open-source plug-in tool that simplifies water balance estimation. Jaltol was developed following extensive consultations with grassroots stakeholders.

Jaltol was piloted during training sessions with over 50 participants from more than 20 organisations and there are plans to continue improving the tool based on feedback from these sessions. CSEI will also focus on increasing engagement with civil society organisations to augment the uptake and usage of Jaltol.

Jaltol has greatly benefitted community members involved in rural water security planning as it provides them with data on their watershed and helps them estimate water budgets at the click of a button. This has helped improve water management practices followed by the gram panchayat for the benefit of the local community.

Veena Srinivasan, director, CSEI, ATREE shares, “ICC partnered with CSEI at ATREE in 2020 with the objective of co-creating systemic solutions for rural water security. Our joint objective was to help ICC’s network partners redirect investments and make data driven decisions about which interventions to scale, how, and where. Our initial research resulted in a set of typologies and metrics to evaluate rural water security interventions. ICC also helped us co-design the “Jaltol” water budgeting tool. It is a truly collaborative partner and has been open to all our ideas, and ICC’s commitment to leading these ideas to fruition has been phenomenal.”
MAKING LIVELIHOOD GENERATION EQUITABLE AND SUSTAINABLE

Coverage (up to March 2022)

19 States
90 Districts
287 Blocks
9,345 Villages
785,000 Households
3.8 MILLION Individuals

ANNUAL REPORT 2021-22
OVERVIEW

As part of its Rural Upliftment portfolio, the Trusts work with rural poor, particularly women, in an equitable and sustainable manner to ensure better access to assets and services, and control over productive capital. The focus is largely on poverty alleviation by increasing incomes and through the creation of a basic social and economic infrastructure.

This is supported by training rural women and youth, and skilling and employing marginal farmers. The creation of embedded entrepreneurs within a production framework, where their trainings are linked to ongoing job creation activities, allows for introducing long-term sustainability in the system. A ‘from the ground up’ approach to resource production and job creation implies that jobs are created as a response to a felt need, while allowing for outward growth of the market. Sparks of innovation either evolve or are brought in through research and development during various stages of resource use, processing, marketing, entrepreneurship, and in programme management processes itself. These lead to successful pilot projects, which are then scaled up, often across geographies.

The portfolio has grown around a central theme of community strengthening and growth. Integrated community-based interventions that strive to improve rural incomes by improving farming practices, water management, soil conservation, livestock and animal husbandry, market linkages, crafts, etc., form the core of the portfolio. Working closely with locally influential stakeholders, including relevant government departments, civil society, and market influencers, is also an important aspect of the process.

KEY ACHIEVEMENTS

- Starting from a base income of ₹40,000 to ₹45,000, most of the families covered under interventions have seen a jump in their annual income to ₹75,000 per annum, while a substantial portion fall in the ₹100,000 to ₹130,000 brackets.

- Close to 24,000 village-level community institutions, with a membership of over 285,000 members were operational in project areas.

- Annual turnover of ₹980 million was achieved by 82 federations, comprising 155,000 members. Similarly, annual turnover of ₹3.79 billion was reported by 29 Farmer Producer Organisations, comprising 115,000 members across the Trusts’ project areas.

- Out of a total outreach of 785,000 households, various agriculture interventions were undertaken with 524,000 households. Water harvesting structures, such as farm ponds, check dams, gully plugs, etc., were completed to cater to the irrigation needs of 33,000 acres of farming land, belonging to 28,000 households. Improved irrigation management practices (drip irrigation/sprinklers) were adopted by 26,000 households across 18,000 acres.

- High value agriculture initiatives with 172,000 households covering 95,000 acres resulted in higher incomes. High value horticulture (fruits and vegetables) was adopted by 92,000 households and covered 31,000 acres of orchards and fields. Other agriculture interventions were
undertaken across 980,000 acres and covered 216,000 households.

- Livestock-related interventions covered 306,000 households. While 169,000 households were covered under dairy, goat rearing, piggery and poultry interventions covered 84,000, 17,000 and 10,000 households, respectively. Interventions across fishery and other livestock covered 26,000 households.

- Non-farm interventions covered around 5,000 households, including around 1,000 entrepreneurs, whose average annual income stood at ₹110,000.

- Various rural marketing initiatives were taken up by apex level institutions across the country.

- This included marketing of 1,900 tons of agricultural inputs and around 100,000 tons of livestock inputs. On the output marketing side, these institutions sold 7,300 tons of agriculture produce and 8,750 tons of livestock produce.

- Training programmes were conducted for over 600,000 beneficiaries comprising 53,300 sessions. Besides, 130,000 community institution members were also covered through 16,500 training sessions.

- Awareness programmes on paddy straw management using the Happy Seeder technology and to prevent crop stubble burning in North India just before the onset of the Rabi crop season were also conducted, with approximately 130,000 farmers from 16 districts of Punjab and Haryana.

- A community-based tourism project has been initiated in the Tehri and Rudraprayag districts of Uttarakhand, along with funding from the MakeMyTrip Foundation.

- The Antaran programme now supports 2,400 artisans through 230 artisan entrepreneurs across six weaving clusters in four states. Over 2,000 market-friendly products were developed as an outcome of 2,200 education sessions held for the artisans. Over 50% of these artisan entrepreneurs now have access to direct digital sales channels, while 250 new B2B buyers have been introduced to them.

**GOING FORWARD**

- Evaluation of several technology providers across the “Farming as a Service” model.

- A new climate resiliency proposal using Agri Tech Hydroponics Fodder and multi-crop production system is being developed.

- In Uttarakhand, 1,000 households have been registered under an Organic Production Certification Programme.

- Given the initial success on hydroponic vegetables and fodder in Uttarakhand, hydroponic fodder stations are being planned in more states.

- Income resilience building through non-farm components in the context of the landless rural poor, resource sustainability crisis, climate change, natural disasters, economic shocks and less than 10% youth adopting farming as primary livelihood.

- Digitisation of FPOs - discussions are ongoing with service providers for the adoption of digitised forward and backward linkage solutions across 10 FPOs.
The Bird Flu outbreak in several states (Maharashtra, Kerala, Haryana, Madhya Pradesh, Chhattisgarh, Uttarakhand, Gujarat, Uttar Pradesh, and Punjab) in the first half of the year has reduced demand for poultry, resulting in low prices. After facing a prolonged surge in avian flu cases, the sector is now eyeing a recovery based on rising prices, fuelled by a pick-up in demand and shortage of birds in the market.

Over 5 million hectares of agricultural land was affected due to heavy unseasonal rains during November 2021. Cyclonic storms and flash floods affected over 5 million hectares across 20 states. Karnataka was the worst hit, with crop loss across an area of 1.4 million hectares (ha), followed by Rajasthan (679,000 ha), West Bengal (690,000 ha), Bihar (580,000 ha) and Maharashtra (455,000 ha). Other affected states included Tamil Nadu, Gujarat, Madhya Pradesh, and Odisha.

Both the crafts and tourism sectors experienced a cautious re-opening of markets, with inflationary trends subduing profit margins; this has been especially acute in the crafts sector where yarn prices have gone up as much as 40% in some cases.

**BEST PRACTICES**

**Climate Smart Agriculture and Livestock (CSAL)** – The programme focuses on adaptation mechanisms for climate change to deliver food security and sustainable increase in productivity and incomes. The highlight is an integrated approach to agriculture and livestock that also includes demand side measures. Major projects include:

- **Mission pulses programme in Uttarakhand:** Started in February 2018 and covering 125,185 beneficiaries in 12 blocks of nine districts of Uttarakhand, the programme aims to increase the annual income of 150,000 beneficiaries by between ₹50,000 and ₹70,000 from agriculture interventions, and by over ₹20,000 from pulses and legumes. A community institution-driven model has promoted the Trishuli brand for the marketing of agriculture commodities from 500 villages, which has already established market linkages with Mother Dairy, Tata Consumer Products Ltd., Big Basket, and Innoterra. Pilot testing to supply to the 25 SAFAL outlets is underway.

- **Central Himalayan Livestock Initiative - Phase 2:** Operationalised in January 2022, this programme builds on the first phase that covered 182,850 beneficiaries in 1,200 villages of 12 districts in Uttarakhand. The programme aims to increase the annual income of 300,000 individuals up to ₹130,000 through improved fodder/feed, breed, better management, health services, and marketing linkages. The programme will operate 40 self-reliant and self-sustained federations and develop 2,100 self-sustained individual entrepreneurs.

**Pathways to Prosperity: Lakhpati Kisan (PPLK)** – Launched in April 2015, this programme has covered 530,925 households in 1,093 villages of 15 districts of Jharkhand, Gujarat, Maharashtra, and Odisha. It aims to mitigate risks by ensuring financial security through a combination of layered interventions. Community institution-centered interventions with a market driven, demand linked approach, and innovative, technology driven solutions have helped thousands of families prosper. The Lakhpati Kisan model is one of the flagship models under the Rural Upliftment portfolio of the Trusts and the FPOs promoted under it have received several awards.

**CHALLENGES FACED**

- The Bird Flu outbreak in several states (Maharashtra, Kerala, Haryana, Madhya Pradesh, Chhattisgarh, Uttarakhand, Gujarat, Uttar Pradesh, and Punjab) in the first half of the year has reduced demand for poultry, resulting in low prices. After facing a prolonged surge in avian flu cases, the sector is now eyeing a recovery based on rising prices, fuelled by a pick-up in demand and shortage of birds in the market.

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- Both the crafts and tourism sectors experienced a cautious re-opening of markets, with inflationary trends subduing profit margins; this has been especially acute in the crafts sector where yarn prices have gone up as much as 40% in some cases.
Chamela Devi is among the thousands of women living in villages dotting India’s countryside whose lives have been transformed by the Tata Dairy Mission initiative.

With her income solely dependent on cultivating a small landholding and meagre sales generated from selling milk, Chamela, a resident of Patti village in the Pratapgarh district of Uttar Pradesh regularly struggled to provide for her family of eight, including a husband and six children.

Most farmers in India own a land holding of less than 2 hectares, making livestock rearing, and the assured and regular cashflows generated from it, critical for sustainable income. A lack of supporting infrastructure and guidance has made building capacity in key areas, such as milk production, breed improvement, and animal nutrition, a challenge.

The Tata Trusts set up the Dairy Health and Nutrition Initiative India Foundation (DHANII) as part of the initiative to help such farmers by collaborating with local community organisations to form a Milk Producer Company (MPC). Functioning as a cooperative made up local and regional producers, an MPC allows the member stakeholders to share profits.

That is how Chamela became a shareholder in the Shwetdhara Mahila MPC Ltd. (now known as the Shwetdhara MPC), set up in Pratapgarh in 2016 with initial funding support from the Trusts. Not only did this empower her socially and economically, Chamela also became an active member of a network driven by market-savvy female dairy producers armed with knowledge about the latest technology, infrastructure, and assured market linkages to grow their community-driven business.

“Good management by the farmers and the guidance we received from professionals completely changed the picture for us,” says Chamela.

She also managed to double her income and expand her livestock holding within a few years. The milk cooperative has further expanded its footprint in the region and currently operates with the help of a network of more than 300 villages and about 12,000 women members and their families in the districts of Pratapgarh, Bahraich, Balrampur, and Shravasti.
The creation of Self-Help Groups (SHGs) has been instrumental in empowering women entrepreneurs and reducing gender disparity across tribal communities in India. Sumitraben Sureshbhai Ninama, 36, practices farming in Dungarpur village of Gujarat’s Dahod district. Joining an SHG started by the Tata Trusts’ associate organisation—Collectives for Integrated Livelihood Initiatives (Clnl), under its Parivartan-Lakhpati Kisan initiative in Gujarat—changed her life.

Using traditional rainfed and mono-cropping agricultural techniques to grow maize and wheat on a two-acre piece of land to support a family of eight, Sumitraben struggled to make ends meet. Unreliable rainfall patterns, lack of knowledge about sustainable farming practices, increasing costs of cultivation, and dwindling returns forced her to borrow credit from a local moneylender, at a high rate of interest, to alleviate her situation.

With no improvement in her economic condition, Sumitraben and her husband had to resort to working as agri-labourers in the village to supplement their income. Attending a meeting organised by Clnl under the Parivartan-Lakhpati Kisan initiative to improve knowledge and scale up programmes in areas, such as agricultural productivity stabilisation, water resource development, and microfinance, gave her hope of turning things around.

During subsequent meetings, Sumitraben learnt more about credit practices, various helpful government social security schemes, including insurance and pension schemes, and support benefits offered by the agriculture department. Listening to her peers’ positive personal experiences about increased farming returns stemming from the use of new cultivation methods, access to quality inputs, and adoption of scientific practices to choose suitable crop combinations for optimal returns, gave Sumitraben the confidence to incorporate these learnings into her crop planning strategy.

Doing so helped Sumitraben augment her farming income substantially and improve her overall economic condition. Says Sumitraben, “My family is happier because of the substantial income generated from farming our land, which was not the case before. I will sincerely continue my efforts to adopt, scale up, and follow sustainable agriculture practices in the future as well.”
COMING TOGETHER TO EDUCATE AND EMPOWER A COMMUNITY

Coverage (up to March 2022)

11 States
312,678 Students
19,875 Teachers
1,989 Schools
OVERVIEW

The COVID-19 pandemic forced nationwide school closures, causing widespread learning disruptions for millions of children in India. The sudden, but rapid shift from in-person learning to online modes of instruction further exacerbated pre-existing inequities in education, especially for students belonging to rural and marginalised communities. This also pushed many children out of the school system, further deepening the digital divide.

The high number fatalities, especially during the initial phase of the pandemic, rendered many children at risk on account of them becoming orphaned and consequently losing access to a social support system, care, protection, and education.

Studies conducted across India showed a spike in learning losses, especially foundational learning skills, due to prolonged school closures. In addition to learning losses, the absence of regular schooling also left a lasting impact on the health, nutrition, and overall well-being of children, as many of them had earlier relied on school meals as a key source of daily nutrition. Studies have also documented that education disruption significantly limited the ability of many parents to work and increased the risk of violence against women and girls, in many cases resulting in a growing incidence of early marriages.

With no end to the pandemic in sight, the resumption of in-person learning was delayed multiple times during FY 2021-22.

This further reinforced the Trusts’ Education portfolio’s focus on addressing issues of equality and quality in education in India. To ensure that learning continues despite school closures during the second and third wave of COVID-19, and supported by the belief that communities would remain key to building back better post-pandemic, the Trusts took the following actions. Community-level education interventions were implemented for children in villages through Associate Organisations and partners at community learning centres and libraries. This was achieved with the help of a dedicated group of community volunteers, who supplemented these efforts with online learning, wherever possible.

These classes also doubled as much-needed hubs for social activity and human interaction, key for fostering learning and development among children. Centres located in remote areas offered a range of activities, including library activities, games, and teacher training, which ensured the continuation of education despite school closures, and also helped stem further learning losses. With the intensity of the pandemic waning in terms of the severity and number of infections, and despite a third wave occurring in January 2022, state governments geared up to safely re-open schools across states, with Anganwadis also re-opening in most states by the end of this financial year. The Trusts’ teams extended support to the re-opened schools and Anganwadis by focussing on children’s attendance, regularity, tracking out-of-school children, as well as supporting children to plug the gaps in learning at schools and in communities.

1 Azim Premji Foundation, 2021; The School Team, 2021
**KEY ACHIEVEMENTS**

- Under the regional initiatives carried out across Uttarakhand, Jharkhand, Odisha, eastern Uttar Pradesh, Rajasthan, Assam, Mizoram, Gujarat, Maharashtra, and Karnataka, the Trusts’ teams reached out to children through community-level volunteers to retain their engagement with the learning process, regardless of school closures.

- A community-based intervention entitled, ‘Promoting Learning during the Pandemic’ was implemented in Uttar Pradesh, Jharkhand, Karnataka, and Rajasthan, where a common baseline-endline of student assessment was undertaken to understand the status of learning in Languages and Mathematics. Across states, gains in these two categories ranged between 11% and 43%. 84% to 97% of the students (in Languages) and 72% to 96% of students (in Mathematics) scored above the benchmark cut-off defined for each grade, showing significant retention of foundational skills.

- Tata Trusts was invited by the central government to develop a course for the professional development of teachers on Experiential Learning, a concept also highlighted in the National Education Policy, 2020. An eight-week long certificate course on Experiential Learning for the 21st Century for educators from the Central Board of Secondary Education Board (CBSE) and Eklavya Model Residential Schools (EMRS) system was launched and offered to a batch of 259 teachers in 6 states, as part of a Continuous Professional Development (CPD) initiative. The course saw a completion rate of 74% among participating teachers. The course was created as part of a joint initiative between the Trusts, the CBSE, and the Trusts’ partners; namely, the Tata Institute of Social Sciences (TISS), Mumbai, and the Mahatma Gandhi International School in Ahmedabad.

- The Centre of Excellence in Teacher Education (CETE), seeded by the Tata Trusts at TISS, to strengthen the teacher education sector in the country was inaugurated on November 12, 2021, at TISS, Mumbai. CETE will focus on in-service, pre-service teacher education, policy advocacy, and research. The Centre also received recognition from the National Council for Teacher Education (NCTE) for B.Ed. and M.Ed. programmes offered under the innovative category, allowing multiple entry and exit options to students. It also launched an online Digital Badge course on ‘Inquiry Based Learning with Technology: Design and Implement WebQuest for Students,’ which is a self-paced course that endeavours to explore the concept of inquiry-based and problem-based learning activities for students using technology.

- CETE’s collaboration with UNESCO led to the publication of a report on ‘No Teacher, No Class- State of the Education Report for India 2021,’ authored by the former’s academic team. The report strongly recognises the importance of a teacher’s professional development for ensuring quality education among students and emphasises a teacher’s autonomy, motivation, and agency, through concepts like creating vibrant communities of practice.

- The Parag Initiative of Tata Trusts continued its work by:
  (i) supporting the development of children’s books in Indian languages, at schools, and community-based libraries; and
  (ii) launching the Parag Honour List 2022.
GOING FORWARD

- Design and roll out multi-state programmes focusing on Early Childhood Care and Education (ECCE) and in-school education. These programmes will address the impact of extended school closures by offering quality ECCE, strengthening the continuum between ECCE and early grades, and facilitating remediation and foundational learning through an alignment with NIPUN Bharat.

- Intensify engagement with parents and community members to provide active support to children’s learning and address their overall well-being.

- Complete a multi-state study on the impact of the pandemic on children and disseminate its findings.

- Based on the large number of out-of-school children estimated, based on micro-studies undertaken in Uttar Pradesh, a larger study has been proposed to understand the issue.

CHALLENGES FACED

- Despite best efforts, given the access barriers created by the pandemic, only a small percentage of children could be covered during the year. Undoubtedly, the extended closure of schools, coupled with the limited reach of online education due to a host of factors, has impacted the education and development of children, especially the younger generation.

- On re-opening of schools, teachers were found to have mainly focussed on completing the syllabus, irrespective of children’s current learning levels, which affected the actual learning progress.

- Low and irregular attendance of children at schools continued to be a challenge, further impacting continuity of learning inputs gathered from irregular children. The mid-day meal programme also did not resume in all states.
Enriching illustrations in children’s literature, one batch at a time

An experienced illustrator with several books credited to his name, Shivam Choudhary was looking for a way to upskill himself to the next level. “The Riyaaz Academy for Illustrators,” run by the Tata Trusts’ Parag Initiative—a flagship education programme—provided Shivam with just the right opportunity to refine his artistic skills.

Visual imagery forms an integral part of how children perceive the world around them, especially when they are first acquainted with books and reading. Learning during these formative years can be varied, but images continue to play an important role in the development of children’s sensory perceptions.

Good story books also play a crucial role in a child’s educational journey. Since 2005, the Parag Initiative has been working to strengthen the children’s literature ecosystem in India and to promote reading for pleasure, especially in regional languages. Illustrations form a defining part of children’s books, but a lack of supporting training infrastructure to build and nurture children’s book illustrators has impeded progress in this area.

To address this gap, the Trusts joined hands with noted education Civil Society Organisation (CSO) Eklavya and eminent children’s illustrator Atanu Roy in 2015 to start Riyaaz. Supported by Parag grants, first two batches of Riyaaz were run by Eklavya, and the last three batches by Ektara and the Takshila Education Society’s Children’s Literature and Art centre.

Through the initiative, the Trusts have tried to tap the impactful use of images to refine the perception, professional skills, and intellect of students and young professionals interested in illustration, especially picture book illustration. Shivam is among the graduates of the latest and fifth cohort of the programme, which ended in March 2022.

The course helped impart an easier visual fluidity to Shivam’s artistic style. He is now able to better visualise the world around him and integrate these visualisations into his illustrations. He is also able to understand the various nuances of composition and line drawings a lot better. The world of children’s literature is richer for the likes of Shivam graduating from every batch of the programme, which has trained 85 children’s book illustrators so far.

During the certificate course’s 10-month duration, the students are mentored by a group of distinguished illustrators, who guide them on how to hone and diversify their existing creative and artistic skills. “Riyaaz alumni have gone on to work for many publishers and CSOs, including Pratham Books, Eklavya, the National Council of Educational Research and Training (NCERT), Room to Read, and the Aga Khan Foundation,” says Shivnarayan Gour, who is part of the leadership team at Eklavya.
What is the best way to engage Class 10 students in a lesson on political science? Make them simulate a real-life election, complete with students and staff acting as party leaders, party functionaries, polling officials, and as ordinary citizens voting in the whole democratic process.

Earlier, during the normal course of classroom teaching, Gajanan Dhangar (a teacher at Eklavya Model Residential School (EMRS), Khairi Parsoda, Ramtek, Nagpur, Maharashtra) would have delivered a lecture on Political Science to his students, followed by a discussion on the key concepts, and students taking down notes on the same. But attending a training course on experiential learning in December 2021 exposed Gajanan to a different and perhaps more effective approach to teaching, which incorporates the Nai-Taleem philosophy.

"Using key takeaways from the course, I asked students to conduct a real election during which process, a voting list, election manifesto, ballot paper, party symbol, and agenda were discussed with the students. Senior teachers were requested to act as members of the Election Commission of India," said Gajanan.

"One student became a leader, and others were followers... I asked some students to act as representatives in a polling booth, and students voted as per the attendance register, following which we dotted their fingers using permanent markers. We created an election scenario and then asked questions based on the subject matter." adds Gajanan.

Launched in November 2021, the “Experiential Learning for 21st Century” programme is an initiative of the Central Board of Secondary Education (CBSE), the National Education Society for Tribal Students (NESTS), and the Ministry of Tribal Affairs. The Tata Trusts have collaborated to implement the programme as part of its Education portfolio, along with the Tata Institute of Social Sciences (TISS), Mumbai, and the Mahatma Gandhi International School (MGIS) in Ahmedabad.

The training programme was conceptualised as an online course for educators. Its key objective is to give primacy to students’ context and adapt classroom learning to real-life experiences. The three-month online course entitled, “Teacher Leaders” was offered to about 44 selected teachers and principals. Participants were drawn from six states, namely Maharashtra, Chhattisgarh, Madhya Pradesh, Karnataka, Tripura, and Arunachal Pradesh.

Four training modules were delivered, supported by virtual webinars to discuss the teachers’ understanding and to facilitate course learnings. The interactive webinars further oriented teachers towards pedagogy focussed on project mapping and lesson planning.

Following a successful completion of the course, along with 259 other EMRS teachers, and incorporating it in his own classroom teaching methods, Gajanan now acts as a mentor for the course. He is currently mentoring around 10 teachers from the second batch, which commenced in August this year.
SPORTS

TAPPING SPORTS TO CATALYSE DEVELOPMENT

Coverage (up to March 2022)

10 States/UTs

23 Districts

167 Schools

5,638 Coaches trained

32,148 Children

53
OVERVIEW

Sports is an important catalyst for development. It raises aspirations, improves physical and mental health, and aids in the overall development of children. The United Nations has listed sports as a development tool with a host of benefits ranging from raising the standard of health globally, attracting funding and investment in infrastructure, to spawning new livelihood opportunities in the sporting ecosystem.

Unfortunately, in India, sports are still considered an extra-curricular activity for recreational purposes or competitive participation. With a greater focus on academics, the time devoted to physical activities is reduced, which drastically affects not just the physical, but also the mental and social development of children and youth, resulting in many lifestyle diseases.

The Covid-19 pandemic has exacerbated this situation, with even younger children attending kindergarten and primary schools gaining greater access to smartphones, even in remote villages across the country. As a result, these children are now hooked on to their digital devices, forgoing the usual practice of various forms of physical activity and play—a scenario which was mostly prevalent in cities alone.

This has reinforced the importance changing the ways in which education is imparted to children, especially with regard to the need for more physical and experiential learning, along with fostering a physical and emotional connect. This has already been articulated in the new Education Policy, which supports the predominant view that the time is now ripe to embrace and implement this change whole-heartedly.

More physical or sporting activity needs to be included in the school curriculum and should be promoted for the holistic development of children. This will, in turn, feed talent into competitive sports and improve the country’s odds of participation and excellence at the international level.

The Trusts strongly believe in sports being a powerful accelerator for meaningful development, with a focus on young children and youth, especially among the underprivileged and under-served communities in the rural and tribal regions of the country. This is particularly significant given that historically, these regions have produced the best athletes in the country.

Tata Trusts’ sports strategy is based on the “Sports Development Pyramid,” which aims to lay a strong foundation for enjoyable physical education and sports through in-school and grassroots programmes, before building on these fundamental blocks to identify talented players and coaches, and provide competitive training opportunities that lead them to various careers in the sporting field, such as players, officials, administrators, etc.

Further, given that partnerships make such programmes stronger and more sustainable, the Trusts have identified local partners with strong outreach capabilities, such as local clubs, coaches, communities, and state-level sporting associations, to work with and to develop capacities so that these programmes can remain viable in the long run. Wherever possible, collaborations with state governments have been sought, so that existing infrastructure can be used and integrated within the programmes.
Over the past five years, the Trusts have established state-wide sports development programmes at the grassroots level in Jharkhand, Mizoram, Manipur and Odisha, based on the culture and availability of sporting infrastructure in these regions. Programmes were designed to develop Hockey in Jharkhand and Odisha, Badminton in Mizoram, and Football in Mizoram and Manipur.

The Covid-19 pandemic ground all these sporting programmes to a halt over the past two years, though fitness training sessions were conducted online, albeit in a limited manner. During the year under review, with the world struggling to get back to normal post-pandemic, the Trusts renewed their efforts to restart the programmes and bring them back on track.

- The Hockey excellence programmes at the Naval Tata Hockey Academy in Jharkhand and Odisha are residential programmes and were the least impacted during the pandemic. They quickly swung back into operation as soon as the government allowed resumption of sporting activities. Grassroots-level Hockey, though operational in pockets where Covid infections were fewer, also quickly reached peak capacity during the second quarter.

- Due to a denser population and availability of only indoor courts in Mizoram, it took a longer time to regularise operations for Badminton. The competitive training centres, however, commenced operations during the second quarter.

- The physical literacy in school programme in Uttarakhand recommenced during the third quarter with the Train the Trainer workshops being implemented in schools after they re-opened. The training for athletes at the Maharana Pratap Sports School, continued in public spaces and within the institute, as and when permitted. Training for the visually impaired studying at the National Institute for the Visually Handicapped started as soon as the schools re-opened.

**KEY ACHIEVEMENTS**

- **Mizoram Badminton Initiative:** Five and 10 talented players from the Regional Development Centres were placed in the Pullela Gopichand Badminton Academy (PGBA), Hyderabad, and in the ITM Badminton Academy, Raipur, respectively, with full scholarship. Five new coaches were also appointed at PGBA.
• Mizoram Football Initiative: 32 of the 41 boys trained at the Football Centre of Excellence in Mizoram were successfully placed in different football academies across the country, imparting a fillip to their professional football careers. Further, a grant was given to the Mary Kom Boxing Foundation, following which the foundation’s boxers won 12 gold, 5 silver, and 3 bronze medals at three state and national championships.

• Hockey: Girls from the Odisha Naval Tata Hockey High Performance Centre Academy won silver and bronze medals in the Academy Sub Junior and Junior National Championships, whereas the boys from the Naval Tata Hockey Academy, Jamshedpur, won a gold medal at the Academy Junior National Championship.

• Uttarakhand Sports Initiative: Two athletes represented India at the World Athletics Race Walk Team Challenge event in Oman during March 2022; also, a visually impaired footballer from NIVH, represented India in the 3 Match Series organised in Muscat in March 2022.

CHALLENGES FACED

• Training programmes were severely impacted due to the second wave of Covid-19.

• Underachievement of competitive targets as tournaments were cancelled.

BEST PRACTICES

• Continuous teacher training at all levels, from physical literacy in schools to coach education at the grassroots and competitive levels, as well as at the Centres of Excellence, has ensured that the quality and efficiency of teaching has improved over the years.

• A focus on the holistic development of children has resulted in sports training activities also including lessons on life skills.
Mansi Negi has always stood out. Even in her choice of a competitive athletic field—race walking—which is not widely known in India. But the spry walker from Chamoli district in Uttarakhand earned celebrity status in her home state after winning a gold medal at the inaugural Khelo India School Games in the 3000 metres race walking category in 2018-19.

Rigorously guided and trained by Dronacharya awardee Anoop Bisht at the Maharana Pratap Sports School in Dehradun, Mansi now has her sights set on qualifying for and representing India at the Olympics.

But Mansi’s journey has been far from easy. She suffered a massive setback following her father’s demise six years ago. Pandemic-necessitated lockdowns disrupted her training routine and diminished her savings. As a result, the youngster found it difficult to cope with her emotional trauma, coupled with the strenuous physical and financial demands of her training schedule in Dehradun.

It was the launch of the “Education and Sports Initiative in Uttarakhand” by Tata Trusts’ associate organisation - Himmotthan Society (HMS)—in 2020 that offered Mansi renewed hope about her sporting future. She was selected among 16 talented sportspersons to train at the Maharana Pratap Sports college. The selection was made on the basis of athletes’ performance during advanced competitive training sessions.

The Trusts’ Sports portfolio continues to focus on sports development and promotion as a significant tool for socio-economic upliftment amongst underserved communities. As a result, HMS supported Mansi by providing daily nutritional supplements based on advice from expert sports nutritionists, medical, physiotherapy, and massage services, and facilitated her travel and boarding arrangements during tournaments. Freed from having to worry about her training expenditures, the programme allowed Mansi to fully focus on her training.

“The timely support given by Himmotthan has contributed immensely to my growth as an athlete. I was able to compete with established Indian athletes at a national event because of the timely nutrition, health, and logistical support I received from HMS and my coach Shree Anup Singh Bisht,” says Mansi.

That has paid off and is reflected in Mansi’s sporting achievements. She won a gold medal at the 20th National Federation Cup Junior, two silver medals at other national championships, and two gold medals at state championships during 2020-2022.
For 15-year-old H. Thazuala, getting selected to train at the Pullela Gopichand Badminton Academy (PGBA) in Hyderabad in November 2021 was the culmination of years of hard work put into learning and excelling at Badminton in his hometown in Mizoram. Tapping into the enduring popularity of Badminton—the second most played sport in India—the Tata Trusts Badminton Initiative aims to build a formidable ecosystem for the promotion of the sport.

Identifying untapped sporting talent at the grassroots level and providing the required support in the form of more intensive training under experienced coaches forms the bedrock of the initiative. Training under the watchful eye of his father H. Zohmangaiha, also a badminton coach, in his home town of Chanmari West in Aizawl, Thazuala showed potential from an early age. His natural gift for the game was noticed at the Aizawl Regional Development Centre (RDC)—one of the two set up in Mizoram by the Trusts under the initiative.

The centre was instrumental in Thazuala’s transition into a player with serious sporting aspirations from the young boy who was content with continuing to play as an amateur. It helped him gain access to a focussed and well-structured training and skill development programme, which ultimately led to his selection at PGBA, considered a tremendous training ground for professional badminton players in India, preparing to compete at the national and international level.

Since joining the academy, Thazuala feels his sporting skills and technique have shown considerable improvement. “It has also taken my passion for the game to a whole new level,” says an elated Thazuala. Having recently excelled in numerous district, state, and national championships in the under-17 and junior categories, the budding player also managed to maintain a good academic performance despite his strenuous training and tournament schedule.

“I would encourage other parents to also ensure that their children maintain a dual focus on sports and education. I am truly indebted to Tata Trusts for their financial assistance and for providing my son with the best training equipment and top coaches, which has hugely impacted our lives,” says Thazuala’s father and former coach.
BRIDGING THE SKILL AND EDUCATION GAP TO BOOST EMPLOYABILITY
OVERVIEW

Tata STRIVE is a skill development initiative of Tata Community Initiatives Trust (TCIT), operating under the aegis of the Tata Trusts. It aims to actively bridge the gap between vocational education and skills needed by the industry. In 2014, when the vision for Tata STRIVE was crafted, it seemed a task worthy for a Tata organisation to pursue. Slowly and surely over seven years, Tata STRIVE has established its offerings and built credibility in the ecosystem, both with state governments and public sector units, as well as corporates looking to deploy their CSR funds in projects that can be trusted to achieve their stated outcomes. Today, Tata STRIVE is a leading innovator in the skill development ecosystem and a trusted partner for many. By March 31, 2022, its impact was pegged at 1.02 million.

Tata STRIVE’s vision is that of ‘gainful livelihood for every aspirant.’ It provides youth from marginalised communities access to quality skills training, technology, and employment by paving a way for the youth to transition effortlessly into the digital economy of tomorrow. Together with a network of partners, Tata STRIVE’s models employ strategies that aim to achieve large impact—both through direct interventions with youth and through interventions in organisations’ skill development ecosystem.

Direct interventions with youth include enabling jobs/entrepreneurship, enhancement of employability, and creating career awareness through counselling. Interventions in the skill development ecosystem include faculty development, technology, or domain support to other skill development providers. This is represented below:

- **Enabling jobs and livelihoods:** With carefully curated training programmes, Tata STRIVE has touched many lives by providing skills training for jobs and improving their quality of life.

- **Enhancing employability:** Tata STRIVE believes strongly in providing holistic training to aspirants by offering more than just skills training to improve their employability. Tata STRIVE offers courses for holistic development of students through its employability skills programme across colleges.

- **Improve quality of skill development:** To benefit the larger ecosystem, and hence reach more students, Tata STRIVE has taken steps to improve training partners’ facilitator training methods and course content.

- **Create career awareness and counsel:** Tata STRIVE has made great strides in reinforcing the need to seek proper career guidance among aspirants. This step ensures that every learner passing out has an edge in the competitive market.
KEY ACHIEVEMENTS

• **New centres in new geographies:** A new skill development centre at Midnapore, West Bengal became the fifth and latest Tata STRIVE Skill Development Centre (TSSDC) to be set up during the reporting year. The centre achieved 500+ certifications in FY 22. Tata STRIVE Extension Centres (TSECs), which are smaller centres that focus on providing domain-specific expertise, also saw considerable movement with the TSEC Chhindwara centre reopening post-pandemic. Tata STRIVE also started four new TSECs in Navsari, Anand, Nagpur, and Goa, with the latter two being mixed domain centres that are expected to benefit about 500 youth.

• **New courses introduced with a focus on digital skills:** The year saw continued focus on the demand for digital courses, such as Cybersecurity, UX design, IT Support, IT Automation, Data Analytics, Full Stack Developer, and Android App Developer. Tata STRIVE scaled from 100+ students in 2020-21 to 1,000+ in 2021-22 for the said courses.

• **Self-mobilisation as a service:** With the pandemic raging on, mobility of students was restricted. Tata STRIVE leveraged technology to empower students through a self-directed process. The redesigned process allows youth to self-register [using mobile OTP-based verification], receive self-guided counselling [chatbot-based], and be directed to the right course. A base counselling solution was rolled out last year across the state of West Bengal, benefitting thousands of youths and setting an example for other states to emulate.

• **Building on the success of Dual VET intervention at ITIs:** The partnership between Tata STRIVE and Siemens on the Dual VET programme is aimed at introducing the German Dual VET model, customised for Industrial Training Institutes (ITIs) in India. The bedrock of the dual system is learning at both vocational institutes and on-site locations. The programme is being implemented in ITIs across Maharashtra, Delhi, Gujarat, West Bengal, and Punjab. More states are likely to sign up. The cumulative impact to date is over 43,500 students, with upskilling of 1,325 ITI instructors across 170 ITIs. Over 1,500 companies have been on-boarded and are willing to open their doors to ITI trainees for in-plant training.
GOING FORWARD

• Expanding its work in the entrepreneurship domain. Tata STRIVE has also been offering programmes aimed at entrepreneurship development since its inception and will be expanding to more states in FY 23.

• Making vocational education reach schools, as also stated in the National Education Policy 2020, which pushes for “exposure of vocational education in schools and the higher education system.”

• Piloting different models of outcome-based funding, such as Skill Impact Bond.

CHALLENGES FACED

• Blended learning does not cater to the most needy youth from tier 3 cities; for instance, those who do not have access to devices and internet.

• Uncertainty due to lockdowns posed challenges, especially for government programmes that took a significant hit and were rendered financially unviable due to a lack of flexibility in the norms for classroom-based training.

BEST PRACTICES

• Quality frameworks updated to cater to nuances of new models.

• Leveraging the robust technology backbone, which continues to support operations.
Tata STRIVE - the Tata Trusts’ skill development initiative offers a fresh lease of life to individuals whose personal circumstances have impeded their career growth or who lack easy access to skilling or upskilling opportunities to improve their current employment situation.

With the bulk of India's workforce lacking formal skills training, there is an urgent need to develop skill development programmes that will help offset these social and economic challenges. To that end, Tata STRIVE has opened skill development centres and partnered with other organisations that focus on employment, entrepreneurship, and building community enterprises in the formal and informal sectors.

Ankita Hendre is emblematic of the success of these initiatives. Armed with a Bachelor’s in Technology, Ankita had been looking forward to commencing a long and successful career till a sudden illness following her graduation took her by surprise. Having to undergo an urgent kidney transplant followed by a six-month recuperation period dealt a massive blow to Ankita’s professional aspirations. The high costs incurred for her surgery and subsequent treatment further worsened her family’s financial condition.

But this only strengthened her resolve to bounce back quickly and upon recovering, Ankita enrolled into Tata STRIVE’s Cybersecurity Course at Pune. Taking the course restored her emotional and professional confidence, propelling her to secure a job with a FinTech giant.

The story of Mrunali Bhere is equally inspiring. A trained electrician supporting a family of four, Mrunali had always received the unstinting support of her parents despite an unconventional career choice. Looking to upskill herself further to improve her professional prospects, she enrolled in an air conditioner and refrigerator course at the Voltas-Tata STRIVE Centre of Excellence in Thane.

Always held back by a fear of public speaking and interpersonal interactions, Mrunali’s teachers at the centre helped her overcome these professional roadblocks through rigorous training. Today, Mrunali works as a certified professional with a private limited company. She attributes her technical prowess and newfound confidence to Tata STRIVE, which she says allowed her to dream big. So much so that she is now planning to save enough to study for a Bachelor’s degree in Computer Application.

As with Ankita and Mrunali, Tata STRIVE continues to help enhance employability of youth belonging to marginalised and under-resourced communities by providing access to quality skills training, technology, and employment. This also empowers them to be future-ready and transition effortlessly into the new economy.
16 States
48 Art collections surveyed
1 Three part volume publication produced
381 Individuals trained in preventive conservation
10 Individuals trained in remedial conservation
26 Individuals awarded fellowships

Coverage (up to March 2022)
**OVERVIEW**

The vision of the Arts and Culture portfolio is to work with multiplicity, excellence, and marginalised communities, focussing on three main areas: Conservation (built heritage, film preservation, and art conservation); Art Education at the tertiary level; and Performing Arts (music, dance, and theatre).

To preserve and nurture the country’s heritage—both past and present, and to lay down a solid foundation for the future—is to support them in all their myriad forms. Securing sustained support for the arts is challenging in the backdrop of high-intensity developmental challenges faced by a country like India, and further exacerbated by events like the Covid-19 pandemic. The portfolio therefore works towards providing incremental and layered support, helping organisations and programmes achieve long-term sustainability.

**KEY ACHIEVEMENTS**

- The publication of the three-part volume, entitled, “Specifications Manual for Built Heritage Conservation and the Associated Schedule of Rates and Analysis of Rates,” has been completed in collaboration with the Aga Khan Trust for Culture. The three volumes have been published and are available online on the Tata Trusts website.

- The fellowship programme for the 1947 Partition Archives has been completed, with 26 month-long fellowships awarded to faculty and student researchers to access over 10,000 oral histories relating to peoples’ experiences of the Partition. Each fellow submitted their research reports spanning themes of gender, violence, memory, identity, and displacement related to the Partition.

- Fifteen conservators engaged in the Art Conservation Initiative have continued their training through weekly online review sessions with an academic consultant. As on-ground conditions became more amenable for travel, conservators from the five partner institutes involved in the Art Conservation Initiative undertook 18 field surveys across India during the year, during which time 88 persons were trained in the best practices employed for preventive conservation methods.

- Conservation labs were upgraded at the institutes through the purchase of requisite equipment and conservation materials. Ten conservators underwent training at two three-month long courses focused on the conservation of oil paintings, and of stone.
GOING FORWARD

• Focus on achieving Year 4 deliverables for the Art Conservation Initiative, which include completion of the remaining field surveys of smaller collections, and scheduling and implementing three-month conservation training courses in specific materials. The following have been planned for FY 2022-23: Conservation of Paper (prints, drawings, and maps); Paper (manuscripts and miniature paintings), natural history specimens, wooden objects and sculptures, and wall paintings.

• Initiation of the project to start a Master of Arts degree in Art Conservation in partnership with St. Xavier’s College, Mumbai.

• Supporting the Kochi Biennale Foundation for the Students’ Biennale 2022.

BEST PRACTICES

• Designing and implementing the three-month long training courses in conservation of specific materials to be held across the five partner institutes under the Art Conservation Initiative. Designed to impart intensive, practical training in conservation of specific materials (such as paper, oil paintings, wood, metals, etc.), these courses aid practicing conservators in specialising and honing their conservation skills with regards to a specific material.

• Collaborating with the Aga Khan Trust for Culture to produce a first-of-its-kind Specifications Manual for Built Heritage Conservation that lays down processes and rates for conservation work at heritage sites and monuments.

• Providing online and secure access to over 10,000 digital oral histories from the 1947 Partition Archives for researchers through month-long fellowships.

CHALLENGES FACED

While the pandemic-related restrictions were largely lifted during the year, the third wave has impacted movement, and health, during the last quarter of FY 22; consequently, some activities have been postponed.
India’s rich and varied art and cultural heritage—whose evolution spans many centuries—is reflected in the thousands of heritage sites located across the country and in the art and artefacts on display therein. However, the preservation of this crucial symbol of the country’s cultural legacy has suffered due to a stark deficit in the number of trained art conservators and conservation labs.

Opportunities for formal training in art conservation are also lacking, with one government-aided post-graduate programme in art conservation available, along with a handful of post-graduate diploma courses that focus on museology, conservation, and curation. The courses currently offered by universities or private museums focus on preventive and remedial conservation of artefacts, and not specifically on conservation of materials, such as paper, oil paintings, stone, or metals.

The Tata Trusts’ Art Conservation Initiative develops and offers intensive training courses in the conservation of specific materials, facilitating the creation of a network of art conservation professionals. Conceptualised in 2018 to create a formal framework for art conservation in India that focuses on infrastructure, training, and outreach, the Trusts have partnered with five art institutes across India to establish and upgrade their conservation labs. The partnership involves hiring and training three conservators at each institute: conducting field surveys for smaller collections, imparting preventive conservation training, and in particular training 30 conservators, annually. The programme will also support the establishment of a master’s programme in art conservation at an Indian university.

As part of the ongoing initiative, the Trusts have conducted three month-long training courses in the conservation of oil paintings at the Kolkata Institute of Art Conservation (KIAC) and a training course in the conservation and restoration of stone objects and sculptures at the Himalayan Society for Heritage and Art Conservation, Ranibagh. Ten conservators were trained during these two courses, who upon completion of their training, undertook month-long internships at different institutes. A training course was also organised at the Museum of Art and Photography in Bangalore in March this year, which focused on the conservation of paper (prints, drawings, and maps).

Each training course is developed and led by an expert conservator in that material, and is supported by an academic consultant from the Art Conservation Initiative. A course anchor is engaged on-site for three months to supervise the work of participants, report on, and document the course. Visiting faculty is engaged as required for specific technical sessions.

“Our perception of conservation changed quite a bit after taking this course; including how to think critically and evaluate the step-by-step process of conservation, how to use photography and other computer-based applications to improve conservation, and how to incorporate locally sourced materials and simple techniques,” says Kartick Kayal, a conservator who took part in the KIAC’s course on conservation of oil paintings.

Other training courses for the conservation of manuscripts and miniature paintings, stone, wood, metals, wall paintings, etc. have also been organised at museums across India. By the end of the project period, the Trusts hope to have built a network of enthusiastic, well-trained conservation professionals.
BACKGROUND

Initially peaking in September 2020, the onset of the second and far more devastating wave of Coronavirus infections were recorded in the first week of March 2021. As of April 1, 2021, daily new infections climbed to over 81,000 and the Trusts rose to the challenge as during the first wave, through its efforts to enhance medical infrastructure across the country, more so in areas with disadvantaged populations and sub-optimal medical facilities. Efforts to ramp up vaccination drives were strengthened, along with facilitating vaccinations of the Trusts’ employees and their families.

While the first wave of the pandemic saw the imposition of large-scale restrictions due to nationwide lockdowns, coupled with the medical fraternity trying to come to grips with constantly changing treatment protocols, the second wave proved to be deadlier due to the more virulent strain of COVID-19 driving up infection rates. As the daily new case count topped 414,000 on May 6, 2021 (the peak of the second wave), India was left grappling with a severe dearth in medical infrastructure. Supplies of medical oxygen, necessary as the first line of treatment, were severely stretched, with the unavailability of beds at various medical facilities further pressuring an already struggling healthcare infrastructure. Meanwhile, an acute shortage of vaccines stymied the vaccination drive started by the Government of India in January 2021.

The worst phase of the second wave of Coronavirus infections lasted for about three months, subsiding by the end of June 2021, as vaccination drives gathered steam across the country. India recorded a third surge in cases during the latter part of December 2021. Although infections were reportedly milder, compared with the first two waves, the number of cases rose dramatically from a low of 5,000 per day in the third week of December to a high of over 350,000 by the third week of January 2022. The case count quickly dwindled to less than 4,000 a day by the first week of March, with the prevalent COVID strain declared to be milder. As a result, most patients were found to be asymptomatic, leading to a faster drop in the number of hospitalisations, compared with the earlier waves.

A COUNTRYWIDE INITIATIVE OF TATA TRUSTS

The Tata Trusts’ relief programme ‘One Against Covid’, was operationalised in April 2020 through a commitment of ₹5 billion and continued its operations through the 2021 financial year. The year under review saw the completion of two discrete projects; the first aimed at setting up Covid care infrastructure facilities in Maharashtra, Uttar Pradesh, Rajasthan, Gujarat, and Madhya Pradesh; the second to augment capacities at existing hospitals to provide care to an increasing number of patients.
Setting up Covid care infrastructure facilities
The objective of this project was to enhance the capacity of existing health systems for the management of Covid cases. A total of 975 beds were set up across 7 hospitals in the states of Maharashtra, Gujarat, Rajasthan, and Uttar Pradesh and over 59,000 patients had received treatment for Covid up to end of the 2022 financial year. Notably, these facilities were commissioned in a span of 8 to 12 weeks. Over 2,000 doctors, nurses, and technicians were trained to use the relevant medical equipment and manage the Covid case load.

Covid-19 Support for Health Establishments
India faced an acute shortage of hospital beds, oxygen and trained medical staff, and a timely availability of critical care equipment (Ventilators, BiPAP, etc.) due to the sudden surge in demand. As a result, recorded a higher number of deaths, during the second wave of Coronavirus infections lasting from April to June 2021, compared with the first wave in 2020. The Hospital Augmentation Initiative was started to address some of these critical gaps, with a focus on high case-load geographies in some of the underserved and vulnerable communities in Tier-2 and Tier-3 towns. The initiative had a two-pronged goal: (a) repurposing existing hospital beds in different specialties to deal with Critical Covid Care Management; and (b) providing sustainable oxygen generation methods to cater to Covid-induced respiratory distress. This was facilitated by enhancing the availability of fully equipped ICU beds, ensuring a steady supply of oxygen, procurement of ventilators, bed side monitors, BiPAP machines, medical furniture, and all other necessary critical equipment, as required and evaluated. A total of 49 medical institutions across 19 states were identified by the Trusts for this purpose. Over 1,900 ICU and 6,300 non-ICU beds were set up at these locations.

With the introduction of vaccines, the Trusts undertook vaccination drives in rural communities, across Bhavnagar (Gujarat) and Sirohi (Rajasthan).

The nationwide lockdowns also, affected children's learning, particularly for those from marginalised backgrounds. More than their academics, children’s social and emotional well-being had to be taken care of at this difficult time. And what better way than stories that children could read, hear and watch to take their mind off everyday troubles and worries. Besides, videos on lessons and physical exercises to ensure their well-being were also shared. Finally, the Trusts also shared videos with communities related to Covid appropriate behaviour, agri-related advice, etc.
Using physical literacy to plug pandemic-forced well-being gaps among children

For about 4,000 children spread across some of the remotest mountain communities of Uttarakhand, coping with the forced isolation resulting from the COVID-19 pandemic was particularly difficult. Trekking to school up and down winding mountain pathways with their friends-cum-schoolmates was one of the few pleasures afforded by their daily routine. A routine that was suddenly disrupted, causing further anxiety and depression as the pandemic wore on with no end in sight.

But even as it upended life globally over the course of the last two years, the pandemic has also reinforced the importance of physical activity as a coping mechanism and to ensure mental and physical well-being. Pandemic- necessitated lockdowns have not only disrupted economic and social life; its impacts are especially evident in the emotional and psychological toll it has taken on school-going children.

Education and social interaction are crucial to the overall development of younger children, who are still in their formative years. Both were deeply impacted by the pandemic, prompting Tata Trusts’ associate organisation—Himmotthan Society (HMS), which works among rural mountain communities—to undertake holistic programmes, to promote physical literacy as a coping tool for school children sequestered at home.

HMS worked with 115 community institutions, comprising 85 school management committees, 15 Mata Samitis (committees comprising of mothers) and 15 Bal Sangathans (children groups) spread across 100 villages in five districts to implement the project. It shot multiple physical literacy videos with the help of various stakeholders. HMS field teams worked with the Samagra Shiksha Abhiyan (SSA) and its associates to share these videos every Thursday morning on social media apps that were popular at a local level.

The videos were shared with the parents of the school children living in these communities, who supervised their children’s physical literacy sessions, often sharing videos and pictures of the same with the wider community and group administrators. The initiative resulted in a marked improvement in participants’ physical and mental well-being.

“All the children in my village would eagerly await the physical literacy videos sent by Himmotthan every Thursday. Whenever we used to get bored studying at home by ourselves, we would watch these videos for entertainment and to exercise to boost our immunity,” says Harshita Pujari, a Class 5 student from GPS Ginti Gaon in Kotabag of Nainital district.

With schools slowly reopening, in April 2021, HMS shifted the emphasis from online sessions to in-person physical literacy sessions conducted in schools. The initiative has been identified as a major outcome of quality education programming, with HMS successfully integrating the concept of physical literacy into school lessons and classrooms. Till date, it has broadcast 75 physical literacy session on various social media platforms, along with 38 snapshot videos.

For the 2022-2025 academic years, HMS plans to integrate physical literacy with foundational literacy and numeracy in 300 schools of four blocks of Uttarakhand. It will also aim to train 300 government school teachers and about 13,000 children.
INSTITUTIONS

PROMOTING END-TO-END INNOVATION AND BUILDING SCALABLE SOLUTIONS
TATA INDIAN INSTITUTE OF SKILLS (TIIS)
OVERVIEW

India will add 90 million people to its workforce during this decade. Consequently, skill development to create a qualified and trained workforce across sectors, has become the need of the hour. The Government of India (GoI) has launched multiple schemes and programmes to improve skilling in India. However, India continues to have a low percentage of formally trained workers that can handle advanced trades.

The Tata Indian Institute of Skills (TIIS) was incorporated under Section 8 of the Companies Act, 2013 and was set up by the Tata Education and Development Trust in March 2020, which was selected to partner with the Ministry of Skill Development and Entrepreneurship (MSDE) in June 2019 to set up, operate, and maintain two world-class Indian Institute of Skills (IIS) in Mumbai and Ahmedabad. The primary goal behind setting up the institute was to create an industry-ready workforce as per the evolving demands of national and global markets. TIIS is committed to designing and delivering a contemporary and agile curricular to meet the emerging skill needs of the nation in a digital world. This is being done in collaboration with GoI, MSDE, state governments, and leading industry partners.

In the past one year, TIIS has been working to streamline its core functions by building a team of experts and professionals. While waiting for physical campuses to be constructed, TIIS has developed a short-term course on Factory Automation and is creating more courses that are aligned with the upskilling needs of the contemporary industry. These courses intend to provide high-quality and high-impact training during short durations and will be offered on temporary campuses with the support of leading domain partners.

KEY ACHIEVEMENTS

• Mapping sector demand to understand market scenarios and identifying key sectors that have job creation possibilities in India.

• Building a core operations and programming team of experts.

• A short-term course in ‘Essentials of Industrial Automation’ was launched in November 2021 in collaboration with Festo—a German company that is recognised as an expert in automation. Since then, three batches have completed their training with 24 students in each batch, bringing the count of trained students to 72. The course is offered in a blended mode, with the first two weeks made up of online training, followed by lab-based training for a week. The training programme has received positive feedback from students, who are mainly from rural districts with minimal exposure to modern manufacturing trends.
The Tata Institute for Genetics and Society (TIGS), founded in 2017, is a non-profit research institute that aspires to develop solutions to address challenges in human health and agriculture. A unique initiative of Tata Trusts, TIGS supports the application of cutting-edge science and technology to genetics and genomics. It also works to resolve the significant challenges that impede the achievement of health equity and nutrition security for all of India’s population. The work done at TIGS aims to prevent infectious diseases, improve access to affordable and quality diagnostics and therapeutics for rare genetic disorders, foster health equity, and achieve nutrition security through sustainable models for agriculture.

Research programmes undertaken by TIGS cover the following areas:

i. Infectious Diseases: The Infectious Diseases programme studies vectors, pathogens, and their relationship to humans and the environment. The programme disentangles how vectors, such as mosquitoes, interact with and adapt to their environment, which helps devise strategies for their control. It also employs environmental surveillance to understand the prevalence of disease-causing pathogens in a community. This has been of immense relevance in the ongoing COV pandemic. Pivoting to the need created by multiple waves of infections,
TIGS has been a key player in leading SARS-CoV-2 viral surveillance of wastewater. The institute is currently working on expanding its surveillance platforms to encompass other pathogens and develop strategies to reverse the threat of antibiotic resistance.

ii. Rare Genetic Disorders: The Rare Genetic Disorders programme focusses on genetic diseases that affect a small percentage of the population and do not have sufficient therapeutic or management options. Efforts are directed towards developing accessible diagnostic assays that can be applicable to screening carriers of genetic disease traits and cost-effective therapeutic strategies.

iii. Crop Improvement: The Crop Improvement programme at TIGS is aimed at developing food crop varieties that are more resilient to diseases and pests and are nutrient-rich and drought tolerant.

**KEY ACHIEVEMENTS**

- **Wastewater Surveillance for SARS-COV-2**
  TIGS is a key partner of the Brihat Bengaluru Mahanagara Palike (BBMP) for wastewater surveillance carried out at 28 sewage treatment plants under the Bangalore Water Supply and Sewage Board (BWSSB) in Bengaluru. The wastewater infrastructure of Bengaluru offers an effective resource to access and estimate the spread of the SARS-CoV-2 across the city. Scientists at TIGS have been involved in screening for the presence of SARS-CoV-2 in wastewater and for early indication of infection trends. Further, it has also helped in the creation of spatial and temporal heat maps on the distribution of viral biomarkers at the local level. TIGS is also involved in viral genomic sequencing that helps in detecting regionally prevalent SARS-CoV-2 variants. Data regarding the viral load trends is updated in real time on a customised SARS-CoV-2 wastewater surveillance dashboard.

- **Setting up a Pathogen Surveillance Network**
  TIGS has also liaised with BBMP to integrate wastewater-based epidemiology in the healthcare framework. This is crucial for setting up systems for monitoring other infectious pathogens and preventing their spread in the city. As part of the Bangalore Life Sciences Cluster (BLiSC), TIGS is now collaborating with a multi-city, multi-institute consortium funded by the Rockefeller Foundation to monitor disease spread. Using environmental samples and clinical infection data gathered from various partners, TIGS aims to track pathogen prevalence and diversity at multiple locations.

- **Forging Multi-Stakeholder Partnerships for Rare Genetic Disorders**
  Rare genetic disorders are not so rare in India, owing to the large population of the country. There is an urgent need for the affected population to be able to access cost effective diagnostics and treatment, which are presently unaffordable due to very high import costs. TIGS has been involved in an in-depth multi-stakeholder engagement during the past year to understand the various challenges and bottlenecks present in making cost effective diagnostics and affordable treatments available to patients. Five collaborative partnerships were initiated with hospitals, patient groups, and research institutes to bolster efforts focussed on the development of low-cost point of care diagnostics and indigenised therapeutic options for patients on a fast-track pathway.
• **Crop Improvement using Traditional Methods and Molecular Biology Approaches**

In the wake of India relaxing its regulatory policies around gene editing, especially to develop crops with traits that enhance disease resistance and drought tolerance, TIGS has established a rigorous programme to make use of cutting-edge science, such as gene editing and traditional methods of mutation breeding to develop high yielding, nutrient rich food crop varieties, including rice and pulses. This programme aims to cater to the climate adaptive needs of today’s society, as well as reduce hunger through better yields and high nutrient content.

**KEY ACHIEVEMENTS**

• A spoken language assessment tool has been developed to provide an accessible and scalable technological solution that can provide students with rapid feedback on their pronunciation and fluency of speech. A speech recognition algorithm running on a mobile device analyses the recording of a child reading out passages of text and estimates metrics of accuracy and fluency. The analytical engine has been tested by partners, including Pratham and WPP, who have been using it to evaluate speech proficiency in over 1,500 children.

• Over 1,000 cottage industries manufacturing artisanal jaggery have shut down in the Kolhapur region in the last decade due to the non-availability of technology and skilled manpower, and an unorganised supply chain for sugarcane. To address the situation, a project team has developed a mobile unit that ensures continuous manufacturing of jaggery. The unit is easy to use, energy efficient, and produces a product of consistent quality. The team has now created a start-up—Revotech Industries Pvt. Ltd.—to market innovative processes followed in the various sugarcane cultivating regions of the country.

• A translation project to create low-cost bone and near-net-shape grafts for dental and orthopaedic bone reconstruction resulted in a start-up called Effectmed Pvt. Ltd. To solve the issue of bone tissue degradation,
the team has developed rapid ways of designing and printing 3-D bone scaffolds. Clinical trials conducted at AIIMS, New Delhi have been completed and dental and orthopaedic surgeons have started recommending the use of such bone grafts.

• During the COVID-19 pandemic, the Centre undertook certain challenge driven projects in response to urgent clinical requests. CoviDialysis is a patient coordination service undertaken during the first two waves of the pandemic on behalf of the Municipal Corporation of Greater Mumbai (MCGM) for the management of all COVID-19 patients in need of haemodialysis care. Such patients need biweekly or triweekly dialysis sessions as their condition puts them at high risk of contracting COVID-19, with low survival odds. More than 200 dialysis clinics across Greater Mumbai were onboarded on to a portal put together quickly by the Centre. As dialysis patients across the city became confirmed or suspected COVID-19 cases, the portal allowed for their rapid redirection to dedicated COVID-19 dialysis clinics. More than 2,000 COVID-19 positive patients were redirected during the first nine months of the pandemic (Mumbai has an estimated 10,000 dialysis patients) and with timely intervention, case fatality rates were brought down from 25% at the onset of the pandemic to below 5%. BMC has labelled this effort ‘Project Victory’ and has involved the Centre in the implementation of further public health initiatives.

• To better utilise the oxygen cylinders that were in relative short supply during the second wave, a team worked on redesigning oxygen masks facilitating the recirculation of exhaled air. TCTD’s calculations showed that more than 95% of the oxygen inhaled when on pure oxygen cylinders was exhaled out so a redesign of the oxygen mask was carried out to facilitate the removal of carbon dioxide, allowing for the exhalation to be recycled, and thereby extending the life of an oxygen cylinder by at least five-fold. The blueprints for the solution called reBreather were subsequently open sourced and disseminated, allowing other groups across the country to replicate and fabricate locally.

• The non-COVID wards at major hospitals in Mumbai continued to receive patients in their OPDs exposing themselves and other hospital staff to the Coronavirus. To help decongest these wards, a helpline platform called World Wide Helpline (WWH) was set up to allow a team of volunteers to respond to patient queries in an asynchronous mode. This platform was deployed at six hospitals and COVID centres, including the King Edward Memorial Hospital, Mumbai. The MCGM has indicated its interest in using the platform for the delivery of public health services, post-pandemic.
While Tata Trusts have been engaged in major philanthropic activities, they have not lost sight of the ‘individual.’ Since their founding, great emphasis has been laid on assisting with the health and education costs of needy and meritorious individuals. The Individual Grants Programme across the Trusts adopts a comprehensive, systematic, and most importantly, fair, and humane approach to identifying individuals in need, and deserving of, financial assistance. The programme comprises medical and educational grants.

**MEDICAL GRANTS**

A medical emergency, for most families, causes tremendous emotional and financial stress. Escalating hospital bills and medicine costs have rendered decent medical attention beyond the reach of even middle-income families in 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, kidney diseases, etc. Charitable trusts and benevolent individuals then seem to be the only recourse available to individuals/families experiencing a health emergency and being unable to bear the financial burden of treatment.

The Trusts have utilised their vast network of medical professionals and social workers at various prominent government, municipal, private, and charitable hospitals within the country to provide help. The linkages with these hospitals help in assessing the socio-economic condition of the family, forwarding the form with the entire set of documents to the Trusts, and providing information on the utilisation of the grant disbursed by the Trusts for the patient’s treatment. All new linkages established by the Trusts are valid for a specific time period, after which a review is undertaken to decide on further action. The Trusts were actively collaborating with 23 hospitals as of March 2022.

**Details of Medical Grants sanctioned/disbursed under Sir Ratan Tata Trust and Allied Trusts from April 2021 to March 2022**

<table>
<thead>
<tr>
<th>Aliments</th>
<th>Number of Applications Sanctioned</th>
<th>Amount Sanctioned (₹)*</th>
<th>Number of Disbursals Made</th>
<th>Amount Disbursed (₹)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>621</td>
<td>242,610,000</td>
<td>535</td>
<td>160,915,449</td>
</tr>
<tr>
<td>Cochlear Implant</td>
<td>48</td>
<td>24,917,000</td>
<td>40</td>
<td>21,608,000</td>
</tr>
<tr>
<td>Heart</td>
<td>218</td>
<td>46,000,000</td>
<td>226</td>
<td>34,408,528</td>
</tr>
<tr>
<td>Liver Disease</td>
<td>43</td>
<td>25,736,000</td>
<td>28</td>
<td>15,340,849</td>
</tr>
<tr>
<td>Others</td>
<td>385</td>
<td>102,794,000</td>
<td>315</td>
<td>75,096,574</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,315</strong></td>
<td><strong>442,057,000</strong></td>
<td><strong>1,144</strong></td>
<td><strong>307,369,400</strong></td>
</tr>
</tbody>
</table>

* 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. Further, a sum of ₹1.53 million disbursed by the Allied Trusts of SRTT towards relief of poverty has not been included in the table above.
Financial assistance through education grants was provided under the following categories:

A. **Means Grants** (College/School/NGO/Special Schools):
   Support was extended towards the cost of a student’s college and school studies. This also extended to marginalised children, including orphans, street, and tribal children, and commercial sex workers, through a network of NGOs. Differently abled children, especially those with learning disabilities were also supported through a network of Special Schools catering to their needs.

B. **Merit-based scholarships**: These were offered in the following academic streams:
   - Medical and healthcare scholarships – Covering some medical streams.
   - M.Sc. in Speech Therapy – M.Sc. in Speech and Hearing, Masters in Audiology, and Speech Language Pathology, M.Sc. in Audio Speech therapy, M.Sc. in Speech Language Pathology, and M.Sc. in Audiology.
   - M.Sc. in Neuroscience.
   - Aircraft Maintenance Engineering.
   - B.Ed. and D.Ed. – Only for students pursuing studies in Jammu and Kashmir and the North-East.
   - Special Education – Students pursuing B.Ed. and M.Ed. in special education.

Scholarships were also offered under earmarked endowments; these included the Darab R. D. Tata and the C. N. Gosalia scholarships for pursuing studies in the fields of medicine and healthcare.

C. **Tata Institute of Social Sciences**: Scholarships were awarded to students pursuing their studies at the Tata Institute of Social Sciences in the fields of: (i) Family and Child Welfare; (ii) Medical and Psychiatric Social Work; (iii) Urban and Rural Community Development; and (iv) Social Welfare Administration.

D. **Aviation scholarships**: These were awarded to cadets pursuing their Commercial Pilots’ License (CPL) training and type rating.

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### EDUCATION GRANTS

Financial assistance through education grants was provided under the following categories:

<table>
<thead>
<tr>
<th>Aliments</th>
<th>Number of Applications Sanctioned</th>
<th>Amount Sanctioned (₹)</th>
<th>Number of Disbursals Made</th>
<th>Amount Disbursed (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>323</td>
<td>138,246,000</td>
<td>420</td>
<td>111,692,943</td>
</tr>
<tr>
<td>Cochlear Implant</td>
<td>13</td>
<td>6,404,000</td>
<td>10</td>
<td>5,065,000</td>
</tr>
<tr>
<td>Heart</td>
<td>74</td>
<td>20,931,000</td>
<td>112</td>
<td>18,314,059</td>
</tr>
<tr>
<td>Liver Disease</td>
<td>15</td>
<td>8,167,000</td>
<td>9</td>
<td>4,371,367</td>
</tr>
<tr>
<td>Others</td>
<td>169</td>
<td>62,302,444</td>
<td>204</td>
<td>58,556,631</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>594</strong></td>
<td><strong>236,050,444</strong></td>
<td><strong>755</strong></td>
<td><strong>198,000,000</strong></td>
</tr>
</tbody>
</table>

* 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. Further, a sum of ₹41.96 million disbursed by the Allied Trusts of SDTT has not been included in the table above.
E. Professional Enhancement Grants: These were provided to mid-career professionals interested in enhancing their skills through relevant overseas training programmes, workshops, or observerships.

F. Spectrum grants: Support was extended for various teachers’ training programmes (formal and informal) aimed at equipping them to offer better care to those suffering from learning disabilities.

G. Studies Abroad: The J N Tata Endowment scholars, pursuing studies abroad were given gift scholarships based on their academic performance, as well as travel grants. Other Indian students were also supported as per a broad-based criterion.

H. Partnerships: The 2021-22 financial year was the last year of the five-year programme started in partnership with Clemson University, United States, and Warwick University, United Kingdom, under which scholarships were awarded towards post graduate studies in Automotive Engineering and Health Sciences, respectively.

As part of a grassroots football development programme in the north-eastern states of India, scholarships were awarded to selected children in the 12 to 14 years age group, for training at the Atletico Academy in Spain.

Details of Education Grants sanctioned/disbursed under Sir Ratan Tata Trust and Allied Trust from April 2021 to March 2022

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Number of Sanctions</th>
<th>Amount Sanctioned (£ in million)</th>
<th>Number of Disbursals</th>
<th>Amount Disbursed (£ in million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studies in India, including research scholarships</td>
<td>3,034</td>
<td>186.25</td>
<td>3,134</td>
<td>188.77*</td>
</tr>
<tr>
<td>Studies abroad, including loan scholarships and research scholarships</td>
<td>272</td>
<td>229.62</td>
<td>270</td>
<td>227.43</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>3,306</td>
<td>415.86</td>
<td>3,404</td>
<td>416.20</td>
</tr>
</tbody>
</table>

* Includes disbursements against grants sanctioned during the previous year.
Details of Education Grants sanctioned/disbursed under Sir Dorabji Tata Trust and Allied Trusts from April 2021 to March 2022

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Number of Sanctions</th>
<th>Amount Sanctioned (₹ in million)</th>
<th>Number of Disbursals</th>
<th>Amount Disbursed (₹ in million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studies in India, including research scholarships</td>
<td>41</td>
<td>6.83</td>
<td>41</td>
<td>6.83</td>
</tr>
<tr>
<td>Studies abroad, including loan scholarships and research scholarships</td>
<td>139</td>
<td>123.00</td>
<td>132</td>
<td>101.79</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>180</strong></td>
<td><strong>129.83</strong></td>
<td><strong>173</strong></td>
<td><strong>108.62</strong></td>
</tr>
</tbody>
</table>

**JN Tata Endowment**

Mr. J.N. Tata, founder of the Tata Group, believed strongly that it is important to support the best and brightest minds in the nation, enabling them to be of the greatest service to the country. Established in 1892, The JN Tata Endowment for the Higher Education of Indians has scrupulously followed its founder’s mandate, awarding loan scholarships to candidates of excellent calibre and credentials through a rigorous selection process, enabling them to pursue quality higher education at some of the best institutions in the world. The Endowment counts, among its recipients, some high-profile individuals, such as former President of India, KR Narayanan Pillai, the renowned astrophysicist Jayant Narlikar, and Xerses Desai, who created Titan. Until March 2022, the endowment had awarded scholarships to 5,551 students going overseas for higher studies across diverse fields covering more than 839 subjects and branches of specialisation.

During 2021-22, 132 scholarships were awarded for a total sum of ₹101.65 million. Of these, 49 were for women scholars. The scholars opted for a total of 13 destination countries, including the United Kingdom, United States, Australia, Belgium, Canada, Finland, France, Germany, Italy, New Zealand, the Netherlands, Singapore, and Switzerland.

**Lady Tata Memorial Trust (LTMT)**

Established in 1932 by Sir Dorabji Tata, in the memory of his wife, Lady Meherbai, the Trust spends four-fifths of its income on research in leukemic diseases and one-fifth of its income on research focussed on the alleviation of human suffering from diseases in India and internationally. The Trust also supports institutional scientific research, offers a ‘Young Researcher Award’ to budding scientists, provides fellowships to students pursuing PhDs, and supports Teachers’ Training Programmes at a number of colleges.

**Indian Awards for alleviation of human suffering**

In response to the online applications invited from Indian universities and institutions during 2021-22, the Trust received a total of 93 projects. From among these, 37 projects were shortlisted and the applicant students invited for interviews. 15 students from different universities/institutes in India were awarded Junior Research Fellowships for their projects during 2021-22. The list of awarded projects is as follows:
<table>
<thead>
<tr>
<th>Name</th>
<th>Institute Name</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Monica Singh</td>
<td>BITS Pilani Hyderabad Campus</td>
<td>Targeting riboflavin biosynthetic pathway of Mycobacterium tuberculosis (M.tb) for identification of novel class compounds with anti-mycobacterial activity.</td>
</tr>
<tr>
<td>Ms. Sangati Pancholi</td>
<td>Department Of Zoology, Maharaja Sayajirao University of Baroda</td>
<td>Role of long noncoding RNAs (IncRNAs) in Glioblastoma-derived extracellular vesicle signalling in Microglia and Astrocyte dysregulation.</td>
</tr>
<tr>
<td>Ms. Tamali Roy</td>
<td>Molecular Immunology and Cell Biology, West Bengal</td>
<td>To understand the role of complement activators and regulators in adverse pregnancies.</td>
</tr>
<tr>
<td>Ms. Reena Jatyan</td>
<td>BITS Pilani (Pilani campus), Rajasthan</td>
<td>Development and evaluation of Temozolomide-fatty acid conjugate loaded nano-carriers for the treatment of Glioblastoma Multiforme.</td>
</tr>
<tr>
<td>Ms. Shruptha Kumari</td>
<td>Manipal School of Life Sciences, MAHE, Manipal</td>
<td>Influence of Microbiome and Mechanism during Cervical Cancer progression in women.</td>
</tr>
<tr>
<td>Ms. Manasa V.S.</td>
<td>Madras Diabetes Research Foundation, Chennai</td>
<td>Diabetes remission in an Indian setting-a randomised control trial to evaluate the efficacy of dietary fads modified for sustainability.</td>
</tr>
<tr>
<td>Ms. Srivarsha Reddy Bollareddy</td>
<td>BITS Pilani Hyderabad Campus</td>
<td>Fabrication, characterisation, and preclinical evaluation of 3-D printed solid oral dosage forms and implantable devices for personalised medicine.</td>
</tr>
<tr>
<td>Ms. Shrishti Pandey</td>
<td>Amity Institute of Biotechnology, Panvel, Mumbai</td>
<td>Development of a highly sensitive and selective optical sensor for a widely used blood anti-coagulant: Heparin</td>
</tr>
<tr>
<td>Ms. Khushboo Kumari</td>
<td>Department of Anatomy, Institute of Medical Science, Banaras Hindu University</td>
<td>Effects of bisphosphonate, Vitamin-D, and Calcium supplement on Hypocalcemia induced by PPI drug in Swiss albino mice.</td>
</tr>
<tr>
<td>Mr. Asif Itoo</td>
<td>BITS Pilani Hyderabad Campus</td>
<td>Multifunctional graphene oxide nanomedicine for breast cancer therapy.</td>
</tr>
<tr>
<td>Ms. Akepogu Jacquelyn</td>
<td>L V Prasad Eye Institute, Hyderabad</td>
<td>Mechanisms for sensing intraocular pressure by corneal endothelial cells.</td>
</tr>
<tr>
<td>Ms. Durga Neeharika Rani</td>
<td>Department of Genetics, Osmania University</td>
<td>Molecular mechanism of the Rankl - Rank - OPG signalling system and its impact on the pathophysiology of Otosclerosis in the South Indian population.</td>
</tr>
<tr>
<td>Ms. Anisha Jain</td>
<td>JSS Academy of Higher Education and Research, Mysuru, Karnataka</td>
<td>Evaluation of repurposed drug targeting the mutant KRAS gene of non-small cell lung carcinoma using Crispr/Cas-9 technology via Zebrafish as the model organism.</td>
</tr>
</tbody>
</table>
Institutional Research Grants

The focus for the year 2021-22 was on leukaemia and biology, and the treatment of cancer, for which 22 proposals were received and three approved.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institute Name</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Manju Sengar</td>
<td>Tata Memorial Centre, Mumbai</td>
<td>Early T-cell precursor acute lymphoblastic leukaemia: Unravelling mechanisms of resistance and development of novel therapeutic strategies.</td>
</tr>
<tr>
<td>Mr. Somsubra Nath</td>
<td>Saroj Gupta Cancer Centre &amp; Research Institute, Kolkata</td>
<td>Clinical role of a pair of novel mutations in BCR-ABL1 towards therapy switch in imatinib-resistant chronic myeloid leukaemia.</td>
</tr>
<tr>
<td>Mr. Hasmukh Jain</td>
<td>Tata Memorial Centre, Mumbai</td>
<td>Phase I study to evaluate the feasibility and safety of addition of ruxolitinib to a standard BFM-90 regimen in adolescent/adult Ph-like ALL.</td>
</tr>
<tr>
<td>Ms. Ruma Dey Ghosh</td>
<td>Netaji Subhas Chandra Bose Cancer Research Institute, Kolkata</td>
<td>Evaluation of 5 potential circulating miRNAs (miR-3677-3p, miR-138-5p, miR-3938, miR-4638-3p and miR-4725-3p) as blood-based biomarkers for early prediction of disease prognosticication in oral cancer.</td>
</tr>
<tr>
<td>Ms. Pritha Ray</td>
<td>Advanced Centre for Treatment, Research and Education in Cancer (ACTREC-TMC), Navi Mumbai</td>
<td>Investigating the role of RUNX1 and ID proteins for targeting the cancer stem cell population in primary and relapsed Epithelial Ovarian Cancer.</td>
</tr>
<tr>
<td>Mr. Sanjoy Chatterjee</td>
<td>Tata Medical Centre, Kolkata</td>
<td>Hypo fractionated radiation therapy comparing a standard radiotherapy schedule (over three weeks) with a novel one-week schedule in adjuvant breast cancer: An open-label randomised controlled study.</td>
</tr>
</tbody>
</table>

Teacher Training Programme

Two online teachers training programmes were also conducted during the year, on the topics of “Bioinformatics” and the “Science and Technology of Emerging Metals for Healthcare.”
**International Awards (research in leukaemia and diseases of the blood)**

Scholarships aggregating GBP 185,000 were sanctioned during 2021-22, for 5 research projects as under:

<table>
<thead>
<tr>
<th>Name</th>
<th>Country of origin</th>
<th>Place where work will be done</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Rita Hleihel</td>
<td>Lebanon</td>
<td>American University of Beirut, Lebanon</td>
<td>Tax and interleukin-10: druggable targets for a better clinical management of adult T-Cell Leukaemia / Lymphoma</td>
</tr>
<tr>
<td>Ms. Anouchka Laurent</td>
<td>United States</td>
<td>The Trustees of Columbia University in the City of New York, United States</td>
<td>Identify epigenetic vulnerabilities in angioimmunoblastic T-Cell Lymphoma</td>
</tr>
<tr>
<td>Ms. Anastasia Conti</td>
<td>Italy</td>
<td>San Raffaele-Telethon Institute for Gene Therapy (SR-TIGET) within Ospedale San Raffaele SRL.</td>
<td>Elucidating the functional role of cell senescence and transposable elements reactivation in acute myeloid leukaemia response to therapy</td>
</tr>
<tr>
<td>Mr. Narendra Dhele</td>
<td>India</td>
<td>Institute for Immunology, Centre for Pathophysiology, Infectiology and Immunology, Medical University of Vienna, Austria.</td>
<td>Isoform-specific functions of the transcription factor MAZR/PATZ1 in B-Cell Lymphomas</td>
</tr>
<tr>
<td>Ms. Cécile Lopez</td>
<td>France</td>
<td>Wellcome-MRC Cambridge Stem Cell Institute, University of Cambridge Jeffrey Cheah Biomedical Centre, United Kingdom</td>
<td>Gene regulatory complexes and networks regulated by the ERG Oncogene</td>
</tr>
</tbody>
</table>
Timely financial assistance or grants that recognise individual talent and merit, regardless of gender, social or economic status, can prove to be life-changing for the individuals, their families, and extended communities involved.

In addition to its impactful philanthropic work aimed at uplifting members of marginalised and under-resourced communities across India, Tata Trusts also award Loan scholarships each year to individuals with a proven track record of academic excellence, and through a rigorous selection process.

In continuation of this significant and more than a century-old practice, the Trusts have awarded J.N. Tata Endowment Loan Scholarships worth ₹9,00,000 each to two individuals for the 2021 financial year.

Sanjana Srikumar utilised the Endowment loan scholarship to pursue an LL.M degree at Columbia University, New York, United States. Chosen for the degree programme as part of the Centre for Public Research and Leadership programme run by the university, she plans to use the scholarship funding to research and work on education equality.

The second scholar is Srinivas B. S., who used the loan scholarship funds to pursue a master’s degree in Electrical and Computer Engineering at the University of Texas, Austin, United States, having completed a bachelor’s degree in Electronics and Communication Engineering from the National Institute of Technology, Karnataka. He is presently working as a teaching assistant at the University of Texas to manage his expenses.

Many Indian students aspiring to pursue higher education overseas compete for the JN Tata Endowment loan scholarship, every year.
Sudden illnesses or unforeseen healthcare expenditures can prove to be ruinous, notwithstanding the physical and emotional toll they take. Many Indians are unable to bear the financial burden of treating medical conditions that require specialised and extended care, regardless of whether they own medical insurance or not.

The family of a young mother of a four-year-old found themselves in a similar situation when the mother was diagnosed with Hodgkin’s Lymphoma (HL) in 2019. A highly curable type of blood cancer, with approximately 80 percent of patients being cured through standard first-line chemotherapy, the woman underwent treatment, but unfortunately suffered a relapse in 2021.

A teacher by profession, with her husband employed in the private sector, the family was unable to afford the recommended second phase of treatment. This involved high-dose chemotherapy and an autologous stem cell transplantation - Bone Marrow Transplant (BMT) recommended by healthcare professionals to minimise the long-term side effects of her condition and to improve treatment outcomes. The family turned to Tata Trusts for aid, which was promptly extended following an extensive case evaluation.

The Tata Trusts’ philanthropic work in community building and uplifting the underprivileged also includes tapping into its strong network of medical professionals working at various government-run, private, and charitable hospitals across the country to help families struggling with exorbitant medical bills. The Trusts uses the social work department of the network hospitals to assess the socio-economic condition of the family in need, helps family members of the patient process the required paperwork for treatment, and provides information on how the medical grant awarded to them will be disbursed for the patient’s treatment.

A timely intervention in this case was highly effective with the woman now well on her way to recovery.
LIST OF PARTNERS

HEALTHCARE


NUTRITION


WASH

ENVIRONMENT


ARTS AND CULTURE

LIVELIHOOD


EDUCATION

**SPORTS**

Mission Olympics Amravati, Maharashtra | Mary Kom Regional Boxing Foundation Imphal, Manipur | IndusInd Bank Mumbai, Maharashtra | Directorate of Education, Govt. of Mizoram Aizawl, Mizoram | Aizawl Diocesan Education Society Aizawl, Mizoram | Pullela Gopichand Badminton Foundation Hyderabad, Telangana | Bovelaner Hockey Academy The Netherlands | Atletico de Madrid Spain | Mizoram Badminton Association Aizawl, Mizoram | Mizoram State Sports Council Aizawl, Mizoram | Mizoram Football Association Aizawl, Mizoram | Center for Micro Finance and Livelihood Guwahati, Assam | North east India Development Association (NEIDA) Aizawl, Mizoram | Child in Need Institute New Delhi | Livolink Bhubaneswar, Odisha | Himmothan Dehradun, Uttarakhand | Hockey Ace Foundation Jamshedpur, Jharkhand

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**CANCER CARE**

Pfizer Mumbai, Maharashtra | Tata Capital Financial Services Ltd. Mumbai, Maharashtra | Exim Bank Mumbai, Maharashtra | Dakshina India Arya Vysva Sri Vasavi Kanyaka Parameswari Dharma Paripalana (DIAV) Tirupati, Andhra Pradesh | IndusInd Bank Pune, Maharashtra | Numaligarh Refinery Ltd. Golaghat, Assam | Bharat Petroleum Corporation Ltd. Mumbai, Maharashtra | Tata Autocomp Pune, Maharashtra | Tata Communications Mumbai, Maharashtra | Titan Bengaluru, Karnataka | Voltas Mumbai, Maharashtra | Tata Steel Mumbai, Maharashtra | Indian Oil Corporation Limited (IOCL) Kolkata, West Bengal | HDB Financial Services Ltd. Mumbai, Maharashtra | LIC Housing Mumbai, Maharashtra | Savita Oil Technologies Ltd. Mumbai, Maharashtra | D-Mart Mumbai, Maharashtra | Tata Capital Housing Finance Ltd. Mumbai, Maharashtra | Tata Consultancy Services Mumbai, Maharashtra | Tata Trent Mumbai, Maharashtra | Tata Memorial Hospital Mumbai, Maharashtra | Tata Medical Centre Kolkata, West Bengal | National Cancer Institute Nagpur, Maharashtra | Dr. Borooah Cancer Institute Guwahati, Assam | Meherbai Tata Memorial Hospital Jamshedpur, Jharkhand | Homi Bhabha Cancer Hospital and Research Centre Vishakhapatnam, Andhra Pradesh