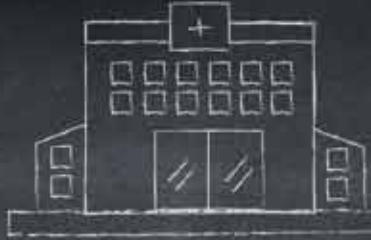


TATA

REVIEW

APRIL-JUNE 2020

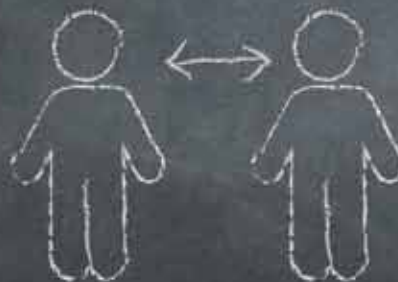


NUMBERS OF

HOPE



BEYOND THE PANDEMIC



Editorial

Dear Readers,

As the Covid-19 pandemic continues to unfold, it poses significant challenges for livelihoods, businesses and economies the world over. The Tata group has committed ₹1,500 crore to fight the invisible enemy. This issue of *Tata Review* focuses on the Tata group's efforts in combating the novel coronavirus.

The message from our Chairman, Mr N Chandrasekaran, recognises the resilience shown by Tata people and urges us to continue to collaborate as 'One Tata'.

The Cover story showcases how the group leveraged the 'One Tata' spirit to not just address the most critical needs in the healthcare and infrastructure spaces, but also in sectors like technology, communications, skilling and education among others.

The Community story highlights the Tata Trusts' pioneering efforts in supporting the Government of India to deploy emergency resources to cope with the crisis. The Trusts has been channelising support to the medical fraternity, augmenting healthcare facilities in India and reaching out to the marginalised sections of society through its 'One Against Covid-19' programme.

Read the interview of TV Narendran, CEO & MD, Tata Steel, who shares insights on the impact of Covid-19 on the manufacturing sector with emphasis on the steel industry's future. His counterpart Praveer Sinha from Tata Power throws light on the company's efforts to ensure uninterrupted electricity supply as the country went into lockdown.

The Special Report highlights the exemplary work of several Tata companies in enabling availability of essential goods and services across the country; ensuring business continuity in organisations around the world by providing the best in industry, technology and communications solutions; and adapting to new protocols and safety measures.

Read about the Tata group Founder, Jamsetji Nusserwanji Tata's inspiring work during the bubonic plague epidemic in Mumbai (then Bombay) in 1896, which continues to be the guiding force towards the Tata group's philanthropic efforts. The Tata People section salutes the indomitable spirit of Tata employees who have been working selflessly to fight against the disease on several fronts.

As geographies around the world begin to reopen, Tata companies are adapting to the 'new normal' and gearing themselves to face the challenges of the post-Covid-19 world.

We conclude this note with a steadfast belief that these stressful times, too, shall pass. So, stay positive.

Group Corporate Communications team

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N Chandrasekaran
Chairman, Tata Sons

CHAIRMAN'S NOTE

TATA GROUP'S RESPONSE TO THE COVID-19 PANDEMIC

For our generation, there is little that compares to the six-month period we have just experienced due to the Covid-19 pandemic. Travel, meetings, office, school and socialising have all fallen victim. Overnight, we have had to reimagine how we work. Through all of these rapid changes, I continue to be deeply impressed and gratified by the adaptability and resilience our people have displayed.

Under the leadership of Mr Ratan N Tata, we committed ₹1500 crore as a group to Covid-19 relief. Tata employees have, in addition, contributed tens of crores towards various response projects.

The past few months have been very challenging, but they have also been a great demonstration of the value of collaboration. I am proud of how we have worked together to battle this disease. Now, as we navigate the uncertain journey into the post-pandemic future, we will need to respond according to our principles of simplicity, synergy and scale and, above all, to foster the mindset of 'One Tata'. Collaboration has been our watchword, and the pandemic has shown the importance of living by our principles.

EQUIPMENT

A significant Covid-19 outbreak in India would quickly result in an acute shortage of ventilators, personal protective equipment (PPE) kits, masks and gloves, as well as Covid-19 testing kits. Amid soaring global demand, purchasing can be very difficult and lockdown makes guaranteed delivery problematic. We looked at this problem and pooled our knowledge to do more as a group than any one business could do alone.

Drawing on the procurement expertise across Tata Steel, Tata AutoComp Systems (TACO) and Tata Consultancy Services (TCS), we orchestrated a plan to buy large quantities of medical supplies from China, the US, South Korea and domestic sources. Our teams visited ventilator suppliers and underwent training in installation to help guide medical staff in India. To date, over a 1000 ventilators and respirators, 4 lakh PPE kits, 35 lakh masks and gloves, and 3.5 lakh testing kits have been procured. The result of the group's collaboration was a series of interventions that were lifesaving.

TESTING

This pandemic will not be controlled unless we can test at scale. Polymerase chain reaction (PCR) kits are a scarce commodity; reagents for testing have to be imported; and sample collection, processing and transport require specialised equipment and trained personnel. The Tata group has invested in technology to make testing easier, faster and cheaper. We completed a research pilot, with the help of the country's most eminent scientists, that proved the value of a 'Minimum Testing Maximum Intelligence' approach in the Kolar district of Karnataka. This process uncovered evidence of silent transmission among high-risk groups such as health workers and police personnel which enabled us to predict the spread of the disease at a time when Kolar had no confirmed positive Covid-19 cases. A detailed standard operating procedure of the testing strategy for national scaling was handed over to public health agencies to incorporate in lockdown exit efforts. Currently, the Kolar model is being adopted and refined in Jamshedpur.

Our investments in two novel testing technologies will not only help the Covid-19 fight but also have a huge potential beyond, for instance, in the diagnosis of other infectious diseases and genetic diseases, as well as in the treatment for cancer. Both technologies are expected to be scaled up within the next quarter.

CAPACITY

Outbreaks of Covid-19 around the world have shown that if the health system is overwhelmed, the consequences will be higher mortality rates. India needs many more quarantine and isolation facilities, ICU beds and dedicated Covid-19 treatment centres.



Under the leadership of Mr Ratan N Tata, we committed ₹1500 crore as a group to Covid-19 relief. Tata employees have, in addition, contributed tens of crores towards various response projects.”

Coordinated action across the group has provided a boost to India's health capacity. Tata Sons, supported by Tata Projects, has helped local governments and municipal corporations expand the number of beds, treatment centres and isolation facilities by leveraging the group's network of real estate assets and hospitals. Added to this, we are in the process of setting up entirely new Covid treatment facilities. This was made possible by inter-group co-operation: teams from Voltas, Tata Steel and Tata Consulting Engineers, as well as medical experts from Tata Trusts, each providing support and expertise; and group companies like TCS, among others, providing access to leased commercial space. To date, 2,000 beds have either been added or are currently in progress.

SELF-RELIANCE

This increase in capacity will lead, if it is pointed in the right direction, to increased self-reliance. This is why we have tasked 'Tata Medical and Diagnostics' with spearheading efforts to produce ventilators and new testing technologies. Soon, it will be expanded to other medical devices and diagnostics.

Tata Motors, TACO and Voltas have all brought together their respective expertise in design, manufacturing and procurement; and, in consultation with medical experts from Tata's hospital network and senior government officials, identified products for mass production. We've also started producing our own PPE kits — with over 9,000 distributed to date — to address immediate shortages.

TECHNOLOGY

The power of technology will underlie the future success of healthcare delivery. Under the aegis of Tata Digital, we have recrafted the Tata Bridgital platform to provide a range of services for users registered on the Aarogya Setu contact tracing app. These include Covid-19 awareness, screening and risk assessment to virtual consultation and triage. Over 3,500 virtual consultations have been provided by doctors on the platform since its launch in May 2020.

Tata Bridgital Covid Safety Services, another technology-led application, helps companies come out of lockdown safely by assessing the work profile and risk levels of a business, and



Under the aegis of Tata Digital, we have recrafted the Tata Bridgital platform to provide a range of services for users registered on the Aarogya Setu contact tracing app.”

connecting staff to medical personnel. AirAsia, Tata Steel and Trent are all using the model, which has the potential for setting the standard for protocols across the country.

SUSTENANCE

Finally, extraordinary times require us to do some extraordinary things. Over the past few months, 15 Tata group companies have worked to scale meal and food grain provision and provide accommodation across the country. The Indian Hotels Company Limited (IHCL) has distributed over two million meals to healthcare professionals and migrant workers, including to over 20 hospitals in Mumbai, Delhi, Bengaluru, Agra and Coimbatore. The company worked with Tata Trusts to support the Mumbai police with daily meals. Tata Power, Tata Consumer Products, Tata Chemicals, Tata Motors, Tata Advanced Systems Ltd, Titan and Tata Communications each undertook efforts to keep meals flowing to migrant and frontline workers, and those in need across townships, factory locations and settlements where they are located.

IHCL also opened the doors of its various hotels, including properties like The Taj Mahal Palace and Taj Lands End in Mumbai, for medical professionals. These rooms helped doctors and nurses spend less time commuting, thereby lowering the risk of viral transmission. Various Ginger properties across the country have also offered rooms for quarantine purposes.

CONCLUSION

Working as ‘one’, deploying our expertise, collaborating to increase capacity, increasing national self-reliance, deploying technology for creative solutions, helping people in tough times — these are the themes of this extraordinary time.

The experience of our combined Covid-19 response has shown that the sum of our group’s efforts is so much more than its individual parts. The breadth and scale of our interventions is testament to the nation-building orientation that Tata stands for. I would also like to acknowledge the professionalism and hard work of all those who stood tall, who raised their hands when others would shy away. We have shown that when we come together, to collaborate as One Tata, we can accomplish more than we can ever imagine. **TR**



The experience of our combined Covid-19 response has shown that the sum of our group’s efforts is so much more than its individual parts. The breadth and scale of our interventions is testament to the nation-building orientation that Tata stands for.”



Numbers of Hope

How the Tata group led India Inc's response to the Covid-19 pandemic

BY MONALI SARKAR



It took less than 30 seconds for Tata Sons Chairman N Chandrasekaran to approve the first ₹150 crore for procurement of ventilators and other medical equipment for India's fight against the Covid-19 pandemic.

"That pretty much set the tone for what our approach would be towards this challenge," Banmali Agrawala, president, Infrastructure, Defence and Aerospace at Tata Sons, tells *Tata Review*.

Within days of that, on March 28, Tata Sons announced a total commitment of ₹1,000 crore to this fight. Along with the ₹500 crore pledged by the Tata Trusts, it remains the largest sum committed by a corporate and its philanthropic arm since the outbreak of the disease in India.

"The message from the Chairman was pretty clear: We have got to do the best we can. We have got to be impactful and coordinated so that we actually make a difference," says Mr Agrawala, who is coordinating the Tata group's effort to combat Covid-19.

"That one signal gave us a lot of confidence to do things at scale."

ONE TATA

Tata Sons leveraged the combined expertise of the group to optimise the impact of its

financial commitment. A special task force, with representatives from various group companies, was put in place with immediate effect. But they walked into uncharted territory.

"We didn't get into it with a readymade template. It evolved," says Mr Agrawala. "The first clear verticals to emerge were the need for financial aid and healthcare equipment."

Requests from different states and entities poured in — to Tata Sons directly as well as through group companies. The most critical and most requested items were ventilators, personal protective equipment (PPE), testing kits, gloves, and N95 and triple-layer masks.

To address the immediate need, Tata Sons, Tata Steel, Tata Motors, Tata AutoComp Systems and Tata Consultancy Services (TCS) leveraged their domestic and international networks for procurements. To address the long-term need, the group set in motion plans to begin manufacturing PPE and ventilators in India.

The third vertical to emerge was the need to boost the healthcare infrastructure with new hospitals, hospital conversions and beds. A need answered by Tata Projects, Tata Consulting Engineers, Tata Steel and Voltas.

“We then realised that taking care of people and providing infrastructure also meant providing food and accommodation to doctors, healthcare workers and other frontliners,” says Mr Agrawala. “What began as a one-off gesture by The Indian Hotels Company Ltd (IHCL) evolved into a fourth vertical to serve thousands of meals a day and more.”

He adds, “As these evolved, we quickly put a framework around them and got a leader for each vertical. We also coordinated our efforts with the Tata Trusts so that the aid was well spread out, and there was no duplication. I don’t know if there has been another instance in the history of our group of so many companies and teams coming together to establish a uniform process. And all of this was done in a matter of days.”

3 MONTHS AND COUNTING

The special task force has kept the momentum going for three months now to address the constantly evolving needs in at least 24 states across the country. And it has taken an unprecedented amount of collaboration to see it through.

Since April, at 4pm every day, at least 20 leaders from across Tata companies have connected on a ‘Teams’ call to coordinate efforts. It has been



A Tata Chemicals-led household survey on Covid-19 in Okhamandal, Gujarat

followed up with a daily update to the Chairman of Tata Sons as well as the CEOs of companies to ensure visibility across the group on the multiple activities taking place under each vertical.

“The logistics of procurement and distribution of aid is not simple,” says Mr Agrawala. “Even when you are just distributing aid there is a certain structure, documentation and legality to be followed. There is a lot of documentation and tax-related paperwork that has to happen behind the scenes. We also maintain an elaborate spreadsheet to track the need, the number of cases in each state, what we have received and what we have distributed. It is monitored on a daily basis.”

THE NEXT STEP

But it is not just the size of financial commitment or the scale of aid that has set the Tata group’s crisis response apart. It

is the fact that even through the fog of the pandemic, the group never lost sight of its legacy of medical philanthropy — to go beyond aid and foster a culture of medical research to secure the future.

Jamsetji Tata showed the way during the bubonic plague pandemic of the 1890s by supporting Dr Waldemar Haffkine, who developed the plague vaccine. Following in the Founder’s footsteps, the group allocated funding to develop technologies of the future.

Mr Agrawala says, “We have partnered with CSIR’s (Council of Scientific and Industrial Research) constituent lab, Institute of Genomics and Integrative Biology for commercialisation of a new testing technology. We committed ₹10 crore to the Brihanmumbai Municipal Corporation to further plasma therapy. A bridgital platform is also in the works to bring patients and doctors on one platform for testing, treatment and follow-ups.”

“It’s not just money. It’s not just our goods and services. It’s not just opening up our facilities,” he adds, reiterating what has made the Tata group’s crisis response stand out. “It’s the attitude, the approach and the intellectual contribution in terms of finding a solution.” **TR**

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‘The most satisfying job of my career’

In conversation with **Banmali Agrawala**, president, Infrastructure, Defence and Aerospace at Tata Sons, and the man at the helm of the Tata group’s special task force against Covid-19

How is the Tata group coming together as one to meet the nation’s needs?

Let’s take procurement first. We realised there were few things in critical short supply — ventilators, personal protective equipment (PPE) and testing kits — and went about procuring them. We leveraged Tata AutoComp Systems and Tata Steel, which have a presence in China, as well as Tata Sons China to connect with suppliers and manufacturers. We also leveraged Tata Daewoo and Tata Consultancy Services’ (TCS) Asia-Pacific (APAC) reach for procurement from countries like South Korea.

Ventilators are sophisticated equipment. TCS in the APAC region, on their own initiative, trained a team in the product so that if needed we would have a team ready to help us out with installation or servicing. Thinking ahead, taking initiative, getting it done — we have seen such outstanding

conduct and behaviour from many of our colleagues across the group, and that has been very encouraging.

Another example is the building of critical care facilities, where Tata Projects stepped in. The first ward conversion at Mumbai’s KEM Hospital was done in 12 days. They also built a hospital in Kerala from barren ground and delivered the first phase of 200 beds in six weeks. The design, done remotely during the lockdown, was executed by Tata Consulting Engineers (TCE). The ventilation came from Voltas. The wards and beds came from Tata Steel. We leveraged the

entire capability of the group to make things happen. It is a phenomenal example of working across company lines to produce outstanding results. We continue to do more of this.

Through all of this, the Chairman’s ‘One Tata, One Network’ vision is taking shape.

A key element of the group’s efforts has been the employees on the frontlines of this effort...

It was never just about giving money or building infrastructure; our people have taken a lot of risks, and they have done so happily and cheerfully.

It is important to remember



The Covid-19 wing at Tata Main Hospital, Jamshedpur

that the KEM critical care ward that was converted was adjacent to a Covid-19 ward. Our people working there took a big risk. The same is the case with The Indian Hotels Company Limited (IHCL) staff who put themselves at risk when they served the healthcare workers coming back from hospitals. It speaks volumes for the commitment of our people.

What are some of the business innovations that have come about as a result of this crisis?

Manufacturing of ventilators is a business opportunity that has arisen as a consequence of this.

Tata Chemicals repurposed their fertiliser factories to produce disinfectants and sanitisers. Tata Steel's existing modular construction solutions were adapted to help build hospitals.

Incidentally, not as a business, but given the lack of PPE and the poor quality of what's available, we decided to step in. We are now packaging PPE kits — a gown, footwear, gloves, mask and a hood.

We are procuring the pieces, checking for quality, sanitising and sealing them. We give it out to healthcare professionals with our stamp on it so that they know these are safe to use.

We also got a PPE design made for women — it was

pointed out that unisex PPE could be ill-fitting for women — and we will be rolling that out as well.

You have said that your most revealing interactions during this time have been with governments and scientists. Why is it so?

I have been around for a fair time, and I have dealt with governments for a fair time. I have never seen governments — from the local level, to the state level, to the centre — be so prompt. They are wanting to get things done with a huge sense of urgency. The whole approach has been to work together and get things done. It's been truly revealing.

But the most remarkable were the scientists, especially those at CSIR (Council of Scientific and Industrial Research) with whom we are working very closely. Notably the

“

It was never just about giving money or building infrastructure; our people have taken a lot of risks, and they have done so happily and cheerfully.”

depth of their knowledge, the way they think and their belief that the solutions and possibilities are available within India were promising. Just talking to them and the confidence and conviction with which they responded was very convincing. That was a huge “aha!” moment for me.

Do you see India becoming more self-reliant as a result of this pandemic?

Absolutely! Just to give you a sense of this, not only do we not make ventilators and PPE in our country, we also don't make the swabs needed to collect samples for Covid-19 testing. It's not for lack of capability or knowledge; it's just that we haven't applied ourselves to getting it done. I am sure that we will all have to think very deeply about this.

To me, being self-reliant is not just about making in India. The fundamental idea and concept have to be born here; the intellectual property or the know-how has to be born here. That is the real 'Make in India', not simply getting material or technology from outside and assembling it here.

I am convinced that a lot of it will happen. I am also convinced that manufacturing will get a lot of impetus as soon as the Covid-19 threat is over. I am not trying to be protectionist; while we do all this, we will have to



IHCL has served 21.5 lakh+ meals to support frontline workers and help migrants during this crisis

make sure that we are globally competitive.

Do you see India Inc's response to this pandemic changing how public healthcare works in India?

I do. There is a realisation on the government's part that we have to spend a lot more money and invest in social infrastructure, with healthcare being right at the heart of it.

From a business point of view, I think it's an ideal opportunity to innovate ideas and solutions that will make healthcare affordable. Today, there is a solution in healthcare for almost everything. For instance, in case of Covid-19, we have RT-PCR (reverse transcription polymerase chain reaction) testing, but that costs ₹4,500 per test. If you catch Covid-19, you have to get at least two to four of those tests done, leave alone the ones that are done from a preventive standpoint. Coming up with solutions that make healthcare infrastructure more affordable and accessible is an opportunity for the Indian business community.

I dare say that digital will play a phenomenal role in bringing down costs and increasing accessibility to a wider range of people.

How has the Tata group stood out in this time of crisis?

It's our Tata culture to come together and rally around a cause, and we have lived up to our reputation. We have been supportive of the government not just in terms of money or throwing open our facilities and infrastructure but also by helping with ideation and policy formulation.

Also, we have stood out as a group that is doing not just what is expected but doing it quietly. The underlying note in all of this has been an honesty of purpose. What we have been doing as a group has been with an unflinching commitment towards doing something good for the country. There is no other motive.

How has the experience of coordinating the Covid-19 effort for the Tata group been?

This has been the most satisfying job of my career.

The scale at which things are

happening, what we are doing and the difference it is making to the lives of people — it is a privilege to be in a position to play some role in making that happen.

What were some of the most difficult moments of this journey? What were the moments that gave you hope?

The situation was absolutely chaotic when it all started. I hadn't seen such disturbed and distorted behaviour from sellers before in my life; they exploited the pandemic to drive up prices of life-saving equipment.

But what has given me the most hope has also been the behaviour of people, not just within our Tata group but across the country. I could pick up the phone and talk to any CEO or anybody in any company and not once has anyone refused to listen or said they didn't have the time or even asked me to call back or said they couldn't do it. Not once.

We need to be positive about all that is happening and the future. Even the world's most pessimistic person would agree that this is a two- or three-year challenge. After that, we will get back to what we were in many ways. Meanwhile, there is a lot to learn and a lot to look forward to as well, and let's focus on that. **TR**

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HEALTHCARE EQUIPMENT

The factory that was **built** **under lockdown**

1,400+ ventilators and respirators. 3.98 lakh personal protective equipment (PPE) kits. 2.8 lakh+ RT-PCR (reverse transcription polymerase chain reaction) tests. 15 lakh N95 masks. 10 lakh surgical and triple-ply masks. 10 lakh gloves. ₹208 crore spent. By the end of the lockdown, this was what Tata Sons' procurements for India looked like.

In the days following Tata Sons' pledge of ₹1,000 crore to aid the country's fight against the Covid-19 pandemic, these had emerged as the most requested items from states and other entities. And the Tata group leveraged the combined might of companies like Tata Steel, Tata AutoComp Systems (TACO), Tata Motors, Tata Consultancy Services (TCS) and Tata Sons to procure these lifesaving equipment in time.

Arvind Goel, chief executive officer, TACO, says, "Global purchasing and supply chain management is one of our core competencies, given that we

have to compete with global auto component manufacturers in the automotive marketplace. We also have a significant presence in China, in the form of Nanjing Tata Autocomp. At this juncture, the global purchasing and supply chain setup in India and Nanjing Tata Autocomp teamed up to identify sources and procure ventilators and PPE most competitively in the least possible time to meet the emergency requirements of the country."

TACO also set up a warehouse facility in Pune,

Maharashtra, for consolidation of the material received from overseas and local suppliers, in a dust-free environment and played a critical role in delivering PPE kits to hospitals and other destinations as per Tata Sons' allocations.

"Our Purchasing and Supply Chain team has expertise in logistics and distribution pan India, which helped access logistics partners quickly despite the lockdown. A dedicated task force was created for distribution of PPE kits, ventilators, masks, etc,"



TACO chartered a Boeing 777F cargo flight to bring 1 lakhh PPE kits to India — the biggest such consignment during the ongoing crisis

Mr Goel says. “Many supplier partners and clearing agencies also extended support.”

Tata Motors, meanwhile, mobilised its own network. Shailesh Chandra, president, Passenger Vehicle Business Unit, Tata Motors, says, “During our outreach, we were flooded with different options of ventilators. We were lost in terms of which one to procure, and Tata Steel stepped in. We would send ventilator specs to Tata Main Hospital (TMH) in Jamshedpur, and they used to give us decisions within 45 minutes on whether something was worth procuring.”

Tata Steel also aided with the procurement within India. “During that period, the biggest challenge was to ensure that we do not receive any substandard material,” says Chanakya Chaudhary, vice president, Corporate Services, Tata Steel. “So, our entire supplier base in India was pulled in to get whatever we could; we hardly went to any new supplier. Our procurement team was confident that our current set of suppliers, who we have been banking on for so many years, would be able to deliver. That is what helped us.”

MADE-IN-INDIA VENTILATORS

The scale of procurement, however, highlighted the need to

substitute the import of medical equipment to India with self-sufficiency urgently.

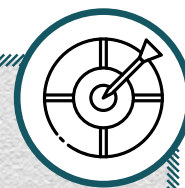
Mr Chandra says, “At least 65-75 percent of the ventilators in India today are imported. I got a call from our Chairman, Mr N Chandrasekaran, as early as March saying that there was

a need for ventilators, and we should look into manufacturing them.”

Tata Motors teamed up with TACO to execute the project.

Recalling the early days of the mission, Mr Chandra says, “We had absolutely no knowledge about this. The first

Adapting to the challenge



TATA CHEMICALS

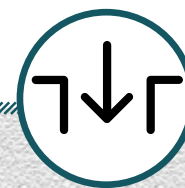
Tata Chemicals repurposed its manufacturing facility in Mithapur to produce disinfectant. By June 15, it supplied 11.7 lakh litres to Gujarat and 6 lakh litres to Mumbai to keep public places and disease-prone localities safe from the virus. Its subsidiary Rallis India transformed chemical units at Akola and Ankleshwar to meet the increased demand of hand sanitiser. It supplied 1.13 lakh litres of hand sanitiser across Maharashtra, Gujarat, Telangana, Karnataka and Northeast states by June 15.

JAGUAR LAND ROVER

The British car maker responded to the need for PPE by manufacturing National Health Service-approved face visors. It began with 3D-printed visors before shifting to a new tooling, developed by WHS Plastics, that enabled it to scale up production to more than 2,000 visors a day – with one polypropylene headband generated every 30 seconds. JLR is also printing protective visors at its facility in Itatiaia, Brazil, and has open sourced the 3D-Printed CAD files to encourage other businesses to join the global call for more PPE.

VISTARA

During the national lockdown, the airline operated 34 cargo flights, deploying its Boeing 787-9 Dreamliner aircraft, to transport 217.6 tonnes of relief material, medical supplies and essential commercial goods.



Filling the gap*

AIRASIA INDIA

Operated 4 free cargo flights to deliver PPE kits and medicines.

TATA ELXSI

Committed ₹25 lakh to Tata Motors for procurement of 35,000 surgical masks, 8,500 N95 masks, 100 PPE kits, 1,250 litres of sanitiser and 5,250 litres of disinfectant solution to help them enhance Covid-19 preparedness in Pune, Maharashtra; committed an additional ₹25 lakh to the Bangalore Baptist Mission Hospital, Karnataka, to procure PPE kits, sanitisers and more; provided ₹17 lakh worth of similar supplies and sponsored the cost of two ventilators worth ₹20 lakh to the Government Medical College in Trivandrum, Kerala.

THE INDIAN HOTELS COMPANY LIMITED

The Taj Public Service Welfare Trust (TPSWT) with aid from Tata AIG supported the Government Hospital, Maharashtra, and Tata Memorial Hospital, Mumbai with procurement of 24 normal ventilators and 6 high-risk ventilators. TPSWT also provided 30 ventilators to other Mumbai hospitals.

TATA AIG

Facilitated procurement and movement of critical medical equipment like respirators, masks, PPEs kits and sanitisers, including procuring medical consumables worth ₹1.3 crore for MCGM (Municipal Corporation of Greater Mumbai) hospitals.

TITAN COMPANY

Supported procurement and installation of one ICU-based ventilator worth ₹15 lakh at CMC Hospital in Vellore, Tamil Nadu; contributed to the procurement of ventilators at the Government Hospital in Hosur, Tamil Nadu; and spent ₹26.2 lakh on PPEs for healthcare workers and others in

Tamil Nadu, Karnataka, Telangana and Sikkim.

TATA COMMUNICATIONS

Supported Tata Motors with a contribution of ₹25 lakh to help three hospitals in Pune to procure PPE kits and other medical supplies.

TATA MOTORS

Distributed 14,600+ N95 masks and 85,000+ other masks, 17,800+ bottles of sanitisers, 5,000 litres of sodium hydrochloride, 275 PPE kits, 2 ventilators, 5 thermal scanners and other medical supplies to government hospitals.

TATA AIA

Contributed medical consumables worth ₹25.6 lakh to Kasturba Hospital in Mumbai.

TATA ADVANCED SYSTEMS LTD

Provided PPE kits worth ~₹7.2 lakh to hospitals and police personnel in Hyderabad and Nagpur.

TATA SUSTAINABILITY GROUP

Supplied masks, PPE kits, sanitisers and other medical supplies worth a total of ₹2.6 crore in Kashmir, Uttarakhand, Tamil Nadu, Maharashtra and Andhra Pradesh.

TATA INTERNATIONAL

Partnered with the Tata Trusts, through Tata International Singapore, to enable airlifting of critical supplies, including PPE kits, N95/KN95 masks and surgical masks for supply in India.

TATA CHEMICALS

Supplied 500 PPE kits to a government hospital in Kanchipuram district, and N95 masks and one ventilator to the Cuddalore district, located in Tamil Nadu.

*Data as of June 2020

challenge was to understand the types of ventilators, what goes into them, which ones are most likely to be needed, the kind of manufacturing facility required, the testing standards and the certifications required before we can start supplying them. Once again, we sought help from Tata Steel and their doctors at TMH.”

Mr Chanakya Chaudhary of Tata Steel notes, “Dr Rajan Chaudhry, general manager, TMH, gave a detailed presentation on the different types of ventilators. He also helped us decide which of those should we try to manufacture based on the country’s need as well as the ability of an auto company.”

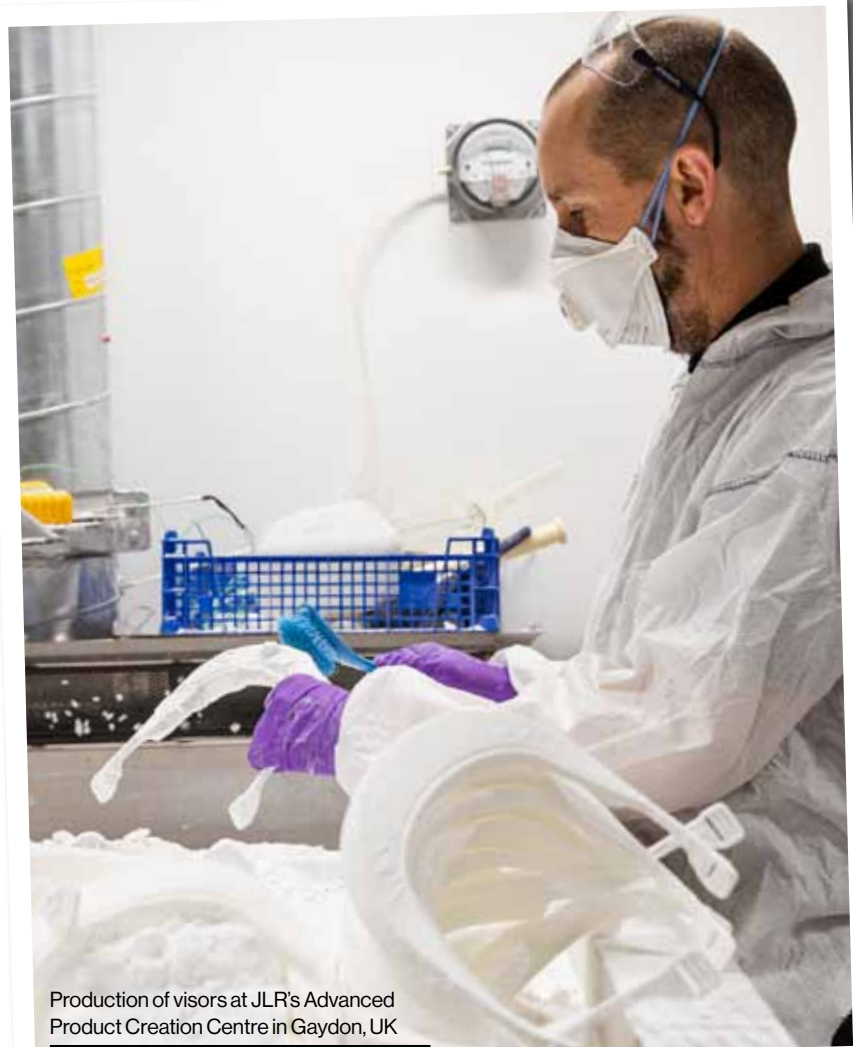
The next challenge was to find the right partner. “After having to abort different partners for different reasons, we finally decided on Medtronic,” Mr Chandra says. “Actually, it was our Chairman, Mr Chandrasekaran, who reached out to their chairman and helped us connect.”

It was decided that Tata Motors and TACO would start with an existing ventilator design from the globally reputed ventilator manufacturer. A readily available TACO factory for electronic products in Pune was converted for the purpose.

Mr Goel says, “The need of



Rallis India manufactured and distributed 1.13 lakh litres of sanitiser across Telangana, Maharashtra, Gujarat and Karnataka by June 15



Production of visors at JLR's Advanced Product Creation Centre in Gaydon, UK



Since April, Vistara has operated 34 special cargo flights to transport 217.6 tonnes of medical equipment and relief material

the hour was to get ventilators into the market as quickly as possible and in large numbers. Hence, the R&D teams of Tata Motors and TACO took up areas where each of us had expertise. For example, the electronics and software were taken up by Tata Motors' Engineering Research Centre, and TACO took up the design of mechanical parts like plastics, battery and blower.

“We have developed manufacturing and supply facilities for several products from scratch over the years

with diverse partners around the world. This capability was harnessed to set up the manufacturing lines. Each of the TACO business units chipped in with their resources to support the larger cause. As an illustration, the interior and plastic division developed all the plastic parts of the ventilator in a record time of three weeks.

“Ventilator manufacturing is intricate. It involves assembling of about 600 sub-components in a compact space. It is a lifesaving product,

hence requiring critical quality checks. Given our experience in developing safety critical products in the automotive industry, we were able to deploy several streams at the same time — manufacturing, process engineering, quality management systems, operator and worker training, safety audit teams, etc — even as the product development was going on to meet the challenge of timely introduction.”

Mr Chandra adds, “It was the foundational

things — strong engineering knowledge because of the complexity of what goes into making a car, the knowledge of manufacturing, the capability to develop components, and the understanding of the language of testing and validation — that made Tata Motors and TACO uniquely suited to take on this challenge. We are yet to deliver, but we will be able to deliver it without doubt.”

PROTECTIVE GEAR

Tata Motors and TACO executed all of this while simultaneously setting up a unit to supply best-in-class PPE kits. “This direction also came from the Chairman. In April, he highlighted that there was an issue with the quality of PPE being supplied in the country and asked us to see if we could do this on our own,” Mr Chandra says.

Unlike ventilators, however, there was no long-term manufacturing ambition in this case. The aim was to ensure that all nine components of the PPE kits being supplied met all the quality standards for the duration of the crisis. They addressed this by mobilising Tata Motors’ ancillary Gruhini Udyog to stitch some of the components while setting up a supply chain to source the others.

“As per requirements from



frontline women health workers, exclusive PPE gowns for women — the first of its kind in India — were also developed,” says Mr Goel of TACO, which took the lead in the assembly, quality checks, sterilisation, packaging, sealing and certification. It also handled the logistics and distribution of the kits based on Tata Sons’ requirement forecast and demand.

THE REAL POWER

By July, at least 55,000 PPE kits will be ready while the ventilator manufacturing unit is being set-up for production. Achievements that would not have been possible without the real power of the Tata group — its people.

“We must remember that we took on all of these tasks during the lockdown,” says

Mr Goel. “Coupled with that was the risk our employees faced in venturing out to develop the product and the manufacturing set-up.”

Hidden behind every milestone of this journey are heart-warming instances of Tata employees stepping up. Like the time Tata Elxsi’s engineers in Bengaluru volunteered to travel to Mysore on behalf of TACO and Tata Motors to meet a potential partner. Like the many trips the engineering and sourcing teams from TACO and Tata Motors made to a partner plant in Hyderabad to gain expertise despite the rising number of Covid-19 cases around them. Or, like the TCS team that quietly worked behind the scenes on alternative solutions. **TR**

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HEALTHCARE INFRASTRUCTURE

A hospital in **weeks**

The situation in Kasaragod, Kerala, was tense at the end of March 2020.

On March 30, the district recorded the highest number of Covid-19 cases in the country and was still largely dependent on medical facilities from Karnataka. With states sealing borders during the lockdown, the Kerala government turned to the Tata group to set up a greenfield hospital in record time.

On behalf of Tata Sons, Tata Projects undertook the responsibility to deliver it.

Explaining how they made it happen, Rahul Shah, chief operating officer, Urban Infrastructure, Tata Projects, says, “We worked with Tata Steel, Voltas and Tata Consulting Engineers (TCE) to

design modular prefabricated units, which could be assembled at site into hospital wards compliant with government guidelines for Covid-19 patients. We realised that if we could manufacture these units in multiple workshops, transport them to Kasaragod and fit them in, we could set up a hospital very quickly.

“The modular units were made by Tata Steel, with air conditioning from Voltas. While these were being manufactured offsite, we prepared the five-acre site in Kasaragod — with levelling, provisions for sewage drainage, roads, electricity — for their arrival.”

Tata Steel banked on its experience in modular housing to make it work. Dr Debashish Bhattacharjee, vice president, Technology and New Materials

Business, Tata Steel, says, “We have a product range called Nest-In, which produces modular enclosures ranging from toilets to homes. So, when this request came in, we were equipped to handle it.”

Nest-In by then had already manufactured two modular ICU cabins for the Ramgarh Sadar Hospital in Jharkhand. “All we had to do was design

Did You Know?

Tata Steel has supplied 700MT of Tata Steellium and Galvano material across India for essential Covid-19 related medical services such as beds, medical furniture, isolation rooms and ventilators.



‘One Tata’ spirit — Tata group companies collaborated to set up a greenfield hospital at Kasaragod, Kerala, in record time

something new; we did not have to build a new concept,” says Dr Bhattacharjee. “TCE helped with the initial design and left it to Tata Projects and Tata Steel to work out the details. Then Voltas came in with the HVAC [heating, ventilation and air conditioning].”

Tata Steel was commissioned to manufacture 128 ready-to-use units, including light and sanitary fittings for Kasaragod. This included 80 quarantine rooms with 400 beds, 24 isolation rooms with 96 beds, two observation rooms with 10 beds, and one resuscitation room with five beds. The units were also used to set up 10 rooms, totalling 40 beds, for nurses and doctors to rest; a waiting room; a canteen; a pharmacy; and ECG, x-ray and ultrasound rooms. Around 20 of these units were made with fibre reinforced polymer composite sandwich panels. The design of these composite material units was optimised to lend the same structural performance as their steel counterparts, with better longevity and at similar cost.

To meet the quick deadline, Tata Steel identified seven manufacturing spots across Kolkata (West Bengal), Mangalore (Karnataka), Hyderabad (Telangana), Ahmedabad (Gujarat) and

Faridabad (Haryana), to increase production and reduce the risk of being in the red zone.

The first phase of the 551-bed hospital is scheduled to be handed over to the Kasaragod administration in July. Work has also been initiated to build a 70-bed greenfield facility for the Tata Memorial Hospital in Mumbai.

QUICK CONVERSIONS

Tata Projects has also taken the lead, on behalf of Tata Sons, for conversions and upgrades at several hospitals around the country to equip them as Covid-19 treatment centres. This includes the much-talked-about conversion at Mumbai’s

KEM hospital.

Mr Shah says, “The Tata intervention at KEM was to quickly convert and equip two wards into a critical care unit with 65 beds and the 20,000sq ft KEM Orthopaedic Centre into a 115-bed isolation ward. When the request came, Mumbai was already in lockdown. But we managed to find contractors and mobilise workers to do whatever was necessary to convert these wards and equip them with the necessary infrastructure. We also managed to deliver the first conversion in just two weeks.

“It is important to remember that we were doing this at a time when the neighbouring wards were

Behind the scenes

Voltas aided in the conversion of multiple medical facilities across the country to make them Covid-19 compliant.

ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS), NEW DELHI

Modifications in the air handling unit and ducting, and the introduction of ultra-violet germicidal irradiation for germ control in the system for conversion of standard wards into isolation wards.

KOVAI MEDICAL COLLEGE AND HOSPITAL, COIMBATORE

HVAC modifications to convert part of the academic block into an isolation ward and set up a testing centre.

GAUHATI MEDICAL COLLEGE AND HOSPITAL, GUWAHATI

HVAC modification to upgrade facilities.





At Tata hospitals

TATA STEEL

Jharkhand: The company has set up 650 beds (567 isolation beds and 83 beds with ventilation support) in the state. This includes 513 isolation beds and 77 critical care beds with invasive and non-invasive ventilators at Tata Main Hospital in Jamshedpur; 25 isolation beds, including three beds, with ventilation support at Noamundi; 25 isolation beds, including three beds with ventilation support, at West Bokaro; and 10 isolation beds at Jamadoba.

Odisha: The company has committed to setting up 600 beds (555 isolation beds and 45 beds with ventilation support). This includes 200 isolation beds with 15 ICU beds in Tata Steel Medica Hospital, Berhampur (Ganjam district); 150 isolation beds with 15 ICU beds in Tata Steel Medica Hospital at Duburi (Jajpur district); 50 isolation beds with five ICU beds in Tata Steel Hospital, Joda (Keonjhar district). Another 200 isolation beds, with 10 ICU beds, were set up at NC Autonomous College in Jajpur district.

TATA CHEMICALS

- **Gujarat:** Preparation of ~100-bed isolation ward in Mithapur to supplement the government's infrastructure requirement. This is being increased to a ~200-bed facility over time.

TATA CONSUMER PRODUCTS LIMITED

- **Karnataka:** Four isolation beds and 25 Covid-19 treatment beds at Tata Coffee's Rural India Health Project Hospital in Kodagu.
- **Kerala:** Six isolation beds and 60 Covid-19 treatment beds at the company's High Range Hospital in Munnar. 16 isolation beds and 80 Covid-19 treatment beds at the Kannan Devan Hills Plantations' estate hospitals.
- **Tamil Nadu:** 22 isolation beds and 22 Covid-19 treatment beds at Tata Coffee's AMD Valparai Hospital.
- **Assam:** Six isolation beds at the Referral Hospital and Research Centre in Chubwa, Dibrugarh district, and 160 isolation beds at other estate hospitals of Amalgamated Plantations.

treating Covid-19 patients. Everybody going there to work, our employees as well as our contractors, risked their lives to set up this facility.”

Similar work was undertaken at four more hospitals in Mumbai — an 80-bed isolation facility at St George Hospital, a 72-bed isolation facility at HBT Trauma Care Centre, a 255-bed facility at Seven Hills Hospital and a 60-bed isolation facility at the Tata Memorial Advanced Centre for Treatment, Research and Education in Cancer, Kharghar. Work has also been initiated for the conversion of another KEM ward into a 50-bed ICU.

The company's other projects across the country include a 20-bed ICU and medical gas line for 200 beds at the Sir CV Raman General Hospital in Bengaluru, Karnataka; facilities for 288 general ward beds, 36 ICU beds and 36 private ward beds in Rudrapur, Uttarakhand; and quarantine and isolation wards, with 125-beds, medical equipment and medical furniture, at the TCS premises in Noida, Uttar Pradesh (UP).

Tata Projects has also worked with the Tata Trusts on four hospitals — a 104-bed facility in Buldhana and a 50-bed one in Sangli, both in Maharashtra; and a 168-bed

facility in Noida and a 124-bed facility in Gonda, both in UP — and it has helped operationalise a 150-bed isolation ward at the Government Medical College and Teaching Hospital in Keonjhar, Odisha, and a 500-bed isolation ward at the Government Engineering College in Bhawanipatna, Odisha.

ONLY THE BEGINNING

Mr Shah notes, “What this crisis brings out is that there is so much opportunity to increase the number of beds per citizen across the country by equipping and upgrading existing hospital facilities and supplementing the efforts of the local administrations.

“The speed at which the greenfield hospital in Kasaragod came up has the potential to be replicated. The modular medical ward solutions from Tata Steel can be used at public health facilities even in remote locations; each unit can be a self-sufficient public healthcare centre. Then there is technology like TCS’ digital health platform. If we weave all this together in the manner in which the states are now responding to creation of health facilities and databases, it all points to this crisis being turned into a platform to revitalise our country’s healthcare system.” **TR**

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Tata Projects has set up 2,954 beds across India for Covid-19 patients



Inside Tata Central Hospital in West Bokaro, Jharkhand — one of the Tata Steel hospitals that were opened up for Covid-19 patients



COMMUNITY

7 lakh people. 25 states. And counting

It was only March 5, 2020 — a time when The World Health Organization (WHO) was yet to classify Covid-19 as a pandemic, and no one had imagined that India would go into a national lockdown within 20 days and remain under it for months after. But in an office in Jamshedpur several Tata Steel leaders were gathered to chart out a course of action for what they saw coming.

Chanakya Chaudhary,
vice president, Corporate

Services, Tata Steel, who was in the room that day, tells *Tata Review*, “The fact that we started a little early in this journey helped. After that March 5 meeting, we immediately met with Mr TV Narendran, CEO & MD, Tata Steel, and he gave us the go ahead to get together and start working on the points we had come up with.

“It also helped that we had colleagues in Singapore and Europe who had begun facing

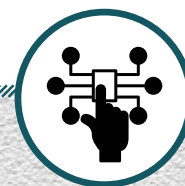
the crisis before us and were able to give us inputs on what was happening and what to expect. All of this gave us time to plan a strategy.”

At the heart of this strategy was #CombatCovid-19 — the Tata Steel Foundation’s (TSF) 10-point agenda to support the community.

“Since TSF always has an ear to the ground, we started sensing some things upfront on what the communities we serve may go through once the pandemic arrives. The first issue was information gap, leading to uncertainty and angst among communities. That was our starting point — to start disseminating information,” says Sourav Roy, chief, CSR, Tata Steel. “We immediately recorded messages in three to four dialects and worked with the local and district administrations to send out vehicles to play those messages. We also decided that we would leave some public



1.01 lakh masks were made and distributed among vulnerable communities under Tata Steel's #StitchinTime masks programme



Digital Bridges 2.0

The 10th and latest initiative of TSF's #CombatCovid-19 programmes is Digital Bridges 2.0, to reach relief and rations to migrant workers across the country.

"When we started interacting with migrant workers, we realised we don't have the luxury of time," says Mr Roy. "There was a pregnant woman who was about to deliver with nowhere to go. We had someone who needed dialysis but had no money. There were women who were on the verge of being trafficked and needed protection. We didn't have the luxury of putting in systems and processes. We just needed to do something. Right away. So, we tried to do this in a slightly different way by relying on our networks of Tribal Leadership Programme, friends and family to raise money."

He adds, "We have to also remember that a migrant worker has migrated because she or he wanted a life of dignity and not one of dependence back home. They don't like living off charity. We have identified the top concerns of the migrants who are returning to the district and are collaborating with the district administration to set up a District Migration Resource Centre."

It has a control room with manned telephone lines for returning migrants, starting from the quarantine period, whether institutional or at home.

"One of the key things we are doing as

part of the Digital Bridges 2.0 programme and the migrant resource centre is helping migrants register on a state-run app meant for them," Mr Roy says. "Less than 25 percent of migrant workers have access to a smartphone, and only 70 percent of that number have a data pack. By now, only half of that 70 percent will have any money left for an active data plan. And if they don't register, they don't get information about the buses and the trains being run."

The resource centre is also looking at how the institutional quarantine experience can be made engaging and constructive by creating economic incentives or income or skills building programmes.

"We can reasonably assume that 50 to 60 percent of the returning migrant workers may not want to go back, at least not immediately," says Mr Roy. "We are mapping their skills and what sort of work they want to do. Often there is a dissonance between the skills that exist and the skills that can be deployed. What kind of economic incentives do we create for them? The primary purpose of the District Migration Resource Centre is to look at reverse migration as a social issue in addition to it being a logistical and medical problem."

By June 25, Digital Bridges 2.0 had reached 94,000+ returning workers across 24 states and union territories.

messaging — like banners with easy-to-understand graphics — wherever we went."

THEN CAME THE LOCKDOWN

While many people were expecting the lockdown by

then, the reality of its actual implementation still hit hard. It was even more magnified for those who did not have enough information. TSF responded with a telephonic or video-based outreach to the

sarpanch, head of the village local self-government (*gram panchayat*) in India; and around 10 other people with influence like teachers, school principals and village elders in more than 300 *gram panchayats*. They also



Some members of the team behind the #ThoughtforFood initiative that served at least one wholesome meal a day to 50,000 families in and around Jamshedpur during the lockdown

leveraged their existing network of public health workers like *sahiyyas* and *anganwadi* workers. This morphed into #DigitalBridges — the first of the 10 initiatives.

TSF deployed #DigitalBridges and its own vast employee and informal networks in the meanwhile to understand the evolving needs of the crisis. Their in-house mapping revealed the extent of the worst-hit settlements and ignored communities like transgenders, street children, leper colonies, sex workers and daily wage earners. It was less

than a week into the lockdown, and loss of income and lack of food were already a reality for many. The #ThoughtforFood initiative was immediately put into place to reach at least one warm wholesome meal a day to 50,000 families in and around Jamshedpur while the lockdown prevailed. In the far-flung areas, where cooked meals couldn't be sent, TSF supplied dry ration packets — each with enough food to last a family of five for 15 days. By June 25, they had served 27.4 lakh+ cooked meals across 184 settlements in Jamshedpur and 48,000+ ration

packets elsewhere.

“The other thing we realised,” says Mr Roy, “is that it is impossible to address an emergency of this scale unless you work with public systems and have access to public finance. That’s where our #StrongerTogether programme came in. We set up possibly Jharkhand’s first District Response Coordination Group in East Singhbhum. The district administration and TSF are jointly leading a civil society coordination group for the district to ensure more overlap between public systems and

civic society.

“This has also been our approach across Odisha and Jharkhand where our response has always prioritised our communities but worked through public systems from the grassroots to the state. We have also been particularly conscious of working with the traditional adivasi leadership structures and been humbled at the meaningful reach that this approach has afforded us.”

Mr Chaudhary adds, “It’s not just the district administrations of East Singhbhum (Jharkhand) or Jajpur or Ganjam (Odisha) but also their state governments and the union government that worked with us to assess needs and reach aid. There is a recognition of Tata Steel’s legacy and confidence in our experience.”

NOT WITHOUT DIGNITY

It is this experience that made TSF very conscious of not creating dependencies. “You can reach food, but at the end of the day, dignity lies in creating incomes, and thereby choice, in the hands of the people,” Mr Roy notes. “#DigitalBridges served as a terrific needs assessment tool for us.”

It led to the concept of #FromtheFarm, connecting farmers whose produce was not

being sold due to the lockdown with Zomato and Swiggy. It created a direct supply chain that allowed them to not only sell their produce but also do so at the right prices. As on June 25, 2020, the initiative had led to the sale of more than 14,330kg of fresh vegetables, supporting 200+ farmers with a cumulative income of ₹7.32 lakh.

TSF also started a #CashforWork initiative instead of direct cash transfers. They created income through a combination of modular kitchen gardens, making bags from newspapers and tie-ups with artisans. As on June 25, the initiative had reached 2,800+ households with a cumulative income of ₹21.15 lakh.

“The other piece that we started reasonably early is the #StitchinTime masks

programme,” says Mr Roy. “We created 1.01 lakh masks and distributed them among the vulnerable communities. In the districts that we operate, every single frontline health worker has received a mask from TSF. There are 190+ families that are now making masks for us, giving them an income.”

He adds, “16,000+ people have benefitted from the income generated from all these initiatives put together.”

SOCIAL FROM A DISTANCE

As the work with communities grew, it brought to light the under-reported mental health issues due to the crisis. TSF responded with #FriendinNeed and #HopeSprings. While the former boosted the capacity of an existing suicide and depression helpline in

On a farm in Boram, Jharkhand. #FromtheFarm has helped 200+ farmers like him by setting up a supply chain for their produce





Helping Hands

TATA MOTORS*

- Served 3.36 lakh+ cooked meals and distributed 20,500+ grocery kits
- Established helpline numbers for food-related requests from temporary and contractual workers
- Served 5,850+ stranded truck drivers and co-drivers
- Disinfected 97,000 vehicles – buses, rickshaws and private vehicles – as part of a partnership with the Delhi Transport Corporation
- Conducted awareness campaigns through social media, banners, posters and other sensitisation tools
- The International business of Tata Motors extended support in the form of funds, meals, medical supplies in Sri Lanka, Bangladesh, Malaysia, the Philippines, Thailand, Nepal, Vietnam and Uganda

TATA CONSULTANCY SERVICES**

- Created advisories, audio messages and posters in 10 Indian languages focusing on physical and emotional well-being guides, which have been virtually delivered to 4.5 lakh+ people in rural areas
- With 22 million+ Americans filing for unemployment benefits, the company offered pro bono services to improve the performance and capacity of the benefits systems in 18 states across the United States
- Reached 18,000 students in underdeveloped areas of South Africa through a digital awareness campaign

- As an aggregator of more than 200 food banks, helped Feeding America build a system for allocation of food, services and donations

TATA CHEMICALS*

- 2 lakh masks being created by Okhai and self-help groups
- Supported 325+ farmers by connecting them to households in Mithapur and Dwarka, selling 47,000+kg of vegetables and distributed 10,000 seed kits across 42 villages of Gujarat for kitchen gardening
- Provided dry ration kits to 9,500+ families in Gujarat, Tamil Nadu, Andhra Pradesh, Madhya Pradesh, Telangana, West Bengal and hygiene kits to 10,000 families in Mithapur
- Held awareness drives in 43 villages across Gujarat and Andhra Pradesh

TATA POWER*

- 6.84 lakh+ face masks being stitched through Dhaaga, a women empowerment initiative
- Supported 5 lakh+ people with food grain
- Reached 4.6 lakh+ people through awareness campaigns, sanitisation, mobile medical services, etc
- Supported farmers in marketing 68,000kg+ of vegetables
- Facilitated supply of green fodder for 3,600 cattle daily amounting to 43MT
- Linked 4 lakh+ people with public distribution systems to get dry ration and food packets

TATA CONSUMER PRODUCTS LIMITED**

- Organised awareness drives for communities in and around plantations and estates and distributed 1.65 lakh masks
- Donated close to 4 tonnes of food grain, tea and coffee, disinfectants through Tata Coffee
- Ensured safe travel of 4,000+ migrant workers to their home district/state through Tata Coffee
- Provided food kits to the elderly through Tata Cha and a tie-up with Helpage India
- Partnered with the Khichdi Project to provide ingredients like salt and pulses for meals for migrant workers and families in Mumbai, helping them provide 30,000 meals a day for 10 days
- Contributed an amount equal to 2 lakh cups of tea to ease the situation for tea shop owners in Tamil Nadu
- Supported hospitals and emergency services across the United Kingdom, the United States, Poland, Australia and Canada with donations and care packages

TATA COMMUNICATIONS**

- Provided meals and ration to 58,000 people in Delhi, Maharashtra (Mumbai, Pune and Nandurbar) and Karnataka (Bengaluru)
- Conducted sensitisation sessions on Covid-19 safety measures in Odisha

and Jharkhand

- Collaborated with Tata Power Delhi Distribution Ltd in Delhi to support 1,000 migrants

TATA REALTY AND INFRASTRUCTURE**

- Distributed food and hygiene kits to 9,400 migrant workers for three weeks

TITAN COMPANY**

- Provided food and water to 12,200 migrants in Hosur and Bengaluru

TATA PROJECTS**

- Provided food supplies to ~4,000 migrant families in Bihar, Odisha, Telangana and Arunachal Pradesh

TATA ADVANCED SYSTEMS LTD**

- Provided 1,500 food packets daily to migrant and daily wage workers near Tata Advanced System Ltd's factories in Bengaluru for 30 days

JAGUAR AND LAND ROVER*

- Deployed 370+ vehicles globally to support Red Cross and other emergency response organisations during the pandemic

*Data as on June 15, 2020

**Data as on May 31, 2020



Jamshedpur to accept more calls, the latter worked with psychiatrists and happiness practitioners to create stress management and counselling modules for frontline workers and migrants.

It also shone a light on society's forgotten people. "There were large pockets of people who were being stranded all over — old-age homes, children's homes, sex workers and their children, institutions for those with intellectual disabilities, etc," says Mr Roy. "Meanwhile, we had many employees who were at home due to the lockdown. So, we started the #FarRishta initiative

with the tagline 'it is possible to be social from a distance'. The idea was to create nationwide social capital and reach out to anyone and everyone who is stranded somewhere."

So far, almost 1,800+ volunteers have given their time and reached 22,900+ people across 19 states and union territories of the country.

NO ONE TAKES A BACK SEAT

#FarRishta has since been recognised by two state governments and extended to many other cohorts, including sex workers and acid attack victims. It has also helped TSF continue its work with

children from its residential bridge schools and other scholars supported by Tata Steel.

Mr Roy explains, "The question was are they safer in school or back home. We had to decide which children had to stay, who could go back home, how to send them back and continue to be responsible for their learning progress and well-being while they are in their homes.

"It's not just them. We have our skill development institutes, the tribal leaders' network, etc, which are all permanent relationships. With the size of our work, we are very conscious of the fact that there are some promises that are year-on-year



Inside Tata Steel's #ThoughtforFood kitchen. By June 25, 27.4 lakh+ cooked meals were served across 184 settlements in Jamshedpur

promises. We can't suddenly run away from them. There is a huge amount of work that is going on away from any spotlight."

TSF brings the same commitment to the #CombatCovid-19 programme, which had reached 7.61 lakh+ people across 25 states by June 25. Barring those that involve distribution of goods, all the initiatives have a long-term vision.

THE INVISIBLE FORCE

"This is unlike most other calamities or emergencies," says Mr Roy. "It has affected everyone, and as we went from lockdown to lockdown, more people became vulnerable. The biggest challenge has been that the definition of vulnerable has been shifting almost on a daily basis."

Another challenge was to conceptualise and execute ideas in record time like moving from a couple of hundred meals a day to 50,000 meals a day in seven days or setting up a supply chain for farmers in just four days.

The momentum was fuelled by Tata Steel's 596-strong CSR team. "It is important to remember that we are an implementing CSR organisation. In the past, a lot of the team have also volunteered for the group's disaster response work, which is coming in very handy right now," he says.



The #CashforWork initiative has helped generate income for 2,800+ households through creation of paper bags, kitchen gardens, wall-writings, paintings, musical instruments and woodcraft

He adds, "But what is even more useful is the TSF team's experience of working with the communities. They understand the communities as human beings. Looking at data and numbers gives you a definition of the problem, but the solution can only come once you look at human beings, family structures, stories and what constitutes identity. The intangible work that we do is coming in really useful right now."

The other powerful intangible at play, according to him, has been the latent goodness in people. "The whole point of our programmes like #FarRishta and #DigitalBridges2.0 is to tap into the fundamental goodness among people, which we believe exists,"

he explains. "We do a lot of our work with that fundamental belief, and no virus is taking that away. There are people who are raising their hands and doing brilliant stuff. That gives us a lot of hope."

He adds, "What's also been terrific is the way the Tata group has been able to launch a multi-faceted response whether it is spurring on scientific research, procuring equipment, enhancing or setting up medical infrastructure or reaching out to people in strife. It makes one feel very proud to be a part of a group like this, which doesn't stop at financial allocations but leverages everything that it has at its disposal." **TR**

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FOOD & ACCOMMODATION

Standing with **COVID-19** warriors

In 2008, just two weeks after the 26/11 attacks in Mumbai and the siege of The Taj Mahal Palace Hotel, Mr Ratan N Tata — then Chairman of Tata Sons and now Chairman Emeritus — created the Taj Public Service Welfare Trust (TPSWT) to provide relief and support in the wake of natural or man-made disasters. True to this charter, The Indian Hotels Company Ltd (IHCL) and the trust swung into action as soon as India began its fight against the Covid-19 pandemic.

Starting as early as March 23, IHCL committed to providing safe and nutritious meals to the true heroes of the crisis — doctors and healthcare workers. The company partnered with chef Sanjeev Kapoor for Mumbai, Bengaluru and New Delhi for this initiative. The meals are prepared and delivered by TajSATS, India's market leader in airline catering, in Mumbai and New Delhi.

In Mumbai, working closely with the Brihanmumbai Municipal Corporation, IHCL distributed over 10,000 meals a day to medical fraternity at government hospitals like Kasturba Hospital, The King Edward Memorial Hospital, Lokmanya Tilak Municipal

Medical College and General Hospital, Nair Hospital and JJ Hospital.

In Bengaluru, they distributed meals in Victoria Hospital and Epidemic Disease Hospital.

In Delhi, they were able to reach seven hospitals,



Tata spirit

The Tata group supported IHCL's meal programme during the pandemic through financial and other contributions.

Tata Sustainability Group donated ₹5 crore to the TPSWT. Financial support also poured in from companies like Tata Power, Tata Elxsi, Tata Consumer Products Ltd (TCPL), Tata Consultancy Services and Tata Advanced Systems Ltd.

Vistara pitched in with 50,000+ long-shelf-life food items.

In addition, companies also ran their own campaigns to support essential workers. Tata Motors provided drinking water daily to 19 police posts in Pune during the lockdown.

TCPL supplied 4 lakh+ sachets of instant tea to medical staff, police personnel, officials of the Disaster Management Cell and sanitation workers. They also distributed Tata Water Plus and Tata Gluco Plus to the police, hospitals and other essential workers in eight states.

Tata Industries, through Tata Smartfoodz, provided ready-to-eat meals worth ₹10 lakh for the medical fraternity in Mumbai.

including Lok Nayak Jai Prakash Narayan Hospital, Lady Hardinge Medical College, Rajiv Gandhi Super Speciality Hospital, GB Pant Hospital, Guru Teg Bahadur Hospital, Deen Dayal Upadhyay Hospital and Dr Ambedkar Hospital.

TPSWT and IHCL later expanded the programme to the Mumbai police as well as migrant workers in the city, serving a total of 21.5 lakh+ meals till June 25.

MAKING ROOM

IHCL also stayed true to its legacy of opening its hotels in service of the nation when needed. It did so during World War I by turning The Taj Mahal Palace in Mumbai into a military hospital to accommodate 500 soldiers and 100 officers. It did so during India's freedom movement by offering a safe space for leaders like Mahatma Gandhi and Jawaharlal Nehru. And it did so this time by offering rooms to healthcare workers.

More than 11 IHCL hotels across the country were opened to the medical fraternity while 35+ other IHCL branded hotels were opened for quarantine purposes, including for those arriving via repatriation flights.

STAYING THE COURSE

What has been striking about



Meal boxes being packed at TajSATS in Mumbai

IHCL's initiatives is that they stepped up despite being part of an industry that has taken one of the worst hits of the pandemic.

Puneet Chhatwal, MD & CEO, IHCL, said, "We are deeply grateful to the medical community for their sacrifice and dedication during these

challenging times."

He added, "This effort wouldn't be possible without the support of the Tata group companies who in true Tata spirit came together to enable us to continue providing this service." **TR**

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EDUCATION & SKILLING

Learning uninterrupted

As the Covid-19 pandemic spread across the globe, one of the most impacted groups turned out to be the world's student population. As per UNESCO, the closure of schools and colleges confined 1.2 billion students across the globe and 320 million students across India to their homes.

Tata Consultancy Services (TCS) was at the forefront of addressing this disruption in India with TCS iON, which offered free access to the TCS

iON Digital Glass Room for one year, up to March 2021. It was also made available for free internationally.

The platform empowers educators to engage with students in real time by sharing lessons, videos, worksheets, assignments and assessments, using interactive methods like polls, debates, quizzes, surveys, etc. It also provides an embedded live classroom, which simulates live classroom teaching. While teachers have a wide set of tools to innovate

and achieve the best learning outcome, principals or deans as well as parents have a transparent view of what's happening in the virtual classroom to ensure better governance.

"These are unprecedented times," says Venguswamy Ramaswamy, global head, TCS iON. "With schools and colleges shut down across the country, we wanted to empower these institutions and help them switch to a virtual mode, so students' learning journeys can



Photo credit: Getty Images

continue uninterrupted on our platform.”

By the end of May 2020, over 2,300 educational institutions (schools, colleges and training institutes) in India, reaching 5.67 lakh learners, had joined the TCS iON Digital Glass Room. It was also being used by institutes in countries like South Africa, Nigeria, Indonesia, the United Kingdom, Columbia, Brazil, and the United States.

A TRANSFORMATION

The sharp minds at TCS iON view the pandemic as a huge opportunity for India to transform learning and education. The country, the company points out, is set to see a 50 percent increase in the number of students in the next 15 years; by 2030, it will have the largest working-age population in the world. “Online education is the optimum solution to match this surge and make the country skill-ready,” says Mr Ramaswamy.

He adds, “Our objective is not only to augment the education institutions to navigate through the current challenges effectively but also to support their transition into a digital era where teaching and learning know no physical boundaries.”

NEW PLATFORMS

“True to its effort to ensure learning continues,” he adds,

“TCS iON also came up with some interesting innovations at speed.”



Lockdown innovations

TCS iON CAREER EDGE

A 15-day self-paced certification programme, offered on TCS iON Digital Learning Hub platform, to sharpen the career skills of college-going students and professionals during the lockdown. It went live on April 1 and was made available free of cost around the globe. By June 5, 7.6 lakh+ youngsters had already subscribed to it.

TCS iON CORNERD

A game that helps children understand the Covid-19 pandemic in a fun way and exhibit appropriate behaviour. The game, offered free of cost, was built by leveraging TCS iON GameLab framework and hosted on TCS iON Digital Learning hub platform.

TCS iON REMOTE ASSESSMENTS

TCS iON enables universities and exam boards to conduct secure, free and fair examinations at scale, in a remote model. It also provides the ability to create question papers – supporting more than 50 question types – and maintain them in an encrypted form till they are shared with students just-in-time for the exam.

It enables controls at three levels, based on the institution's requirements. At the basic level, it locks down the candidate's device, enabling it to only capture exam responses. At the second level, it leverages the device camera and sends a video stream that is analysed using artificial intelligence and machine learning frameworks to detect malpractice attempts and alert invigilators. The third level also enables invigilators to proctor candidates in real time from anywhere. The platform seamlessly integrates with TCS iON Remote Marking, allowing assessors to mark candidate responses from home. More than 28 million candidates have already been assessed through this product.



Free to learn

goIT

TCS extended its goIT programme – aimed at inspiring students across the United States and Canada to study STEM (science, technology, engineering and math) fields – by launching goIT@Home and goIT Online to benefit children.

TATA CLASSEGE

The digital education platform from Tata Industries made free content available to 1,500+ teachers and 5 lakh students in India. Tata Communications enabled this initiative, to support schools during the lockdown, by deploying additional hosting and network infrastructure for three months.

from experts at Harvard TH Chan School of Public Health.

The six-hour, self-paced, self-certification programme was designed for paramedical and professional healthcare workers, but is also of use to volunteers, Covid-19 support groups and public support teams.

POST LOCKDOWN

TCS has also taken the lead on

adapting its phygital platforms to the post-lockdown world. It announced a new standard operating procedure, called Social Distanced Assessments to conduct secure, proctored in-centre assessments for recruitment and academic admissions without compromising on the safety of the candidates and proctoring staff. The norms were designed based on TCS' vast experience in conducting large scale in-centre exams along with inputs from health experts from the All India Institute of Medical Science and Public Health Foundation of India.

“The pandemic has caused significant disruptions to the examination schedules. A large number of students seeking admission for higher education and youth seeking jobs are waiting for the exam process to be restarted,” says Mr Ramaswamy. “In-centre exams are critical as many students do not have access to reliable computing devices or adequate bandwidth to take online exams.”

Additionally, TCS iON will be helping India's Labour Ministry to offer free career counselling services on the National Career Service platform, which hosts around 10 million active job seekers and about 54,000 employers. **TR**

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One such innovation is the TCS iON Remote Internships, which brings location-free internships that can be done by students on any device. While the idea of aggregating internships under the TCS iON platform had been on the cards, the pandemic altered the strategy and speeded up the process.

“Internships provides an important leap in the students' career to gain practical exposure,” says Mr Ramaswamy. “The pandemic has cleared some of the traditional notions, and companies are now even considering some percentage of their workforce to work from home as a permanent business model. It is very important for students, academic institutions and corporates to adapt to the new normal. TCS iON will be at the forefront to drive this transformation.”

From the time they realised that digital internships were the way to go, TCS iON took about a couple of months to bring the product into the market. They worked even quicker — a mere three weeks — to develop TCS iON CoronaWarriors, a free online self-certification course that aims to prepare frontline health workers with prevention and control measures. The course was designed and curated by medical experts of TCS' Lifesciences Unit with inputs



DIGITAL & TESTING SOLUTIONS

A modern-day Feluda

Fast, accurate and accessible testing can transform the way we are dealing with tracking and halting the spread of Covid-19. And Tata Sons has deployed the investigative skills of a homegrown Feluda, much like the fictional Bengali sleuth it is named after, to help India solve the mystery of this pandemic.

Feluda — an acronym for FNCAS9 Editor-Limited Uniform Detection Assay — is an indigenous Covid-19 testing mechanism that was created at the Council of Scientific and Industrial Research's constituent lab, the Institute of Genomics and Integrative Biology (CSIR-IGIB) in New Delhi. It is expected to address the urgent need for accurate mass testing because of its affordability, relative ease of use and non-dependency on expensive qPCR (quantitative polymerase chain reaction) machines.

Satyajit Ray — the creator of the original Feluda,

a genius-but-everyday hero — would have approved.

FOR THE MASSES

Feluda is being brought out of the lab and made available for wide use by Tata Sons, which has signed an MoU with CSIR-IGIB in May to licence the know-how.

“This innovative ‘Feluda’ test uses cutting-edge CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) technology for detection of genomic sequence of the novel coronavirus. It uses a test protocol that is

simple to administer and easy to interpret, enabling results to be made available to the medical fraternity in relatively lesser time as compared to other test protocols,” says Banmali Agrawala, president, Infrastructure and Defence and Aerospace, Tata Sons. “We believe that CRISPR is futuristic technology that can also be configured for detection of multiple other pathogens in the future.”

HOW IT WORKS

According to Dr Anurag Agrawal, Director, IGIB, the



Photo credit: Getty Images

Powering the fight at scale



TATA CONSULTANCY SERVICES (TCS)

The company led initiatives like systems to collate effectiveness data in collaboration with pharma and medical institutions, radiology image analysis using AI models to differentiate between Covid-19 infections and other pathologies, and a wearable monitor for quarantine patients and healthcare professionals.

Through its social innovation centre, DiSQ (Digital Impact Square), TCS leveraged technology to fight Covid-19 at scale. It collaborated on the MahaKavach app to help health authorities in Maharashtra with contact tracing and monitoring of quarantined Covid-19 patients and worked on a tool to enable citizens to assess symptoms from their homes. The latter was used for 3.5 lakh+ assessments in Maharashtra by the end of May.

TCS also powered a vehicle e-pass system, which was deployed in 30 districts in Maharashtra, to allow essential and authorised services to move and work smoothly during the lockdown.

TATA COMMUNICATIONS

Their tele medicine platform GloHeal supported video conferencing for Tata group volunteers to help people schedule remote consultations with doctors in Uttar Pradesh, Andhra Pradesh and Maharashtra.

technology was conceived and developed under a sickle cell mission and utilises an indigenously developed cutting-edge CRISPR-Cas9 technology to specifically recognise Covid-19 sequence in a sample. A combination of CRISPR biology and paper-strip chemistry leads to a visible signal readout on a paper strip that can be rapidly

assessed for establishing the presence of the viral infection in a sample.

The MoU with Tata Sons allows for scaling up this know-how in the form of a kit that can be deployed for testing on ground.

Tata Sons has also tied up with the Sree Chitra Tirunal Institute for Medical Sciences

and Technology in Trivandrum, under the Department of Science and Technology (DST), for the commercial production of Covid-19 testing kits based on RT-LAMP (Reverse Transcriptase Loop-Mediated Amplification) technology, which can produce quicker results thereby increasing the throughput of labs in India. The 'Chitra Gene LAMP-N' test uses an isothermal setup to create copies of viral DNA for detection, which significantly reduces the complexity of overall process compared to the prevalent Real Time PCR technology.

"Testing is a crucial part of this fight against Covid-19 as early detection and treatment arrests the spread of the infection," says Mr Agrawala. "Our association with the Sree Chitra Tirunal Institute is a significant step in our efforts to encourage indigenous production of second-generation testing kits, which enhances speed of testing and ease of handling."

Professor Ashutosh Sharma, Secretary, DST, adds, "Development of a novel, inexpensive, faster, confirmatory test for the diagnosis of Covid-19 by Sree Chitra in a record time is a compelling example of how a creative team of scientists, clinicians and industry working together seamlessly can leverage knowledge and infrastructure to make relevant breakthroughs."

RACE FOR A CURE

The Tata group has also channelled its own scientific temper towards finding a cure for Covid-19. A team of scientists at TCS' Innovation Lab in Hyderabad have identified 31 molecular compounds that hold promise towards finding a cure.

“In TCS, there was a strong feeling within the Research and Innovation leadership that we should use our expertise and work on various aspects of Covid-19 at this crucial moment. The clear guidance was to do something that would be of benefit to society and make it public,” says a scientist from TCS' Innovation Lab. “Since the computational structural biology team at TCS Innovation Labs has expertise in medicinal chemistry, they started looking at the problem of identification of novel small molecules for Covid-19.”

They utilised their AI-based generative models for designing novel small molecules to inhibit the 3CL protease protein (the main protease of SARS-CoV-2). The 3CL protease plays an essential role in cleaving long polyproteins generated by the virus into various functional proteins, which is necessary for it to replicate in the human body.

An inhibitor against the 3CL protease will make the virus inactive.

Putting it into perspective, says the scientist, “Drug discovery is a very long and complex process. The use of AI has reduced the initial drug development process from years to few days. With a pre-trained AI model with state-of-the-art accuracy for molecule generation and property optimisation, the actual work was done within seven days.”

The results of the analysis were immediately published in ChemRxiv, an open access preprint archive for chemistry.

TCS also approached CSIR, which has agreed to synthesise and test these 31 molecules. K Ananth Krishnan, executive vice president and chief technology officer, TCS, says, “The collaboration between TCS and CSIR is a standing example of public private partnership in tackling a problem of national importance. But de-novo drug candidate design is the first step in a long sequence of steps to find a cure to Covid-19.”

Much remains to be done before the process can move from drug design to drug discovery and finally drug development at scale. CSIR has the challenging job of testing the molecules in the lab and then in humans, all of which takes time.

RAY OF HOPE

While the world awaits a big drug discovery anxiously, the scientists at TCS, much like their counterparts outside, believe there are many aspects about the search for a cure for Covid-19 that should give people hope.

Relaying the reasons for their optimism, TCS says, “First, the effort is global. Many governments and leading pharma companies are frantically working on the problem.

“Second, multiple approaches are being tried: repurposing existing drugs, antivirals for treatment, and making a vaccine.

“Third, scientists have been able to isolate the virus and study it very early in the outbreak.

“Fourth, we have tools with AI that reduce the time for synthesising drugs. New drugs usually take many years to develop and hit the market. TCS researchers feel it will not take that long for the Covid-19 cure.

“The relentless efforts of several research institutions and pharma companies in collaboration to identify a vaccine/therapeutic for Covid-19 are getting intense by the minute. TCS scientists have made a small contribution to the global efforts to find a cure. Hopefully, one of their molecules will make it to the clinic in the nearest future.” **TR**

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THE NEW Business As Usual

Covid-19 has changed the world as we have known it, compelling us to re-evaluate and reconfigure the way we live our lives and do business.

Tata companies have adapted swiftly to meet the challenge

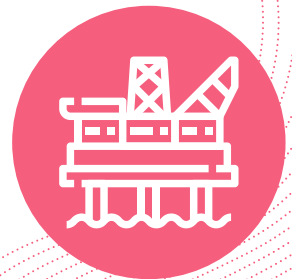
BY ANURADHA ANUPKUMAR, ARUSHI AGRAWAL,
CYNTHIA RODRIGUES & SANGHAMITRA BHOWMIK



No one was prepared for the Covid-19 juggernaut. The pandemic has raged through populations around the world, exacting a terrible human cost — over 470,000 of the 9 million+ people infected have died from the disease (WHO Situation Report, June 24, 2020) — and in many countries around the world, infection rates have yet to peak. Even as we continue to learn new information about this novel coronavirus, there's one thing experts agree on: we're far from the finish line.

The speed and ferocity with which the virus has spread, and the consequent lockdowns around the world, have left the global economy on shaky ground. The hospitality and aviation businesses are reeling, but manufacturing, retail and other service industries have also had setbacks. This, and fears of a second wave of the virus, have raised questions about our collective global economic future. Pundits are anticipating a recession — some say we are already in it. Some fear that the indirect human cost of this pandemic, through loss of livelihood and starvation, will be even greater than those dying from Covid-19.

Tata companies have sprung into action to alleviate the impact of the pandemic, leading the way through compassion, innovation and adaptation. Since Covid-19 peaked globally, and then in India, Tata companies are working round the clock to ensure availability of essential goods and services for the country in challenging lockdown situations. They are enabling organisations around the world to continue operations and remain productive with best-in-industry technology and communications solutions, as well as adapting their businesses to new protocols and safety measures to protect their employees, customers and the many stakeholders. **TR**





Essentially efficient

Tata Consumer Products and Star (Trent Hypermarket) skillfully manoeuvred the uncertainties and impediments surrounding the early days of the Covid-19 lockdown to ensure a steady supply of essential goods to their customers

When Martin Bailie assumed leadership of Star — Trent Hypermarket in November 2019, the induction did not include contingency plans to navigate a pandemic that has essentially altered our way of life. But Mr Bailie and his approximately 3000-strong workforce, comprising everyone from store managers to shop-floor workers, have shown up every day during the Covid-19 crisis, to ensure customers had access to essentials.

“Our mission is to help customers lead a better life by offering better quality, better savings and better choice,” says Mr Bailie. “This mission guides us even through these challenging times, and Star remains committed to bringing customers all essentials, including groceries and fresh produce every day.”

STRAIGHT FROM THE SOURCE

Most of the Star stores have been operational since the lockdown began (while following guidelines from the central government and local authorities) and have endeavoured to have fully stocked shelves. In the early days of the lockdown, this came with considerable challenges in logistics and procurement, as manufacturers, vendors and everyone in the supply chain scrambled to adapt to the new normal.

Star intensified its farm-to-store approach during these times. “We are the industry leaders in fresh produce and among a few

retailers to source over 70 percent of produce directly from our network of 800+ farmers,” says Mr Bailie. “During this period, we increased this percentage, ensuring customers





A stocker checking the inventory in the stock room

could buy 50 to 60 fresh products, including fruits and vegetables, every day in the store.”

Tata Consumer Products Ltd (TCPL), also an essential goods producer, adopted a similar tactic when it came to sourcing raw materials for its products. The company procured materials directly from farmers vs *mandis* (wholesale markets, which were often closed) by arranging transport from farm to miller, stored spices locally to mitigate issues with storage in containment zones, and worked closely with tea plantations to drive efficiencies, among other measures.

Even when it came to procurement of labour, TCPL went hyper local. The company engaged with local *gram panchayats* to encourage labour to return by creating awareness around safety and health protocols being employed at tea factories and salt packing centres; it trained local labour in hygienic and safe packaging operations.

SUPPLY CHAIN LOGISTICS

For TCPL, the supply chain was initially impacted by uncertainties around the dos and don'ts.

“We had to work with government authorities at various levels to ensure factories could open, labour would be permitted to travel to factories,

and that goods transport would be allowed through state and district borders,” explains Richa Arora, president, Packaged Foods, India.

But these have been opportunities to adapt. “We have learnt to work with limited resources and are tracking and reporting changes on a daily basis to make quick decisions,” adds Richa. TCPL has adhered to constant monitoring of hotspots and containment zones to anticipate potential production stoppages, moved stock across carrying and forwarding agents, stockists, retailers and factories to cater to demand in areas where production is impacted, employed virtual management/technology for quality operations and guidance on machine repair, started telecalling retailers as a way for the sales force/stockists to take orders, developed direct-to-customer channels like Swiggy, Zomato, Flipkart and Jubilant.

The Star team also dealt with the problem of limited movement of goods trucks by working on various supply alternatives to keep stores' shelves stocked. They implemented the backhaul mechanism, wherein FMCG and other suppliers enabled Star to pick up stocks from their respective company warehouses and transport those to Star stores across the country. Mr Bailie shares, “We collected a truckload of sanitisers from the HUL factory in Daman, and supported P&G for an entire week by placing vehicles at their Pune depot daily to ensure stocks would be supplied to our distribution centre.”

‘One Tata’ shone through it all. Star received support from the entire Tata ecosystem during this time, as Westside, Croma, Zudio, Tata CLiQ and Starbucks all pitched in with staff in store, and through logistics and supply chain support. Together, these companies contributed to almost 10 percent (or 300-350 of the 3000-strong workforce) of Star staff.

ANTICIPATING CUSTOMERS' NEEDS

Star takes every measure possible so that the

customer experience remains uncompromised while ensuring safety. Social distancing is implemented on the shop floor, in the queues outside stores, in back offices and even in distribution centres. Star sanitises all customer touch points frequently, conducts thermal temperature screenings at stores and always encourages usage of masks and gloves.

Additionally, the company also built solutions that complement a simpler and stronger operating model. “We have always believed in frictionless shopping and that thought was built into every product and service we adopted during these times,” says Mr Bailie. “I am amazed at the speed at which we moved to launch services like Click and Collect, Star on Wheels and Society ordering. It only took a couple of weeks to make these services available for our customers. Our time to market was hugely appreciated by customers with many writing in about the convenience of these services.”

TCPL is also making plans to adapt to changing customer needs as trends emerge. “Given that 40 percent of tea consumption happens

outside homes in offices, canteens, corner shops and malls, we’re seeing that part of the business vanish,” says Sushant Dash, president – Packaged Beverages, India, Bangladesh and Middle East.

“Hence, overall category consumption has come down and will be slow to come back.” The company has also observed that consumers are buying more large packs than usual due to an instinct to stock whenever products are available, though it is expected that normal purchase patterns will resume soon. While the food business has expanded, customers aren’t experimenting with new and premium brands, choosing instead to stick to average-priced and popular brands.

PROTECTING FRONTLINE WARRIORS

As essential workers, employees of TCPL and Star have been on the frontline along with doctors, nurses and public authorities; and both the companies endeavoured to ensure that employees felt safe while performing their duties. “It meant new ways of working and training to maintain all sanitation and hygiene requirements,” says Amit Chincholikar, global CHRO, Tata Consumer



Products. “When it came to our workers at the factory or sales people at the marketplace, we needed to provide assurance of safety and go beyond just legal requirements to provide for transport, food, insurance coverage, sanitation kits and incentives for attendance.”

At Star, employees’ commitment and perseverance have been met with effusive support and empathy from customers. “In the 25 years I’ve been in the retail business, I haven’t witnessed this kind of resilience and agility,” says Mr Bailie,



Martin Bailie with his team at Star stores in Mumbai during the lockdown

recalling, “My store managers from Mumbai — Raju Makhwana, Ajay Tiwari and Prakash Rathod — travel 50km to reach our stores every day and my colleague from Bengaluru, Albert, sat in a goods truck to reach the store from another city. I am grateful for this dedication and feel overwhelmed with such support from my colleagues.”

Star employees were assured of their safety, enabled to reach stores and recognised for their performance. “I personally visited and continue to visit our stores in Mumbai every morning,” says Mr Bailie. “Being on the shop floor with my colleagues, shoulder to shoulder, has been the most gratifying experience.”

To reach out to colleagues in other cities, Mr Bailie started a series of virtual ‘Chai with Martin’ with every store’s team, to listen to their concerns, answer their queries and recognise their efforts. “I also personally signed off letters to the families of our staff, assuring them that we are there for them when it matters the most,” he says.

The company arranged a consistent supply of personal protective equipment (PPE), sanitisers and disinfectants for staff to create a safe working environment. It also launched a ‘We Care’ package comprising a travel allowance, safety measures at the workplace, incentives such as points for grocery shopping, safety while travelling, and an active programme to focus on the mental health of colleagues.

“The reality is that we have collectively experienced changes which have had a significant impact on how we all live,” says Mr Bailie. “And we as a team saw opportunity in this adversity. It has been our purpose, now more than ever, to serve our communities and the nation. I can’t thank our team enough for working hard to keep our stores open, safe, clean and stocked with products. It is hugely inspiring to see the Tata spirit shine through.” **TR**



Ready to serve

Tata Power's and Tata Teleservices' dedicated teams have been on the frontlines, making essential services like electricity and connectivity available to businesses, individuals and organisations in the fight against Covid-19

As a utility and essential services provider, Tata Power has been at the frontline, steadfastly ensuring supply of electricity across India, while the country battles Covid-19. Its 10,000-strong workforce has braved this pandemic alongside doctors, nurses, law enforcement officers and other essential service workers, powering hospitals and laboratories and supporting businesses as they move to work-from-home models, even as they deal with a demand slump due to shrinking economic activity.

“Our 70 renewable power plants, 11 thermal and hydro-generation plants, including Coastal Gujarat Power Ltd’s Mundra Ultra Mega Power Plant, along with transmission and distribution networks operating in five cities, are running at full capacity to serve millions of customers across the country,” says Praveer Sinha, CEO & MD, Tata Power. “The utility’s dedicated workforce, including 2000 officers and 8000 contract workers, continues to operate diligently at different plant locations to provide seamless power supply to all vital institutions and millions of Indians quarantined at home.”

Another company that has been working round the clock to fulfil its role as an essential services provider is Tata Tele Business Services (TTBS). As the country’s leading provider of wireline voice, data and managed services, the company has ensured that its customers get uninterrupted services. “With the enhanced use of digital tools by customers to conduct their daily businesses, the service that we are rendering today is more critical than ever before,” says Harjit Singh Chauhan, president – Enterprise Business, Tata Teleservices Ltd. “Our field teams have been working 24x7 to provide and maintain services including providing critical support to healthcare institutions that are at the forefront of the fight against Covid-19. Despite restrictions on movement and supplies, we have had a team of 1500+ employees — in-office, on-field and at-home — working dedicatedly and collaboratively



Tata Power's workforce of 2000 officers and 8000 contract workers continue to work and provide seamless power supply



TTBS's solutions help customers maintain 'business as usual' mode without compromising on efficiency and productivity

to cater to the evolving business requirements of our customers. We have ensured that all our critical processes function seamlessly irrespective of whether the resources running the processes are at home or on field.”

EVOLVING NEEDS

Tata Power is facing the challenges that come with a lockdown and a deceleration in economic activities, but it continues to operate its power plants in various locations at full capacity, and maintains its transmission and distribution network in various cities.

The company has adapted quickly as work moves from offices to homes, and it has supported government endeavours such as ‘Power for All’ during the lockdown. It also successfully met the variation of demand during the ‘#9pm9minute’ appeal by the Prime Minister of India on April 5. “This could not have been possible without our dedicated and committed team on ground,” says Mr Sinha. “With the support of our skilled and experienced workforce, we have managed this period by ensuring zero disruption of power supply in the country.”

For TTBS, businesses migrating their operations from offices to homes, presented the company with an opportunity to help businesses

run their operations remotely. The company has strengthened its suite of ‘Work from Home’ solutions, which includes ‘Hosted IVR’ to allow enterprises to quickly set up distributed call centres and enable agents to work from home. Others like hosted PBX, audio and web conferencing solutions and international bridging services ensure connectivity and collaboration amongst teams spread across the globe. The aforementioned solutions appropriately address the security aspects arising out of a distributed and remote working environment. “These solutions help customers maintain ‘business as usual’ mode while not compromising on efficiency and productivity even as the employees work remotely,” says Mr Chauhan.

SAFETY ON SITE

Both Tata Power and TTBS have taken every necessary measure to ensure the health and safety of their employees and partners, who are absolutely critical to these essential services. Tata Power and its subsidiaries’ workforce, totalling about 20,000, with nearly 14,000 contract workers, have been following safety protocols like rotational shifts, with two independent groups for operations and on-ground workforce, who are quarantined from each other.

Corporate employees continue to support the smooth functioning of daily operations from their homes, while the company's senior management team follows a 50 percent rotation of work from home and office to support operations and the field team who are working 24x7. "It is a huge task to ensure that all our employees, including contract workers, are properly taken care of," says Mr Sinha. "The health of all our power engineers and staff is being regularly monitored and maintained, through a strict social distancing



Connectivity in the time of Covid-19

Tata Teleservices has undertaken mission critical initiatives to ensure business continuity for government agencies in the fight against Covid-19.

- Data connectivity for isolation centres and other medical facilities set up by the municipal corporations of multiple states.
- Voice connectivity for projects run by multiple state governments to educate citizens, conduct surveys, invite public suggestions, and run Covid-19 helplines.
- Integrated voice and data connectivity to war rooms set up by states to provide vital supply chain management support to hospitals and Covid-19 isolation centres.

protocol as well as by managing their travel, stay and food so that they can focus on their responsibilities and are confident of their health and well-being."

Safety and well-being has been a priority for TTBS as well. The management closely monitors the health of each employee and their dependents on a daily basis, through a digital self-declaration form. The company has extended the 'doctor-on-call' facility to all employees, its partner ecosystem, and their families. Employees are also required to submit a daily declaration well-being form for themselves and their dependents.

Working in such uncertain and turbulent times comes with its own set of anxieties, and TTBS is providing support to its employees with SABAL, the employee assistance programme in association with 1to1help. Employees and their dependents can get free consultations for psychological counselling and comprehensive wellness solutions that help them deal with various work-life challenges.

Additionally, for employees who are reporting to office, abundant precautions are being taken and social distancing norms have been established at the workplaces. All appropriate health and safety measures are in place for personnel who need to visit customer premises for emergency services.

Tata Power has also taken cognisance of the need for programmes to nurture employees' emotional and mental well-being. The company constantly engages with all its employees to ensure they are motivated and feel well taken care of, and has also initiated programmes for yoga, meditation and mindfulness. "As the head of the company, I am extremely proud of all our wonderful, brave employees who have shown tremendous resilience, and are selflessly contributing to serve the nation," says Mr Sinha. "It gives me immense pride to lead this remarkable and committed team and company." **TR**



Photo credit: Getty Images

Tech support

A pioneer in independent work practices, TCS has been uniquely poised to deliver technology services during the pandemic, keeping essential businesses and public service companies going

As a leading technology provider, Tata Consultancy Services (TCS) is working with over a thousand organisations across the world to keep them up and running. The company powers the financial backbone of several countries, supports some of the largest healthcare and pharma companies in the world, and runs technology for governments and public service operations.

TCS has been a pioneer in location independent work practices, having started offshoring 50 years ago, making it one of the companies most prepared to adapt when the Covid-19 pandemic forced businesses to migrate to remote working options. The company launched a programme to ensure business

continuity using their Secure Borderless Work Spaces infrastructure, allowing over 90% of TCS associates, both onshore and offshore, to work from home, thus ensuring business continuity.

“We proactively deployed collaboration platforms, cloud-enabled infrastructure and robust security practices that will hold us in good stead as we deal with this unprecedented situation,” says S Sukanya, global head – Delivery Excellence and Governance, TCS.

BORDERLESS OPERATIONS

Even as the pandemic impacts businesses around the world, TCS’ teams have continued to deliver technology services that enable life-saving healthcare, food and medical supplies, financial

services, mobile connectivity, and utilities such as electricity, gas and water, to keep societies functioning and bring a degree of normalcy to the lives of the millions of people affected by travel bans, isolation, lockdowns and social distancing.

This has been made possible by its Secure Borderless WorkSpace infrastructure, through which associates working remotely are able to connect, collaborate and provide value delivery — and the results are showing. Sukanya says,

Impact report

- 1 Digital Impact Square (DISQ) by TCS is an open social innovation platform that encourages innovation using digital technologies to address the needs of citizens. The Vehicle e-Pass System and the MahaKavach app are two Covid-19 specific innovations that have emerged from DISQ.
 - The Vehicle e-Pass System by Adivid Technologies was widely used by the Maharashtra Government during the lockdown. It enabled essential and authorised service providers, like those in the medicine and food supply chain, to apply digitally for an e-pass and secure rapid approval from police and other local authorities, thereby ensuring problem-free movement of essential goods and services.
 - The MahaKavach app was designed to enable government officials to track suspected Covid-19 cases in the state. The smartphone of a person who is tested positive for the novel coronavirus is installed with this app, which provides details about the person's travel history and list of public places that they may have visited, thus offering a more time- and cost-efficient method of contact-tracing.
- 2 TCS iON's digital classroom is a web-based digital education platform that has empowered educators to move



Photo credit: Getty Images

lessons from physical classrooms to digital classrooms. They can engage with students in real time by uploading and sharing their lessons, videos, worksheets, assignments and assessments, and by using interactive methods like polls, debates, quizzes and surveys.

- 3 In TCS' Innovation Lab in Hyderabad, India, a team of scientists have identified 31 molecular compounds that hold promise of finding a cure for Covid-19.
- 4 Programmes like GoIT and Ignite My Future have also been made available to teachers, students and parents digitally, through collaboration between TCS and their STEM education partners worldwide.



Photo credit: Getty Images

TCS' Secure Borderless Work Space infrastructure allows TCSers to connect, collaborate and provide value delivery to its clients

“Clients want us to take on more work which other companies may have been unable to handle, and associates are happy that they have flexible operating hours (thanks to zero commuting time), which offers them more hours for work, learning, fitness and pursuit of hobbies.”

“Our clients have trusted TCS to manage their technology. We will continue to keep earning their trust by working together to navigate these difficult times,” says Sukanya.

PEOPLE CONNECT

A large part of why TCS' teams (working remotely around the world) have been able to work so well together is through the company's efforts to keep people connected and boost morale. As working from home becomes the new normal, TCS has extended virtual learning sessions to associates globally and is making sure they

stay connected through various collaboration platforms.

There have been physical initiatives (fitness, nutrition, ergonomics, yoga) and psychological programmes (awareness support and morale building, well-being for focused groups, mindfulness, counselling support), as well as live pasta making sessions, talent showcases and ‘bring your pet to work’ days, which encourage virtual fun.

Additionally, webinars have been connected to motivate employees to adapt to a new way of life. Chess Grandmaster Viswanathan Anand interacted with TCSers and discussed life in quarantine, and approximately 4.5 lakh colleagues tuned into a webinar with American astronaut Ron Garan, who shared his tips and tricks for surviving in isolation. **TR**

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Connecting the world

Tata Communications is keeping businesses and individuals connected at a time when people around the world have never been more isolated

As essential as the telecommunications industry is, it has been affected along with other sectors by the global pandemic. However, economic disruptions have presented opportunities to re-evaluate and de-risk the end-to-end value chain and accelerate remote working. The shift to working from home with the help of digital collaboration tools is likely to drive demand for high-end tech in many categories. There is a growing need for infrastructure to support this shift, such as cloud computing for business or increased broadband consumption for consumers.

“Tata Communications aims to fulfil these demands and is working with customers across several industries globally. It is supporting tens of thousands of users from large enterprises to efficiently and securely work from home and maintain business continuity during this time — truly enabling borderless collaboration,” says Amur Lakshminarayanan, MD & CEO, Tata Communications.

WORKPLACE 2.0

As the novel coronavirus evolved to become a global pandemic, more than ever before, agility — the ability to adapt dynamically to change — has been critical for businesses around the world in their adoption of Workplace 2.0, where working from home has rapidly become the new norm.

“Not many customers had the level of technology adoption, security framework and



The unsung heroes who are keeping mission-critical infrastructure up and running

regulatory compliant infrastructure to enable working from home at the scale and speed required. Whereas, Tata Communications was able to shift over 90% of employees to work from home in just under two weeks,” adds Mr Lakshminarayanan.

Tata Communications responded quickly to the crisis, making work from home mandatory where possible, implementing a complete travel ban as well as restrictions around physical

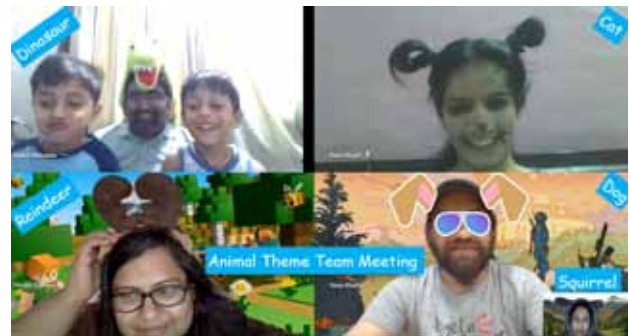
meetings and visitors to their facilities — all before many countries shifted to lockdown measures. As a result, agility and collaboration became even more pronounced character traits within the business.

As a global business with a highly distributed workforce, Tata Communications has had flexible working policies — like work from home, flexible working hours and bring-your-own-device (BYOD) — for a long time. Virtual collaboration environments and unified communication and collaboration technologies were already widely adopted within the company.

For those on-field employees who needed to be on-location to keep mission critical infrastructure up and running, Tata Communications ensured their safety, protection, and mental well-being at all times. Much like first responders, these colleagues are classified as essential workers; they need to travel onsite across network operation centres, cable landing stations or the client site, to monitor and ensure smooth operation of the infrastructure, networks, and backend IT operations, during these unprecedented times.

Says Mr Lakshminarayanan, “These are the industry’s unsung heroes at the frontline, supported by an army of colleagues working from home, keeping the world connected during a time of crisis.”

The business also took extra measures to keep the level of engagement high within the company. This spanned a variety of initiatives including its first all-employee global webcast of the year, hosted by Tata Communications’ CEO together with the entire C-suite; proactive corporate social responsibility drives to support the communities in which it serves; active internal communication across its internal social channels; and well-being workshops including virtual mindfulness daily sessions, virtual private counselling and even (social-distance appropriate) yoga classes for essential workers on campus!



Tata Communications has kept the level of employee engagement high through webcasts, active internal communication, well-being workshops and virtual counselling among others

ENABLING CUSTOMERS TO ADAPT TO WORKPLACE 2.0

As customers implemented their own work from home measures and looked to shift workloads seamlessly across borders as part of their own business continuity plans, Tata Communications witnessed an increased demand for network capacity, together with requirements for bespoke solutions that enabled efficient and secure remote working.

The company was able to augment its network capacity to cater for the increasing demand while simultaneously adapting and launching customised work from home solutions quickly, to help customers’ employees work from home safely with in-built secure access to their corporate applications wherever they are hosted.

Mr Lakshminarayanan elaborates, “Our teams are working in an agile manner to keep services running for our customers, delivering service upgrades and changes in record speed and helping businesses shift their workforce to

securely work from home at scale and at speed. Overall, our customer satisfaction score during this time has seen a record high — contributing to a top quartile Net Promoter Score which we are extremely proud of, as it acknowledges our efforts to provide a superior customer experience.”

STRENGTHENING SECURITY PROTOCOLS

As work from home becomes the global norm, cybersecurity has become critically important. To support corporate agility, Tata Communications is working with their customers to seamlessly and quickly deploy security strategies, offering simple but effective security solutions that can be implemented within days, like Global Secure Internet Gateway and Managed Authentication. These add an additional layer of security to enable secure access to applications and data residing in the enterprise data centre and/or public cloud infrastructure. “Together, these solutions enable end-user access control and policy compliance, providing a consistent, quality experience to employees working remotely so that they can operate in the most productive way,” explains Mr Lakshminarayanan.

In addition, the company’s new-age solutions such as NetFoundry can spin up a secure network over the internet, enabling quick, secure access and performance acceleration to an organisation’s applications in any location, from any device. It ensures users have high performing, reliable connectivity to their business resources.



“By virtue of connecting enterprises, we are uniquely placed to foretell, detect and stall militant activities on our networks, and protect our customers’ valuable data,” says Mr Lakshminarayanan. “Under these circumstances, the digital ecosystem that we enable plays a critical role in keeping the world connected more than ever before.”

WORKPLACE 4.0: THE NEW NORM IN THE POST-COVID WORLD

It goes without saying that the global pandemic has introduced radical changes on both the professional and personal front and has forced tens of millions of people to adopt remote working almost overnight.

Although the global situation has introduced a new kind of disruption, in many ways it has simply accelerated changes that were already well under way. The shift to remote working has been a (slow) trend going on for many decades and even though the digital transformation of work in the last ten years has been faster than ever before, it has become even faster — largely because it means life or death for many organisations. Simply put, it is no longer an option.

The changes that have been accelerated during this period are likely to stay. The ‘new normal’, Workplace 4.0, will be significantly different from life before the pandemic. In other words, everything will become more digital — even physical activities will most likely be increasingly facilitated, if not replaced — by digital.

Mr Lakshminarayanan concludes, “We believe that when the world bounces back, it is not likely to go back to the way it functioned pre-Covid. Some of the make-do solutions for work from home will be more industrialised to deliver a Secure Connected Digital Experience — enabling enterprises to crystallise the efficiencies and also help them to give an unprecedented new digital experience to their customers — across the B2C and B2B worlds.” **TR**



Building the future

Companies involved in manufacturing and construction activities, like Tata Motors, Tata Chemicals, Voltas and Tata Projects, have adapted quickly to the new normal, and are using the opportunity to prepare for the future

The economic repercussions of the Covid-19 pandemic have been felt in every industry, but perhaps most profoundly in the construction and non-essentials manufacturing sectors. The continued spiking of infection rates in industrial states like Maharashtra and Gujarat, uncertainty over lifting of lockdowns, impact on supply chains on account of lockdown measures, weakening demand due to hesitation in investing in capital-intensive assets and the fears surrounding a second wave — have all led to operations coming to a virtual standstill for many businesses.

Tata companies involved in manufacturing and infrastructure have used this period as an opportunity to re-evaluate and rebuild supply chains, reinvent workspaces and environments, adopt new technology to minimise risks, and focus on business areas least likely to face disruption.

PRIORITISING BUSINESSES

“We are optimising this lockdown time to advance our planned plant maintenance work with the least operational disruption,” says R Nanda, CHRO, Tata Chemicals. “Since the full likely impact in some sectors like construction

or auto, where our products are used are not fully known, we are closely monitoring them and building agility in our operations to service the demand. Meanwhile, we will continue to push our businesses like nutraceuticals, agro-chemicals and performance materials, which are least likely to be disrupted.” Tata Chemicals, along with its subsidiary Rallis, is involved in manufacturing products like salt, soda ash, nano zinc oxide, precipitated silica, crop protection products, seeds, etc, many of which fall under essential categories as they serve the food and pharma sector, as well as go into manufacturing critical end products such as face masks and disinfectants.

Voltas, too, is focusing on essential services. “During these challenging times, Voltas engineers have kept hospitals, blood banks, pharmaceutical companies, banks, ATMs and airports up and running 24x7. We have also been engaging with local communities and medical facilities to ease their battle against the pandemic,” says Pradeep Bakshi, MD & CEO, Voltas Limited. “Through our Domestic Projects business, we have been responsible for approximately 260 customer sites which are operational today and being monitored by the company’s O&M team members.” These include several hospitals, airports, metros, pharmaceutical companies, data centres and IT



Voltas continued to service hospitals, blood banks, pharmaceutical companies, banks, ATMs and airports 24x7

infrastructure across the nation.

Tata Motors has been judiciously using the lockdown as an opportunity to accelerate its digital journey. “Additionally, we have been servicing and supporting customers,” shares Guenter Butschek, CEO & MD, Tata Motors. “Via vigorous sessions conducted virtually, employees, dealers and supplier partners were oriented to processes and trained on the feature-rich BSVI offerings for effectively selling and engaging with customers.”

Tata Projects, too, has had to evolve to ensure minimum disruption of projects. The construction industry — the second largest employer in India after agriculture — has witnessed a multitude of migrant labourers departing cities as construction activities were halted in the lockdown’s first phase, as well as stoppage of payments from clients. The company has had to evolve its role to minimise disruption and ensure on-time execution of projects. “Construction involves hand-holding, ie, planning/designing with your client,” explains Vinayak Deshpande, MD, Tata Projects. “With client teams out of office, they rely solely on our planning. We are working from home to keep the planning/designing process going, and we are confident about overcoming new challenges through emphasis on technological solutions and other proactive precautionary measures.”

DE-RISKING WORKSPACES

As lockdown restrictions are eased, Tata companies have resumed plant operations. Based on revised government guidelines, Tata Chemicals has restarted manufacturing at its plants at Mambattu-Nellore in Andhra Pradesh, and at Sriperumbudur and Cuddalore in Tamil Nadu, while its facility in Mithapur, Gujarat, continues to operate at maximum capacity for salt and sodium bicarbonate, which are essential inputs for food and pharma companies. Internationally, at the company’s plants in the UK, the US and Kenya, operations have continued without major disruptions.

Similarly, Rallis' plants at Lote and Akola in Maharashtra, and Ankleshwar and Dahej in Gujarat have also resumed operations; and two of these plants also produced sanitisers in bulk to meet the requirements of various agencies involved with Covid-19 relief work.

Through it all, the focus has been on reducing risks. "We have to get used to the new normal," says Mr Nanda. "As we get ready to reopen, restart, and scale up our production and operations, the way we operate at our manufacturing locations and offices will change — whether it's through social distancing, increased level of hygiene and sanitation, the way we roster employees, and relook at some of the work processes to eliminate the need to be at a particular location to get things done."

Tata Chemicals' on-site employees sanitise themselves at the time of entry, and then multiple times during the day; the company has been undertaking regular sanitisation activities across its locations.

Social distancing is practised in the bus, work areas and canteen. "As a precautionary measure, we have also prepared an elaborate list of employees with details regarding comorbidities, updating details of employees who reside in containment zones and therefore face movement restrictions so that we can quickly address operational requirements," says Mr Nanda. "Employees too need to go through a self-declaration protocol and only those who qualify as per the guidelines would be allowed to work out of the location in order to minimise risk to other colleagues."

Tata Motors is also reconfiguring its workspaces and rules as per government directions. Standard operating procedures have been created for every area of operations, and these have been communicated to workers through extensive training. The company has undertaken online health monitoring; social distancing is being



Tata Projects is constructing a medical facility at Kasaragod in Kerala with 80-quarantine rooms comprising 551 beds as part of its plan to augment hospital infrastructure across India

followed in transport, health screening areas, punching points, canteen and work zones; multi-skilled personnel are deployed to reduce crowding on the shop floor; adequate resources like touch free sanitisers, water dispensers, foot- and sensor-operated water taps have been installed. There is periodical disinfection of the shop floor and work tools, and workers have been equipped with all necessary PPE material like face shields, masks and gloves.

Apart from employing standard safety protocols, Voltas is actively using technology to protect its 2,000-odd on-field technicians and engineers, who are ensuring essential services. It reaches out to its frontline workers via the mobile learning app, Handy Train, to sensitise them regarding health and safety by sharing Covid-19 awareness videos; it also creates technical content, resolves queries, troubleshoots, and conducts assessments and certifications in a streamlined manner. Additionally, its remote monitoring IoT (internet of things) based centre in Thane has been instrumental in conducting predictive maintenance, which has helped reduce risk for its staff.

Technology has also come to the rescue for Tata Projects. Apart from ensuring the health and

safety of workers with protective gear and face masks, medical professionals are deployed on-site to screen workers on a daily basis. The company has also ensured minimal workforce interaction by introducing the Moglix platform, which has largely migrated the supply chain and procurement functions (purchase of materials and supplies) online.

RESTORING THE SUPPLY CHAIN

Lockdown measures have impacted both the supply chain and demand for various products. For Tata Chemicals, dispatch of some products



Employees at Tata Chemicals conform to new work norms like touch-free sanitisers, water dispensers and health screening among others

was impacted for some time due to transportation and port-related issues at certain locations, but it was quickly brought back on track to enable the company to service customers' requirements. "Our teams worked relentlessly to ensure minimal disruption to our supply chain," says Mr Nanda. "They also anticipated potential challenges that could arise in the availability of raw materials and spares, and stocked ample quantities of key items. This included looking for alternate sources should regular vendors face constraints in supply due to reasons beyond their control. With regular dialogues with the fleet operators and coordination with the local authorities on driver-related safety, adequate trucks were made available to ensure minimal disruption to finished goods movement."

When the virus first surfaced in China and later made its way into Europe, Tata Motors had already begun a dynamic process of assessing where the company had relations of either direct sourcing or tier-2 or tier-3 sourcing in those markets; for business continuity, it started finding alternative means of getting parts and using premium freight routes. The company constituted a task force to map the supply chain, identifying procurement issues in the lockdown areas, and added premium freight agreements to ensure availability of critical material.

Over 900 teams from Tata Motors are also engaging with supplier partners across India. The company is anticipating issues by simulating actions with some restart dates as an assumption and has established a checklist of assessments, indicating suppliers' recovery and raw material procurement plan at the suppliers' end, given prevailing low stocks. The company continues to communicate and monitor personnel requirements and has mapped the supply chain to ensure proactive actions during this staggered lockdown across various states. **TR**

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Retail therapy

Titan, Tata Motors and Voltas have found ways to continue engaging their customers despite closure of malls and non-essentials stores in the Covid-19 crisis

The first phase of the lockdown to counter the spread of Covid-19 mandated the temporary closure of all non-essential businesses, including standalone stores and dealerships or those in malls, which meant an almost 100 percent impact on consumer-facing businesses like Titan Company Ltd, Tata Motors and Voltas's retail segment.

CHANGING CONSUMER PRIORITIES

Even now, as these businesses resume operations in a steady, calibrated manner, and as per the government's easing of certain restrictions, demand and supply remain unpredictable. "The restrictions on travel, change in lifestyle and habits, adoption of work from home, and an

increasing focus on safety and essentials, means that discretionary spending is expected to take a backseat," says Guenter Butschek, MD & CEO, Tata Motors. "However, we choose to remain agile to cater to dynamic demand. We intend to scale operations in a graded manner as the entire enabling ecosystem of suppliers, vendors, dealers and customers comes up to speed."

Titan Company Ltd's entire bouquet of brands, including favourites like Titan Watches, Tanishq, Fastrack, Titan Eyeplus and Taneira were unavailable for customers in the lockdown's first phase, as stores were closed and e-commerce for non-essentials was not permitted. These are now opening up in the second and third phases of the lockdown. "We are primarily a retail business

that requires customers to visit our stores,” says CK Venkataraman, MD, Titan Company. “This depends on two factors: stores being allowed to open — which has now started to accelerate in different locations across the country — and people feeling secure enough to step out after overcoming fears of infection. The initial response is quite encouraging. Our safety protocols have been deeply appreciated by customers. We are also doing live video demonstrations and Try@Home approaches to push our omnichannel journey and help customers overcome the barriers they have buying online.”

Income, expenditure and lifestyle changes are also to be taken into consideration. “Many of us who have been working from home have gotten used to a certain way of life,” says Mr Venkataraman. “We’ve been wearing simple clothes for weeks, and we may not feel the need to get dressed up in the next many weeks. We may not invite people home or go to anyone else’s

homes. We may hesitate to dine out or go to the movies. If we don’t go out, we don’t dress up, and thus, do not spend our incomes on any goods that are a part of dressing up, like clothes, watches or jewellery. Our task will be to create that desire and impel people to want to dress up, for their own motivation and satisfaction.”

KEEPING THE ENGAGEMENT GOING

With a lull in buying behaviour, companies are looking for different ways to remain connected to consumers. For instance, Voltas, whose retail business was completely closed in the first phase of the lockdown, has been engaging with customers by fulfilling its promise of convenience through maintenance assistance. “We’ve extended warranties that were scheduled to expire through lockdown, uploaded DIY videos on basic maintenance know-how to YouTube, shared regular educative and awareness videos on basic safety precautions, and executed many other



Tanishq stores are all set to welcome customers with safety protocols in place

such digital initiatives that help us continue to play a role in the lives of our customers during this lockdown,” shares Pradeep Bakshi, MD & CEO, Voltas Limited.

Tata Motors has also constantly been in touch with its customers since the lockdown started. Business units have been actively engaging with customers on various platforms — call centre executives, product specialists and dealership staff connect with potential buyers through phone calls, WhatsApp video calls, messages and emails to provide them with essential information during these times.

“We have also launched ‘Click to Drive’, which is an end-to-end digital sales initiative that has taken our entire passenger vehicle sales process online,” says Mr Butschek. “This initiative will help customers buy cars from the safety and comfort of their homes. It has been integrated with all Tata Motors dealers from more than 750 outlets across the country and will also offer vehicle home delivery for our customers at a later date.”

Moreover, the company has gone digital with some of its launches of BSVI models from the commercial vehicle portfolio. Additionally, sales teams are engaging with customers all across the country via digital communication apps, to disseminate information about the newly-launched products and accept bookings.

TATA MOTORS ALSO INITIATED

#ThankYouIndianTruckers — a campaign to recognise its commercial vehicle customers, many of whom happen to be frontline warriors. The company has been providing various facilities across the country for truck drivers through its dealerships, workshops and *saarathi aaram kendras*, while engaging with those plying the highways by offering free food, sanitisers and masks.

IN-STORE PRECAUTIONS

Tata Motors has used the time during lockdown

to design new ways of working, while respecting mandatory safety norms and aggressively adopting digital as a means for engaging with and selling to customers. And over the last few days, customers have initiated new bookings, deliveries of passenger vehicles have commenced and workshops are seeing an increasing inflow of vehicles for servicing.

“At Tata Motors, the safety of our customers, dealers and their staff is of utmost importance,” says Mr Butschek. “Accordingly, we have developed and shared a new, comprehensive set of standard operating procedures (SOPs) that includes maintaining prudent social distancing, adhering to prescribed hygiene and sanitation standards across all customer interaction areas, both inside and outside each dealership, as well as its workshop and back office. We are virtually imparting training to our dealers for practising these SOPs.” Over 650 dealerships and 500 workshops for passenger vehicles and over 1100 sales outlets and 1300 workshops for commercial vehicles have begun operations with this new set of SOPs.

Titan Company, too, used the lockdown period to plan protocols for its stores, ensuring any stores that open, whether in markets or malls, are able to focus on safety. The company plans to substantially reduce the number of chairs in the store to reduce crowding, sanitise stores frequently, use PPE like gloves and masks for its staff, among other measures.

FUTURE TRENDS

With experts predicting that Covid-19 may be with us for months to come, many businesses are watching trends and revisiting strategies going forward. Mr Venkataraman says that affordable price points in every product category are going to be important. “Many people may have lost weeks of income, salaried or non-salaried, or have other monetary pressures, and will look for lower priced products if they do decide to spend,” he says. **TR**

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Powering through the pandemic

Praveer Sinha,
CEO & MD of Tata Power, reveals
how the company ensured
uninterrupted supply of electricity
when India went into lockdown

MONALI SARKAR



When India went into the world's largest lockdown at midnight on March 25, 2020, to combat the Covid-19 pandemic, there were many who stepped up to keep the country running. Among them were the employees of Tata Power, India's largest integrated power company, who ensured uninterrupted generation, transmission and distribution of electricity across geographies.

Praveer Sinha, CEO & MD, Tata Power, tells Tata Review how they did it.

How did Tata Power keep running without

interruption while India went into lockdown mode during the Covid-19 pandemic? Which part of the business was most difficult to reimagine?

As a standard practice, Tata Power is always geared up for disaster management. We have fallback options for N -1 supply, which is a plan for how the supply is restored from an alternative area if one system goes down. We also do N -2 supply, which is a third supply system that kicks in if two supply systems fail, thus enabling us to meet critical demands. Business continuity is something that we continuously evaluate as a process and practice it whenever the need arises.

This time, we immediately implemented a rota

system for employees factoring in backups. We also have dry backup teams with people who can step in immediately if one of the teams on the rota system gets impacted.

But many things about this crisis are different, so many of our responses are also new. We moved from a physical handover of operations between shifts to a virtual handover. We figured out new travel arrangements to ensure that our staff could get to the plants, adhering to all social distancing norms and other precautions. We equipped the hostels at our plants to handle longer durations of stay.

However, thanks to a robust and resilient business continuity system, which takes care of eventualities, we were able to quickly adapt and implement. We have been able to run without a minute's stop. Our plants have been working at full capacity, which for us means continuing a six-sigma performance. We have ensured that our 11 thermal and hydro generation plants across six states in the country continue to operate. Similarly, our distribution and transmission businesses continue to operate at five locations. Our renewable projects at 70 sites are running efficiently. We continued to serve all our customers at home and business establishments thanks to our 10,000 strong workforce of 2,000 officers and 8,000 contract workers who continued to work in all these plants.

Though we too have faced the challenges of lockdown and a deceleration in economic activities, we continue to operate these plants to ensure that the country continues to work under the current difficult circumstances. Our teams have risen to the occasion and delivered whether it is in generation, transmission or distribution, including at the renewable energy plants. It speaks volumes about Tata Power's work processes, ethos and legacy.

What is the biggest crisis you have seen before

STORY OF 14 STATES

Tata Power reached out to communities in Maharashtra, Delhi, Gujarat, Odisha, West Bengal, Jharkhand, Telangana, Madhya Pradesh, Andhra Pradesh, Karnataka, Bihar, Uttar Pradesh, Rajasthan and Tamil Nadu.*



5 lakh people supported with **food grain**



4.6 lakh people provided access to the **health awareness programme, disinfectant spray, drinking water and mobile dispensary**



4.09 lakh people linked with the **public distribution system**



6.84 lakh face mask orders received; *Dhaaga* members supplied **5.81 lakh masks till date**



3 lakh+ kg of fodder supplied to support **3,600 cattle**



68,400 kg vegetables supplied by self-help group members to local *mandis*



6,700+ migrant workers surveyed for their entitlement of **essential services benefits**

**All numbers as on June 15, 2020*

the Covid-19 pandemic?

Few years back there was a sandstorm in Delhi, which led to the whole power system getting cut off. Railway lines snapped. Metro trains were stuck. It also impacted hospitals and other emergency services. Such situations are a life-and-death issue. It was very challenging to get the grid back to normal.

Tata Power has also worked through calamities like the Mumbai floods of 2005 or even for that matter the heavy rains last year where all our dams — we have six dams between Mumbai and Pune — were overflowing. We had to ensure that the water was released in a way that it would not lead to flooding and evacuated nearby villages as a precaution.

Our people know the drill and our disaster management and business continuity plans are immediately put in place. The difference this time is that all our earlier challenges were for a few days. We never had a challenge that has continued for so long. This is the first time that all countries are impacted, and there is a virtual shutdown everywhere; we cannot tell with any certainty when things will return to normal.

Tata Power ensured uninterrupted power supply in Mumbai despite the demand fluctuation when lights were switched off for '9 minutes at 9pm' in April to pay tribute to frontline workers. How did your team manage that challenge?

Managing the load on the system was difficult. You cannot suddenly ramp up or ramp down the load at coal-based plants. Since it was supposed to start at 9pm, we began to run our coal-based plants at minimum technical load from 8pm. We fortunately also have hydro power plants, so we enhanced them to full capacity. By 9pm, the latter were running at full capacity of their generation.

As people switched off their lights and the load started reducing, we kept reducing the hydro

generation. After 9 minutes, when the load started increasing, we ramped up the hydro generation. It was a fine balancing act that was complicated by an unexpected challenge — the total load reduction of Mumbai was nearly double of what we had anticipated. We were able to manage because we had done a mock drill a day before.

We were able to manage not just in Mumbai but in other locations like Delhi, Ajmer and Jamshedpur as well. It was a unique capability that was demonstrated not just by Tata Power but also by other power companies that were involved in managing the load during that period.

Tata Power employees have been on the frontline of fighting this pandemic...

The commitment of our employees has been phenomenal, but it is also important to note how their families have supported them. Everyone is scared right now. They know what can happen when they step outside. It speaks volumes about the culture of our organisation, about how Tata Power has taken care of its employees, and the connect we have with their families whereby they all feel that they are doing an important duty for the country. Their contribution in no way is less than other frontline workers.

No stopping

~1,188 Ckm of transmission lines, connecting generating stations to **22 receiving stations** for Mumbai

~2,328 Ckm of **220 kV** and **400 kV transmission lines** to evacuate power from the eastern and northeastern regions of India to the northern region

Distribution of power to ~7 lakh customers in Mumbai, **16.96 lakh+ customers** in Delhi and **1.4 lakh customers** in Ajmer



Whenever there have been calamities — be it the flash floods in Uttarakhand in 2013 or Cyclone Hudhud in Vizag in 2014 or cyclones in Odisha — our people have been the first to reach and restore power supply. In Uttarakhand, our engineers camped in forest areas and carried out all the activities to restore electricity. It is a matter of pride to contribute positively to the country in this difficult time and that spirit drives our employees to carry out their daily jobs, and their families always support them.

At this time, how are you communicating to your customers that Tata Power is a caring brand?

An electricity consumer is a lifetime consumer; it is not a short transactional relationship. We are in direct touch with our retail customers in Delhi, Mumbai and Ajmer — nearly 2.5 million consumers in these cities — through calls, emails and our social media handles. We also connect with resident welfare associations and society committees to understand their requirements and ensure 24x7 supply of electricity to them. We inform them about everything from the need for making payments, with the option of paying in instalments.

We run special programmes like the one for senior citizens in Delhi. We have given all our customers who are above 65 years of age the option of having their bill payments collected from their houses. Our system has also tagged customers who have medical equipment in use in their homes. We inform them in advance if at all the supply goes down and ensure that electricity is restored to these loads on priority.

Apart from keeping up the continuity of our connect with all our consumers, we are also running campaigns to educate consumers on going digital, social distancing and energy conservation while at home.



“

It is in difficult periods that one actually sees the culture of an organisation — how its employees behave, how the management behaves, and how they collaborate to overcome challenges and adversity together.”

How is Tata Power supporting the community during this pandemic?

Working closely with the community is embedded in our business itself. We have rolled out initiatives in each of our locations.

One key objective was to keep relationships going in a way that both livelihoods and lives are protected. We helped our self-help groups, many of them empowering women, to continue getting a livelihood by making face masks. Nearly 5 lakh face masks have been produced and distributed by our teams to various communities. In some communities, we have helped farmers sell their produce to the markets.

In Mumbai and other places — as part of our financial inclusivity programme which helps those in need access government programmes — we worked with our field teams and NGO partners to help people get rations from the government.

In Delhi, we have distributed 3 lakh food packets for migrant workers staying in facilities organised by the government. We also worked with Tata Sons and The Indian Hotels Company Ltd to distribute almost 1 lakh lunch and dinner packets over one month.

How do you view the impact of this pandemic on the nature of work and workspaces?

This has been a great learning for many of us. The fear that employees will not be able to deliver if they work from home or have flexi timings has, to a large extent, been proven wrong. It has demonstrated that many a times we underestimate our own employees and their capabilities.

Employees world over have proven that they are responsible whether supervised or unsupervised. Many have ended up being able to do more because they have saved the time lost in commuting and other distractions when they come to office. So, there will certainly be some activities that will continue to be carried out from home even after the lockdown is lifted and

the pandemic passes. However, there is nothing like seeing and talking to individuals. Jobs are also about long-term relationship building. The challenge will be to engage employees who are working from home so that the social fabric, the emotional connect which they have with the organisation does not get frayed. How do we ensure that they don't feel left out or isolated? Those are some dimensions that we need to understand and work with.

How is Tata Power getting ahead of the next phase of the crisis?

Moving forward everyone will realise that digital technology is a necessity and not a luxury. It is an enabler for doing your job and improving your output and productivity. Adoption of technological interventions is becoming faster.

What has been your biggest takeaway from dealing with a crisis that has no corporate playbook?

That we have the wherewithal and commitment to overcome any sort of challenge. It is a great feeling that we have been able to do what we do as a team. It is in difficult periods that one actually sees the culture of an organisation — how its employees behave, how the management behaves, and how they collaborate to overcome challenges and adversity together. That is the biggest takeaway from this.

These are intangible values that organisations develop over time. You cannot put a price or value on this; it's an invaluable asset.

What has been your personal mantra on coping with this?

You need to have faith and positivity that every crisis has a solution. You need to have the conviction that you can come out of this problem and come out of it better than anticipated. **TR**

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Steeled for the future

T V Narendran, CEO & MD, Tata Steel, reflects on how Covid-19 has impacted the manufacturing sector, how the steel giant is navigating the new normal, and the way forward for industry

BY ANURADHA ANUPKUMAR



What impact have the pandemic and the subsequent lockdowns around the world had on the manufacturing sector?

The manufacturing sector, like all other sectors, has been significantly impacted by the pandemic.

Firstly, manufacturing companies have fairly complex supply chains, with inputs coming from multiple places and multiple vendors. So even in normal times, managing the supply chain is challenging. During the pandemic, managing the supply chain was a huge challenge due to the multiple restrictions in different countries and different parts of India.

Secondly, there is an impact on the customer front. A steel company, for instance, caters to various sectors of the economy, like automotive, construction and appliances among others. If any sector that consumes steel is impacted, sales are affected and that has an impact on production.

Finally, manufacturing companies typically depend on permanent labour and contract labour, and the movement of both was affected due to the lockdowns.

For Tata Steel specifically, there were various degrees of impact across the world. None of the geographies had as complete a lockdown as India. We were operating at about 60 to 70 percent production levels in the UK and the Netherlands. In Southeast Asia, operations were reasonably normal because Singapore and Thailand initially seemed to have handled their response to the pandemic

quite well, though Singapore later had a complete lockdown because of a recurrence of cases.

As lockdowns are lifted and restrictions eased across the world, what kind of challenges do you anticipate going forward?

I do expect a challenging year or two ahead. This pandemic is not going away any time soon. There may be a recurrence or future partial lockdowns. One challenge is that we will have fairly disrupted inbound and outbound supply chains for the next two years. So, companies have to be agile and resilient.

Another challenge is that there will be a fair amount of macroeconomic stress, which will impact households and consumption. Customers will take time to come back to normal levels of activity, hence demand will take some time to come back. Again, if there are job losses, consumption will be further impacted. It might take a few quarters or a few years depending on which geography you are in.

There is also the question of how much of an appetite different governments have to spend their way out of trouble. There have been a lot of announcements, but we will need to see how

that flows into the real economy and brings back confidence, which is required to bring back consumption. The government can create demand by spending on infrastructure, which will help with a quicker recovery. If we wait for the sentiments to come back on consumption, it may be a longer haul.

Specifically with regards to Tata Steel, how have business plans for the year – either actioned or in process – been impacted?

We are a capital-intensive industry and have a significant amount of capex planned for every year. So firstly, because demand is uncertain and having high leverage is a challenge, we have decided to focus on cash, on deleveraging, or at least ensuring that leverage does not increase.

We will continue to spend on sustenance, safety, environmental and health-related capex. But anything to do with growth will be deferred until the right time — anything to do with taking out costs or improving the value of our products will be prioritised over growth. We have also focused on taking out both fixed costs and variable costs significantly. On the revenue side we have decided to focus on a much higher share



for export, even as we wait for domestic markets to recover.

How has Tata Steel used the lockdown period to strategise for the future and to build in competencies to adapt to the new normal?

Tata Steel has a number of strengths but agility hasn't traditionally been its strongest characteristic because we are a process-driven organisation, which believes in continuous improvement and running a very stable operation.

Over the last year or so, however, we had been working a lot on agility, and this crisis was an opportunity to test our ability to be agile. I was quite happy with the response — the way teams worked together to respond to the disruption of supply chains, kept the plant running despite the disruptions, looked for alternative markets when the home markets were disrupted, looked at exports, changed the product mix as appropriate, and so forth. The question now is, how can we preserve this agility even after the crisis?

From a strategising point of view, we are determined to build more resilience into our supply chains, in terms of mitigating risk and over-dependence on some geographies, countries or vendors. We have always had fairly strong risk management practices, but we are reviewing these very closely because the velocity of the coronavirus has caught us by surprise. However, I must say that because of our footprint across geographies, we had started some preparation well before the lockdown, and were better prepared than many of our peers in India.

Moreover, for about three years, we have been spending significantly on technology and a year ago, we moved to the Cloud. This couldn't have been more timely, because we very easily shifted to the work-from-home environment, with no disruption to business and operations. So, the investments that we made in technology have been more than remunerative.

We have also used this crisis to conduct a number of experiments in operations, which we can't do with the plant running at full capacity. As a consequence, when things come back to normal we will be able to take out far more costs, because we will work with a different operating regime.

How has the focus on markets changed on account of changes in demand and supply across geographies and industries?

We have struggled because the auto industry, which buys around 20 percent of the steel we make, has not recovered yet and may take more time. We need to find alternative markets, which look for high-quality steel.

In terms of geographies, in Europe we are currently operating at 60 to 70 percent, and we will have to continue at that level because the continent might take a bit longer to bounce back to normal. In Southeast Asia, Thailand has not seen a major impact, while Singapore is likely to be back to normal this month as the lockdown is being lifted. The India business is our biggest and the most profitable, so we're aiming to get the business back to normal here as soon as we can.

As many plants move towards operating at full capacity, safety is an important discussion.

How is Tata Steel going about reconfiguring workspaces and developing new protocols?

Safety has always been a very important part of the way we work, given that at the Tata group our employees are one of the most important stakeholders. We are very particular about not putting any employee at risk. So step one is to ensure that the minimum number of people required come to the workplace, whether that's a factory or the office.

In the operating plants, we have staggered shifts and provided employees with all necessary personal protective equipment, including masks. Workspaces and buses that ferry employees to

the plants are frequently sanitised, and social distancing is observed everywhere, including at the gates, where we follow strict protocols for checking everyone who enters.

We are using a lot of technology to track how plants are operating. In Angul (Odisha), we used drones to check if social distancing is being followed in remote parts of the plant. We use analytics from RFID (radio-frequency identification) cards on contract workers to track if there is a clustering of people at any plant at any site, and we use video analytics to check if people are wearing masks.

Until mid-April, Jamshedpur was the only

major Indian city without a single Covid-19 case, so we've been reasonably successful in our collective efforts — the doctors, security people and employees, including our contract workers and regular workers.

What are the opportunities or learnings that have emerged during this pandemic and lockdown, in your opinion?

Any crisis is an opportunity for us to look in the mirror. It tells us what we're good at and what weaknesses we need to iron out; it gives us a lot of data on the organisation, and how the leadership and the people cope with a situation. There's a wealth of information that emerges, which hopefully helps us run things differently.

One of the learnings is that productivity can go to very different levels — whether it's productivity of people, space or time — if we leverage technology that we've had all along. For instance, it's strange that before March, I'd never used Microsoft Teams, even though I've had it on my iPad. This whole crisis has helped us better leverage the money that we've spent so far on technology. Now the question I ask HR is, at least for office staff, "Do you really need attendance?" In the last three months we've moved towards a culture of measuring people by the quality of work they do and the output they deliver. It doesn't matter what location you work out of, as long as you deliver what you're supposed to. There's an opportunity to build flexibility into HR practices so that we can leverage talent better.

We've also had an opportunity to look at different revenue streams. We already had a Services and Solutions business; now we're building ready-to-use houses, which can be used as isolation centres; and can also build hospitals quickly, along with many other such facilities. So, we're looking at how we can monetise a lot of capability that we have to provide technical services and go beyond our traditional revenue



“

The manufacturing segment will have to recalibrate but it's also a great opportunity for Indian manufacturing to emerge stronger.”



streams, because traditional revenue streams will be vulnerable over the next few years to the fluctuations in the physical world.

How do you envision the journey back to normalcy, if at all returning to the old normal is possible?

First and foremost, we have to accept the fact that this virus is going to be around for the next few years. So the question is, how do we ensure that we don't put our employees at risk, even as we go about coming back to — if not normal — close to normal? A lot of protocols and practices will change, and I'm confident that people will adapt to it. I've already seen it when I went to the plant in Jamshedpur, when I visited Mumbai or when I'm at the airport.

There are many good things that will come out of the crisis. At the individual level, hygiene will improve. From a large number of people in India falling ill or dying because they don't wash their hands enough, to washing our hands every time we walk past a washbasin — the change is huge.

At the institutional level, I hope it will encourage more expenditure on the health infrastructure. We have always underspent on health, and I hope this builds more consciousness around it.

From a manufacturing point of view, if there are products that you supply, which were essential during this crisis, then you look at expanding that part of the business. For instance, steel is pretty much used in everything, including building a hospital, constructing hospital beds, and making ventilators.

People will seek to de-risk their supply chains, and thus more Indian consumers in the B2B space will want to source locally, which is an opportunity for us. The pandemic will accelerate some of the China de-risking work that has been going on for the last two years. And that also creates opportunities to grow manufacturing in India if you can address some of the challenges. The manufacturing segment will have to recalibrate, but it's also a great opportunity for Indian manufacturing to emerge stronger. **TR**

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A Trusted Partner

Tata Trusts, under the aegis of its Chairman Mr Ratan N Tata, has initiated the 'One Against Covid-19' programme to fight the deadly novel coronavirus

BY FARAH DADA



We make a living by what we get,
but we make a life by what we
give.” — Sir Winston Churchill

The unprecedented circumstances caused by the Covid-19* pandemic have severely paralysed the whole world. The prevailing uncertainty and socio-economic fallout has affected people's livelihoods, dislocated supply chains, and placed an intolerable burden on the healthcare system. In such troubled times, support from the civil society, non-governmental organisations and corporate philanthropy is much-needed to augment the government's efforts to fight the contagion.

Realising the gravity of the situation, Mr Ratan N Tata, Chairman, Tata Trusts, and Chairman Emeritus, Tata Sons, has extended support to the Government of India in its efforts towards containing the spread of Covid-19. Mr Tata was one of the first leaders of corporate India to make a commitment towards protecting and empowering the affected communities. On March 28, 2020, Mr Tata pledged ₹500 crore on behalf of Tata Trusts. The initiative had a cascading effect on the corporate sector in India, with Tata Sons and other corporates pledging handsome contributions in the fight against Covid-19.

*Coronavirus disease 2019 (Covid-19) is the official name given by the World Health Organization (WHO) to the disease caused by the SARS-CoV-2 virus. Covid-19 was declared a pandemic by WHO on March 11, 2020.



The Covid pandemic reminds us of Jamsetji Tata's relentless efforts to arrest the bubonic plague that struck Mumbai (then Bombay) between 1896-1899. Not only did the Tata patriarch study every piece of literature available on various plagues but also propagated and, in fact, got himself and his kith and kin inoculated with a vaccine – developed by a Russian doctor Professor Haffkine – which had met with tough resistance then.

Mr Tata's gesture is in line with the guiding philosophy of the Tata group Founder, Jamsetji N Tata, who emphasised that in a free enterprise, the community is not just another stakeholder in business, but it is, in fact, the very purpose of its existence.

“The current situation in India and across the world is of grave concern and needs immediate action. Tata Trusts and the Tata group's companies have in the past risen to the needs of the nation. At this moment, the need of the hour is greater than any other time,” said Mr Tata, adding, “In this exceptionally difficult period, I believe that urgent emergency resources need to be deployed to cope with the needs of fighting the Covid-19 crisis, which is one of the toughest challenges the human race will face.”

The medical facilities of all countries have been put to test due to the rapid spread of the virus. Mr Tata therefore decided to channel support to the medical fraternity and augment healthcare facilities in India. He reiterated that Tata Trusts, Tata Sons and the Tata group companies would stand in solidarity with the local and global partners and the government in their collective fight against the crisis by helping reach out to the marginalised sections of society. He also expressed gratitude and respect for every person who had committed themselves to fighting this pandemic.

ONE AGAINST COVID-19

The Tata Trusts management swung into action

as soon as Mr Tata set the direction of Tata Trusts' Covid-19 efforts. Four teams were appointed, under the 'One Against Covid-19' programme, to manage four key streams that would assist administrations and citizens to fight the invisible enemy.

FOCUS AREAS

Community Outreach headed by Arun Pandhi, director, Program Implementation, Tata Trusts, took on the responsibility of creating awareness and increasing the resilience of the communities.

Training of Healthcare Specialists was assigned to HSD Srinivas, head, Health Systems, Tata Trusts, who has assumed the responsibility of building capacity of healthcare professionals and preparing them in every way to respond to the crisis.

Personal Protective Equipment (PPE) and Test Kits are being procured by a team led by Ashish Deshpande, CFO & company secretary, Sir Ratan Tata Trust, along with Ganesan Krishnan and Neeraj Acharya, to ensure the safety of healthcare workers and to increase per capita testing. Abhishek Poduri, head, South Zone Operations, Tata Trusts, is in charge of the logistics of these supplies across the country.

Establishment of Treatment Facilities is the responsibility of Lakshman Sethuraman, head, Project Management Group, Tata Trusts, who is

overseeing the creation of modular facilities for Covid care.

SPREADING THE WORD

The deluge of information on the novel coronavirus, emanating from social media, television, newsprint and radio caused confusion and fear in people. As a first step in the fight against Covid-19, it was important to address the panic-stricken citizens and educate them about the virus as well as bust the myths and misinformation around it.



On March 31, 2020, the Community Outreach team of Tata Trusts launched the ‘5 kadam Corona mukt jivan’ campaign, to bring about a positive social and behavioural change as well as amplify the government’s message to adopt hygienic practices. This outreach campaign — targeted at the elderly, farmers, migrant workers and rural communities — was launched across 20 states including Maharashtra, Gujarat, Rajasthan, Uttarakhand, Uttar Pradesh, Himachal Pradesh, Punjab, Jharkhand, Odisha, Nagaland, Mizoram, Tripura, Arunachal Pradesh, Assam, Manipur, Telangana, Andhra Pradesh, Karnataka, Tamil Nadu and the union territory of Ladakh.

Considering its extensive geographic spread, the campaign had to be multilingual in nature. “For us, this meant sharply defining the communication messaging yet keeping it generic to appeal to the larger rural communities,” says Arun Pandhi, director, Program Implementation, Tata Trusts.

The health team and medical experts at Tata Trusts sifted through voluminous data released by the government on Covid-19, to extract and construct relevant messaging. Having a fair understanding of the rural audience, the team’s first round of messaging focused on health and hygiene-related practices; the rural populace could easily comprehend it, because they keep receiving communication on this subject from time to time. The new and relatively unknown concepts of social distancing and reverse migration were introduced through a simple message on hand washing.

For ease of comprehension, the messages were

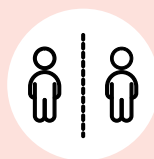
Key Messaging



Hand washing



Respiratory etiquette



Social distancing



Correct information



Symptom recognition



Reverse migration

Outreach



220+ video messages in more than **22 languages/dialects**, reached **137.96 lakh people**



5 animation films, conveying **5 different messages**, developed in **8 languages**



6 audio messages, conveying **6 messages**, in **8 core languages** reached **3 lakh people**



Text messages (mKrishi platform) reached **5.47 lakh people**



Community radio (**4 messages**) reached **1.20 lakh people**



Internet sathis (**IVR**) reached **0.87 lakh members**



Master trainer outreach impacted **~1.25 lakh households**



TV/ news channels/ All India Radio reach in **5 states**



Gurudwaras/ religious places/ milk vans deployed in **4 states**

crafted in local languages and dialects. For the field teams, a reference script was drafted, particularly for recorded messages in their respective local languages and dialects. 220+ videos in 22 languages and dialects were created, and they generated approximately 20 million views.

The messages largely in digital formats were meant for the rural hinterland, where internet penetration is low and smartphone usage negligible. To overcome this challenge, the team deployed multimedia including IVR based audio and text messages. Video messages, short



Indian test cricketer Harbhajan Singh demonstrates the right technique for washing hands

animation videos, infographics displayed on posters and banners were among the other modes through which the campaign was effectively rolled out.

Over 40 celebrities from varied fields such as sports, film and music were roped in as influencers to create a meaningful impact. Nana Patekar, Sonali Kulkarni, Harbhajan Singh, Yusuf Pathan, Ila Arun, Atul Kulkarni, Malini Awasthi, and Sanju Samson of Rajasthan Royals, among others, lent their voice to the campaign, and even promoted their messages on their personal social media handles.

To maximise the campaign's reach, 18 national level trainers from the Health team of Tata Trusts designed three training modules with six key messages. These modules were used to impart training to 430 master trainers, who in turn trained over 5000 community resource people and village volunteers. The mandate for everyone was to propel consistent messaging into the rural interiors. The campaign was successfully delivered to approximately 1.25 million households through these concerted efforts.

The team also leveraged the Tata Dairy Mission network to broaden the outreach, following restrictions on movement due to the lockdown. "Milk, an essential commodity, was being supplied through our milk producer companies to 800 villages across 4 states. We came up with the idea

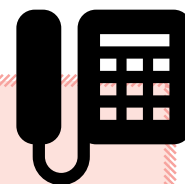
of installing microphones in the milk vans to broadcast our campaign messages,” says Arun.

Utilising the existing network of the Trusts’ programmes, trained community volunteers, associate organisations, community radios, public address systems, along with internet and communication technologies were pressed into service for community outreach.

To assess the communities’ preparedness and awareness levels and efficacy of the messaging, the Data Driven Governance team of Tata Trusts conducted a survey across 75 aspirational districts at the behest of NITI Aayog, the Government of India’s policy think tank. 25,000 responses from 855 gram panchayats yielded a high, positive performance score on message comprehension, inclination to practice the change in behaviour and propensity to disseminate the messages.

The next phase of community outreach will focus on specific messaging for farmers, rural folk and migrant workers to educate them on their entitlements from government schemes and non-government projects. The messaging will be dovetailed with literature on the kharif 2020 crop. In addition, Tata Trusts in partnership with the Ministry of Health & Family Welfare, Government of India, and UNICEF will drive targeted messaging on the prevention of stigma and discrimination against any community or individual with the aim of promoting social harmony.

“Our endeavour has been to provide quick and timely information through reliable resources to the most underserved rural communities, especially in the time of uncertainties. Over the years, our implementation network on ground has become an integral part of the community and its development. Our teams have worked collaboratively with the community to bring them the most appropriate messages in their own language, within their own setting. We are overwhelmed with the response, and it has energised our teams to mitigate adversity at scale,” avers Arun.

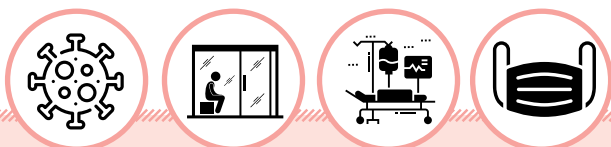


Dial for Care

In Madhya Pradesh, Dr Abhijeet Chaudhury, physician and public health specialist, trained 16 members of the Non-Communicable Disease Screening Programme on addressing Covid-19 related medical queries received on the 104 Health Helpline and 181 CM Helpline. Through these efforts, so far 53 people showing Covid-19 symptoms were connected to public health facilities and 143 distressed callers were advised on the right practices of home quarantine.

In Telangana, Saraswati Padmanabhan, program manager, Elderly Care, Tata Trusts, trained the team from Elder Spring Response System, a dedicated helpline for senior citizens and their caregivers. She equipped the team to offer guidance on health and suggestions on access to essential services during the lockdown, as well as counsel callers on overcoming anxiety and loneliness. Additionally, requests for food, groceries, medicines and essentials for over 100 senior citizens in Hyderabad and 56 old age homes across 14 districts were fulfilled through this helpline.

Dr Amar Nawkar, program officer, Sir Dorabji Tata Trust, helped set up the response centre protocols at the Model Urban Primary Health Centre in Nagpur. He trained medical, paramedical and frontline ASHA (accredited social health activist) workers of the Nagpur Municipal Corporation, to diagnose suspected cases and advise them on the protocols to be followed for further treatment. Starting with training 332 members, the number has grown to 2000. More than 1800 calls were responded to and more than 500,000 people were screened for Covid-19.



CHRISTIAN MEDICAL COLLEGE (CMC), VELLORE

Training Modules

1. Managing
 - Triage of Covid-19 suspected and confirmed patients
 - Quarantine/isolation
 - Infection control
 - Patients in isolation ward
 - Equipment
 - Self and team
2. Receiving patients in the ICU
3. Providing respiratory support
4. Providing cardiovascular support

Training Methodology:

After each module, the participant must clear an assessment before proceeding to the next. At the end of the course, a summative assessment consolidates the learning from all modules. For participants to be certified, they must clear all the nine modules. The institute also offers a 'Train the Trainers' model, where two persons from each hospital could become certified master trainers. Each master trainer could then independently train a batch of 10-15 persons from their own hospital and even from other hospitals. Once the lockdown is lifted, the master trainer could be deputed to the trainee location to provide hands on training if required.

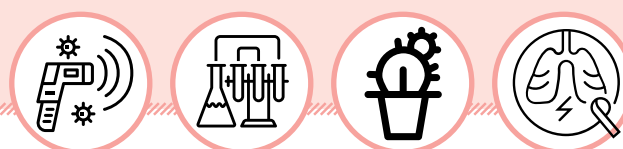
CARE INSTITUTE OF HEALTH SCIENCES (CIHS), HYDERABAD

Training Modules

1. Introduction to Covid Management Course – Overview and epidemiology of Covid-19
2. IPC (infection prevention and control) – standard precautions, transmission-based precautions, isolation, biomedical waste management
3. Triage
4. Approach to patient – physical examination
5. Pneumonia
6. Basic life support
7. Lab diagnostics
8. Ventilator management – Basics of ventilation demo, ARDS (acute respiratory distress syndrome), airway management
9. Management of fatalities

Training Methodology:

The training is conducted through a series of live webinars. A batch of 20 nominated participants, registered on the CIHS portal, are given access to the live webinars and can access the content offline too. Multiple webinars are organised for each batch; at the end of the training, an objective online assessment is conducted based on which a certificate is presented to each participant.



UPSKILLING TO SERVE

Given the scale of the crisis, capacity building of medical staff is paramount. Towards this, the Tata Health Professional Capability Building Program was launched by Tata Trusts and the Tata Business Excellence Group in partnership with the Christian Medical College (CMC), Vellore; and CARE Institute of Health Sciences (CIHS), Hyderabad. The latter two nationally acclaimed institutes will serve as training providers. Tata Trusts and the Tata group are funding the programme that will provide pro bono high quality training to doctors, nurses, paramedical staff from hospitals and nursing homes in India, particularly those who are at the forefront and those who are likely to be engaged in providing

care to Covid patients.

The training programmes have been designed to sensitise and prepare healthcare professionals on the essentials of critical care management. Through these programmes, non-ICU physicians are being familiarised and oriented into the ICU environment, thereby giving rise to a cadre of general duty physicians at the ICUs to monitor and assist the intensivists. The training, imparted using digital technology, involves a blend of online and instructor-guided modules that are delivered in English and can be accessed on laptops, desktops and smartphones. The training extends to a maximum of 20 hours over a week, giving

participants the convenience to access the modules offline as well. “Our training is aimed at building new capabilities in healthcare personnel, preparing them to administer critical care to Covid-19 patients and work in complex medical scenarios. Our training modules are based on WHO guidelines and incorporate 54 competencies, including self-care, patient care, usage of life support equipment, isolation management, discharge formalities, to name a few. We have piloted the training in Tata-run hospitals and are ready to roll it out to others. It is our endeavour to train 12,000 medical staff in the next 6 months,” says HSD Srinivas, head, Health Systems, Tata Trusts.

GEARING UP

Besides Covid-infected patients, the other most vulnerable group has been the frontline medical staff who are risking their lives to provide critical care. These brave hearts need to be equipped with PPE to protect themselves against infection. Tata Trusts — in collaboration with Tata International Limited, Trent Limited and Voltas — airlifted critical medical supplies for deployment across the country. Tata Trusts took on the herculean task of procuring more than 435 tonnes of medical supplies for India.

For the team, it meant treading on new ground as their core expertise lies in philanthropy.



The first consignment of 2000 boxes containing PPE kits, surgical masks and N95 masks was flown down to Mumbai in Air India carriers

“The first challenge was to identify the right people from within the organisation who could bring their skills to the table. Those with experience of handling logistics and procurement and a shared passion for giving back to society were onboarded,” says Ashish Deshpande, CFO & company secretary, Sir Ratan Tata Trust.

The next step was to identify what goods were required and in what quantities. After several deliberations, it was decided that the supplies should essentially include PPE kits comprising coveralls, gloves and goggles, along with N95 masks and surgical masks of different grades. The total order consisted about 7 lakh PPEs, 27 lakh N95/KN95 masks and 50 lakh surgical masks, which was the largest order at that date by a single organisation in India.

“The expertise of the Tata group companies was utilised to manage the end-to-end order process from identifying suppliers to order placement, organising transportation to procuring insurance for the shipments and managing import protocols, handling customs and airport clearance to loading of goods for transfer to the central warehouse in Pune,” says Ashish.

Since the Indian suppliers couldn't fulfil such a large order, Tata Industries placed orders in China, with the assistance of two leading aggregators who acted on behalf of Tata Trusts as points of sourcing. Considering the urgency of the need, the Trusts made arrangement for 16 chartered flights to airlift the whole cargo from China to Mumbai. Volunteers from Tata Trusts were given special permission to supervise and ensure safe custody of the cargo at the airport premises; they also assisted the customs house agent in getting the goods cleared within 36 hours of arrival, and then loaded them on to trucks headed for Pune.

The supplies were stored in a 100,000 square feet warehousing facility in Pune provided by Voltas. CCTV cameras were installed and disinfection was carried out inside the facility,

prior to the shipment's arrival, making it safe and secure to handle the large volume of the supplies. An efficient team from Trent supported Abhishek Poduri, head, South Zone Operations, Tata Trusts, and his team in supply chain and inventory management.

The first consignment of 2000 boxes consisted of hospital grade sterile clothing (for medical staff working in the ICUs and Covid-19 wards), hospital grade non-sterile clothing (for other hospital staff), N95 masks and surgical masks. “As *mathadis* (persons who carry the load on their heads or on their backs) could not reach the warehouse due to the lockdown, teams from Trent and Tata Trusts took it upon themselves to receive and despatch the consignments,” says Abhishek.

Concurrently, a central team at Tata Trusts, assisted by the team led by HSD Srinivas, was collating requirements from state governments, Tata group-run hospitals and not-for-profit hospitals and NGOs. The team ensured that they catered to all, even as they prioritised requests from hotspots.

To speed up the clearance process at border checkpoints, the Tata Trusts team used a declaration letter, clearly stating that the goods were for Covid relief. This helped DTDC, the delivery partner, to smoothly clear the protocols at checkpoints.

“So far, the Trusts have despatched more than 125 consignments and supplied over 3 lakh units of personal protective clothing (including coveralls, goggles and gloves) and over 30 lakh units of masks (N95 and surgical masks) to about 25 states and union territories, charitable hospitals and other NGOs. In addition to healthcare workers, frontline staff in police services, border security forces in Jammu & Kashmir, sanitation workforce, and milk federations have also been provided with the necessary gear to ensure their safety. The team is now gearing up to receive the last lot of the material shipments,” says Abhishek.

TESTING TIMES

Truenat™ Beta CoV Test

The Truenat™ Beta CoV test, which enables same-day testing, reporting and patient isolation, has been launched by Molbio Diagnostics Pvt Ltd. The company — supported by the India Health Fund (IHF), a collaborative initiative of Tata Trusts (see box on India Health Fund) — focuses on molecular diagnostics for a number of diseases including tuberculosis (TB) and malaria. Molbio had partnered with IHF for support in developing a testing kit for TB, which was rapidly adapted for Covid-19 and can now diagnose a positive result for the coronavirus strain within an hour. The second Indian-made testing kit for Covid-19, approved by ICMR, uses polymerase chain reaction (PCR) technology in which a swab from the throat is taken to diagnose the novel coronavirus.

The compact battery-operated kits can be taken to the field to test as many as 15 individuals a day and are capable of providing test results at the point of care within an hour for ₹1,350 for each test compared with ₹4500 per test



Covid-19 testing in progress using the Truenat™ Beta CoV testing kit



India Health Fund

The importance of testing in the fight against Covid-19 cannot be stressed enough. The India Health Fund — a collaborative initiative seeded by Tata Trusts with strategic support from the non-profit organisation, The Global Fund against TB, malaria and AIDS — is an independent organisation that works to further Tata Trusts' goal of delivering impact at scale and augments the Government of India's efforts to eliminate diseases. It supports and fosters innovations to eliminate diseases like tuberculosis by 2025 and malaria by 2030 from India, and more recently Covid-19.

IHF has taken a twofold approach to support the development of solutions for Covid-19. It is doing this by adapting existing initiatives developed for TB and malaria in its portfolio, ensuring speed to market, and by scouting for newer solutions which need support for development. IHF aims to speed up development and deployment of low-cost diagnostic test kits for screening, confirmatory tests, reporting and monitoring, as well as tools for contact tracing of Covid-19 cases.

"It is our aim to support the development of disruptive solutions, by Indian innovators and entrepreneurs, which leverage advances in diagnostics, data analytics & AI, digital technology and product design to accelerate the elimination of infectious diseases. Our affiliation with Tata Trusts helps to fund the development and facilitate the implementation of these solutions at scale to maximise their impact in terms of lives saved. We catalyse public and private partnerships and raise additional capital from corporate and philanthropic sources to pool funds to provide easy access to these solutions. Tata Trusts has been the most generous supporter of our initiatives," says Madhav Joshi, CEO, IHF.



The Qure.ai team views an x-ray of a patient's chest to assess the damage to the lungs

by other diagnostic solutions. The use of this testing kit does not require trained healthcare professionals. The test is currently being used by the governments in Goa and Andhra Pradesh and has shown 100% accuracy in more than 20,000 screenings.

q-Scout – Pandemic Response Care Platform






The IHF has collaborated with Qure.ai Technologies Pvt Ltd to fund their smartphone-based application q-Scout, which uses artificial intelligence (AI) to screen chest x-rays and assess lung damage. This app-based predictive solution can interpret images like analog or digital x-rays captured on the smartphone, using AI algorithms. Originally designed to enable fast screening and diagnosis of TB without the need for trained medical personnel, it was subsequently repurposed for Covid-19 screening. It is an effective tool for identifying the need for further testing, triage and monitoring the progress of patients. q-Scout is being used extensively by the Brihanmumbai Municipal Corporation in India as well as in Pakistan, Italy and Mexico among other countries.

SPACING IT OUT

The alarming rise in Covid-19 cases across the country has put a tremendous strain on the healthcare infrastructure. To augment the existing medical ecosystem, members of the Cancer Care Team at Tata Trusts are working on creating a modular infrastructure for treating Covid patients.

“We realised that we had to create specialised facilities for Covid care, and this had to be done as a matter of urgency. A decision was taken to avoid going the greenfield way; we started scouting for vacant facilities that could be effectively utilised,” says Rishav Kanodia, a member of the Cancer Infrastructure Team at the Trusts.

The team requested state governments to identify facilities with an area of 50,000 square feet, having power supply, basic utilities and proximity to a district hospital. Two facilities in Sangli and Buldhana districts of Maharashtra and two in Gautam Buddha Nagar and Gonda districts in Uttar Pradesh (UP) were identified. While setting up of the facilities in UP is being managed by Tata Trusts and funded by the Bill and Melinda Gates Foundation, those in Maharashtra are

 LOCATION			
Gautam Buddh Nagar, Uttar Pradesh	Gonda, Uttar Pradesh	Islampur, Sangli district, Maharashtra	Buldhana, Maharashtra
EXISTING FACILITY			
240-bed District Hospital	150-bed Divisional Hospital	Sub-district Hospital	District Hospital
RENOVATED FACILITY			
168-bed comprehensive facility with 130 ward beds, 20 ICU beds, 10 HDU (high dependency unit) beds, 8 emergency beds	124-bed comprehensive facility with 104 ward beds, 10 ICU beds, 10 HDU beds	50-bed facility with 45 ward beds and 5 ICU beds	104-bed facility with 98 wards beds and 6 ICU beds
			

being both set up and funded by the Tata Trusts. Investment in each facility is to the extent of ₹8-15 crore. Edifice Consultants, who work on cancer hospitals for Tata Trusts, created two prototypes: first, a 50-bed isolation centre for screening and testing of non-critical Covid-positive cases and the other, a 100-bed facility for critical patients, equipped with ventilators and dialysis to provide intensive care.

Tata Projects' expertise was sought for site assessment of all the four facilities. "The toughest part was undertaken by the young engineers of Tata Projects who had to traverse distances, seeking necessary permissions to conduct site visits; poor network connectivity made things more difficult for them," states Atamjot Grewal, who is the Cancer team's medical planner.

After necessary approvals, the facilities were disinfected and readied for renovation. Some of the buildings were in a decrepit state, some with no medical gas pipelines and without proper floor layouts which meant that the design details had to be created from scratch and customisation was done for each facility.

"The fully functional facilities, including

pathological laboratories, OPDs, diagnostics that include CT scan and x-ray, tele-medicine units, critical care and quarantine wards and more, will be handed over to the respective governments within 4-6 weeks of commencement of work, which is underway," adds Rishav.

LAUDING THE EFFORTS

Strategic planning — by leveraging the expertise and skills of Tata group companies, non-governmental organisations, non-profits, as well as trained community volunteers that are associated with the existing network of the Tata Trusts' programmes — has enabled the Tata Trusts to ramp up efforts within a short span to fight the pandemic that has presented unfathomable challenges across the world. What is most laudable, though, is that Tata Trusts has not just funded these efforts but has played a proactive role in ensuring successful outcomes, which is the real need of the hour to fight the intractable micro-enemy. **TR**

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Note: This story captures events and activities that occurred between March 28, 2020 and May 15, 2020.



Innovative Weavers

Crafts persons at Antaran are reinventing themselves to adapt to the new normal Covid-19 world

BY FARAH DADA

The socio-economic fallout of the prolonged nationwide lockdown due to Covid-19 has affected the most vulnerable amongst us the hardest. Crafts persons from the handloom sector, who are mainly self-employed with small-scale operations, are paying a heavy price in terms of loss of livelihood. Being daily wage earners, their lives have been severely impacted as they struggle to feed their families.

The situation, however, is different for the handloom weavers of Antaran, an initiative by Tata Trusts to bring transformation in crafts. With the help of the Antaran team, these weavers are redefining skills and ways for adapting to new ways of conducting business in the world of social distancing.

In the past two years, Antaran has nurtured around 75 artisan entrepreneurs through its education and development programme across six clusters. These artisans, in turn, have transferred the knowledge to 867 associates. Many more artisans have been benefitting indirectly through increased exposure of these clusters to buyers and markets, with sustained efforts by Antaran, for highlighting the uniqueness of weaves of each cluster.

DESIGN THINKING

Artisan entrepreneurs from Antaran Design

and Business Education Programme of Antaran Incubation Design Centres are utilising the lull in business to create new design concepts. The Antaran team has been facilitating this initiative by providing online consultation to weavers of six clusters. Drawing inspiration from nature, culture and architecture, the weavers are translating new motifs and patterns on their products, the output of which will be phenomenal with 40 new collections planned – each different yet coordinated! The artisans are busy with creating new samples for the next four seasons.

For the next phase, the Antaran team is working alongside the artisan entrepreneurs to launch Artisan Design Connect – a limited edition collection of new designs with a privileged preview and pre-ordering opportunity open only for the employees of Tata group companies. The collections have been co-designed by artisan designers nurtured under the initiative. These collections were originally planned to be displayed at fashion weeks and trade shows in India and overseas, but this won't happen now due to the pandemic. Through this initiative, Antaran's goal is to generate a continuous stream of work for the artisans and enable new design developments at the clusters. Artisan Design connect was launched at www.antaranartisanconnect.in on May 21, 2020.

STRATEGISING SALES

Artisan entrepreneurs are also honing their digital sales skills through interactive online sessions conducted by the Antaran team. Making product presentations, handling online customer orders and addressing customer queries on the website are now all part of the artisans' daily business activities.

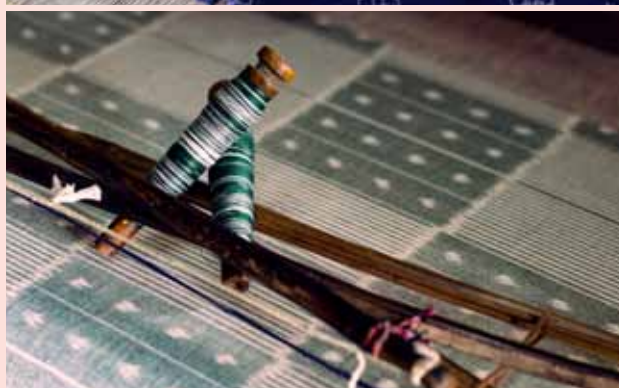
To help mitigate the hardships caused by this downturn, buyers, designers and craft lovers are being urged to purchase beautiful handwoven textiles at wholesale prices through this website, thereby ensuring that the payment is made directly to the artisan while ensuring guarantee of delivery once the lockdown is lifted. This business model has translated into many benefits: flexibility for designers to buy smaller quantity per design and choose from ready assorted stock of 6 clusters in one place, attractive prices for retail customers who are getting products at wholesale rates directly from the artisans for this period and faster cash generation for weavers on their stockpile, without having to burden buyers in cities who themselves are in trouble to take up deliveries of stock they had ordered.

IMPACTFUL PRODUCT VISUALS

The Antaran team, through video calls, is guiding the artisans on how to take professional photos of their products, using varied angles and the play of light. The photographs are being displayed on the www.antaranartisanconnect.in. Artisans from Maniabandha and Gopalpur in Odisha have turned out to be promising shutterbugs!

GOING SOCIAL

Realising the importance of social media to reach a wider audience, some artisans from Odisha and Assam have started using their Facebook and Instagram pages to showcase their products and intricate weaves. They are learning to use the right hashtags for their offerings and are responding to buyers directly through WhatsApp messaging.



USING DIGITAL PAYMENT GATEWAYS

Historically accustomed to doing face-to-face business, along with over-the-counter sales at exhibitions, the artisans are learning to do digital transactions in the Covid-19 world. Most of them are independently handling Paytm, PhonePe, GooglePay and NEFT/IMPS fund transfers, as all sales during lockdown are being conducted online. The Antaran weavers are surely learning to rebuild their lives safely and sustainably!

"Artisans have truly validated the education they gained in design, business, communication and marketing skills in the classes and have bloomed into being entrepreneurs, nudged by the crisis. They have turned adversity into opportunity, navigating their way through the crisis and planning ahead for the rebound through Artisan Design Connect. It's this determined spirit of the artisans that inspires the Antaran team members to be on their toes even in the lockdown!" says Sharda Gautam, head, Crafts, Tata Trusts. **TR**

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Through the **Lockdown** and **After**

A compilation of various best practices for the pandemic,
through the lockdown and after

BY HAROON BIJLI

Contrary to popular belief, Covid-19, the disease caused by the SARS-CoV-2 virus, is not the first such pandemic to hit the world.

Humankind has always been under attack by viruses. Some have changed the destiny of our species; others haven't had such a drastic influence. The earliest recorded pandemic took place during the Peloponnesian War in 430 BC and ravaged two-thirds of the population in North

Africa and Europe. At school, we read about the bubonic plague called Black Death, which wiped out a third of the world's population during the 14th and the 15th centuries.

Closer home, a little more than a 100 years ago, a virus originating in China caused what is known as the Spanish flu. The dreaded flu ravaged millions of lives in India, especially in Mumbai.

Within our recent memory, we have been through the SARS, MERS, Avian (bird)

flu and Swine flu pandemics. According to studies, Swine flu caused by the H1N1 virus and the strains thereof affected over one billion worldwide, most of which were mild and asymptomatic cases. The pandemic ended in late 2010.

We have been there before and have come through the pandemics.

ANATOMY OF THE PANDEMIC
Nevertheless, we cannot be casual about Covid-19. While scientists are learning rapidly about the

virus, it is still new; there is no vaccine yet and treatment is presently symptomatic. Anyone can be infected.

On the other hand, the mortality rate is relatively low; according to the World Health Organization (WHO) over 80% of infected people develop only mild symptoms and are able to recover without requiring hospitalisation. The symptoms are known to start gradually with a fever, dry cough and fatigue.

Other less common symptoms are aches and pains, nasal congestion, headache, conjunctivitis, sore throat, diarrhoea, loss of taste or smell, a rash on the skin or discoloration of fingers or toes.

One in five people develop serious breathing problems. Particularly vulnerable are the elderly and those with comorbidities, such as high blood pressure, heart and lung problems, diabetes and cancer. People of all ages who experience fever and/or a cough associated with difficulty in breathing, shortness of breath, chest pain/pressure, or loss of speech or movement should seek medical assistance immediately.

HOW COVID-19 TRANSMITS

SARS-CoV-2, the virus causing Covid-19, is viable in aerosols for three hours, and remains detectable on plastic and

stainless steel surfaces for up to 72 hours.

Aerosol is when tiny droplets stay suspended in air. While most transmission is person-to-person, there is substantial transmission via inanimate objects, such as plastic and stainless steel. A combination of these two makes the disease highly viral — Covid-19 is known to spread much faster than any other pandemic known to mankind.

At the time of writing this article, it seems certain that the pandemic will continue well after the easing down of the lockdown and of the travel restrictions that have been enforced all over the world. While one can't predict when normalcy will be restored, one can presume that personal hygiene and precautionary measures are critical to keep ourselves healthy as we ease into normal life.

PERSONAL HYGIENE

Hand washing: Maintain a rigorous hand washing regimen, even when you are at home. Use an alcohol-based sanitiser when soap and water is not available. While on essential travel, carry a few sanitiser pouches or a small bottle with you. A popular internet meme tells you to sing the full 'Happy birthday' song while washing your hands to ensure that you've washed them thoroughly.

Maintain safe distance:

Avoid crowds at all costs. In public spaces, ensure that you maintain a two-meter distance from others, unless it is a family member or someone you stay with at home.

Avoid touching your mouth, nose and eyes: This is a rule for all times. Your hands touch surfaces, and you invariably touch your face — mouth, nose and eyes. It is hard, but train yourself not to touch your face. This is another reason why we need to adhere to a strict hand washing routine.

Follow good respiratory hygiene: Ensure that you and others around you follow good respiratory hygiene. While sneezing or coughing, use a tissue and dispose it immediately after use, and wash your hands with soap.

Wear a mask in public spaces: The CDC — Centers for Disease Control and Prevention, a US federal agency for improving overall public health — recommends that a multiple layer cloth mask should be used at all times while in public spaces. While N95 masks are useful in case you are visiting a hospital or a laboratory, a DIY (do it yourself) cloth mask is good for daily use. However, it is important that the mask is disinfected, washed and cleaned after every use. Masks are effective only when

used along with other measures, and are not a replacement for washing hands, safe distancing or respiratory hygiene.

Various governments are likely to enforce usage of masks in public places after the lockdown.

Clean and disinfect:

Keep frequently touched surfaces clean and disinfected. These include lift buttons, doorknobs, car handles, keyboards and mobile phone surfaces. While shopping, ensure that shopping carts and POS (point of sale) machines are disinfected before and after use.

Isolate yourself: If you have a cold, cough, headache or a mild fever, isolate yourself as a precaution. If these symptoms persist and you feel short of breath, call the Covid-19 helpline and seek treatment.

IN PUBLIC SPACES

In most states of India, the complete nationwide lockdown is being lifted in phases. It is critical that you observe local guidelines during the easing of the lockdown. It is important to continue safe distancing, avoid crowded spaces, and follow personal hygiene while in public.

Various countries have restricted movement of people to groups of two: it may be helpful to follow this guideline. Organised public areas



Photo credit: Getty Images

like schools, office buildings, universities, hospitals and public transport will have their own guidelines; and it will be in our best interest to educate ourselves and adhere strictly to them.

DIET AND EXERCISE

The CDC and the WHO advise a nutritious diet and exercise regimen as a general health guideline.

The WHO advises the following while handling daily supplies and groceries:

- All vegetables and fruits need to be washed thoroughly with water, even if you are planning to cook them
- Washable plastic packaging to be washed if possible; if not, disposed immediately after unpacking
- Cartons need to be disposed immediately after unpacking

Wash your hands thoroughly with soap before and after handling groceries, and at no time should you touch your eyes, nose and mouth during the process.

According to the WHO and the CDC, there have been no cases of the virus spreading through food and water so far.

AFTER THE PANDEMIC

At present, any discussion on an 'after' stage is presumptive. The development of a globally available vaccine is not yet a reality, while herd immunity spoken of in the media is not one that world scientific bodies such as the WHO and the CDC recommend.

Therefore, it is increasingly apparent that humanity will have to learn to live with Covid-19 for the foreseeable future. What is certain is that we will have to continue with the same personal and community hygiene precautions till some time to come. **TR**

All content has been sourced from the WHO, the CDC and the Ministry of Health and Family Welfare, Government of India
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Clean and hygienic rooms and timely food service is how this team catered to its quarantined guests



Cleanliness first

Ginger Bhubaneswar has shown that dedication to cleanliness is the key to keeping the coronavirus at bay

BY CYNTHIA RODRIGUES

If there is one thing that the coronavirus has impressed upon us, it is the need to practise good hygiene to ward off the virus.

At the 160-room Ginger Bhubaneswar, named a quarantine centre, this learning has been honed to perfection by hotel manager Shantanu Das and restaurant manager Saurabh Kumar. While Saurabh takes care of day-to-day activities, including coordination with doctors and vendors, Shantanu has redesigned the services for guests, coordinates with Bhubaneswar Municipal Corporation (BMC) officials, and engages with the staff and their families.

The hotel set aside 60 rooms in the new wing as the quarantine centre. The functioning of the hotel is limited to four housekeeping associates, four associates for food service and three managing the front office. Despite having to function with fewer staff members, the hotel took great care of its quarantined guests, all of who tested negative after their stay.

GREAT EXPECTATIONS

The hotel aims to live up to the expectations

that BMC has set. Shantanu says, “The administration expects us to provide clean and hygienic rooms along with timely food service. They have also requested us to install CCTV cameras and appoint security personnel to ensure that quarantined guests stay indoors.”

BMC doctors visit the hotels every alternate day to examine the health of the quarantined people and ensure that hygiene is being maintained. An official is available on call for Ginger Bhubaneswar in case of any issues such as vendors not being able to supply essential goods due to the curfew.

NEW PROTOCOL

Prior to the hotel being designated a quarantine centre, BMC officials inspected the premises and trained the staff. Ginger did a deep cleaning of the hotel, and equipment and supplies used for cleaning the quarantined wing were purchased and stored separately.

With most associates advised to stay at home, the hotel is functioning with a skeletal staff. Saurabh says, “We have housed those of our

associates who couldn't reach home due to the lockdown."

Fourteen rooms in the new wing have been occupied as self-isolation rooms. During the period of the quarantine, housekeeping services are limited to providing fresh linen and clearing the garbage, without the associate needing to enter the room. Breakfast, lunch and dinner are provided in disposable containers left at the door.

Complying with the instructions from the BMC, the rooms have been let out for single occupancy alone.

CARING FOR THE CARERS

Saurabh says, "We have accommodated all the associates in the hotel and are providing them with nutritional meals. They have been equipped with adequate safety gear while working; this allays their fear of infection."

Initially, BMC supplied the associates with surgical masks and gloves; hazmat suits were provided a few days later. Officials also offered training on service expectations that had to be maintained during the pandemic. Associates that are sensitised to caring for their own hygiene are more likely to care for the safety of guests.

Shantanu says, "BMC officials kept in touch with our associates during the first week, briefing them on how to avoid getting infected by the coronavirus, the dos and don'ts that had to be followed. Our associates were told not to touch their faces, dispose of gloves, and repeatedly wash and sanitise their hands, particularly after every room was cleaned. The hotel provided them with a room in which to bathe and change at the end of their shift. Similarly, they have to bathe, change into their uniforms, and sanitise themselves before starting the shift." Ginger also took care to monitor the temperature of the associates three times a day. Hot water for drinking was made available at the cafeteria.

Knowing that associates' families would

naturally be worried about them, Saurabh and Shantanu spoke to them at length about the safety precautions that were being taken. Shantanu says, "We told them about the minimum contact service that we were working towards. As they understood the process that was being followed and the support we were offering the associates, the families began to feel more at ease."

KEEPING OUT THE VIRUS

A lot of thought was put into which items were required in a quarantine room. Shantanu says, "We removed stationery material, menu cards, the bed runner and laundry bags from the rooms. Extra water bottles, tea and coffee sachets, hand towels and soaps were provided to pre-empt further requests on the part of the quarantined guest. We also provided dental and shaving kits and detergent powder on request, at no extra cost."

The process of cleaning the room was broken down into simple steps: providing bed and bath linen as per the request of the guest, clearing the bins, and providing amenities based on usage. Once the guest checked out, the unoccupied room was kept locked for 48 hours before any kind of service was initiated. At the end of this period, the linen, pillows, mattress protector and duvets were washed, and the surfaces deep cleaned. The room and bathroom surfaces were sanitised with an approved chemical.

MOUNTING CHALLENGE

As the Covid-19 crisis intensifies, the shortfall in personnel will crunch the resources of Ginger Bhubaneswar further, but the team is prepared for the challenge. Shantanu says, "In spite of all our planning, we continue to worry about the safety and well-being of our guests and our people. We will continue to do our bit to contribute to the nation." **TTR**

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(Left) Chef Atanu Debinath, Taj Lands End, Mumbai; and (right) Chef Rajendra Nayal, TajSATS, Mumbai



Serving a nutritious meal

Chefs from various IHCL hotels and TajSATS have provided free meals to frontline Covid warriors and migrant workers in these times of distress

BY NAMRATA NARASIMHAN

From the kitchens of The Indian Hotels Company Ltd's (IHCL) various hotels and TajSATS, a leading player in airline catering and institutional catering, more than 1.65 million free meals have been provided so far to medical personnel, police personnel and those impacted in the lockdown.

Working through the pandemic though had its own share of challenges. Says chef Paramjeet Singh Arora, from Taj West End, Bengaluru, — who was among the hotel's skeletal staff, catering to guests and providing meals to Covid-19 frontline warriors and migrant workers in the lockdown — “The main challenge during the lockdown was sourcing items from the local market, and the other was limited personnel. It took detailed

planning and hard work to ensure all the daily preparations were not only ready on time but also of excellent quality.” Chef Atanu Debinath from Taj Lands End, Mumbai, concurs, “We received food supplies only once or twice a week and had to manage with them. This, however, had its positive side, because we learnt to adapt and innovate and plan weekly menus.”

The culinary artists thus started dishing out multiple dishes with minimal ingredients to suit every palate. Taj Palace, New Delhi, primarily provided meals to medical personnel and guests who were staying in the hotel before the lockdown. Rajesh Wadhwa, executive chef, at Taj Palace, who has been with the Taj Hotels for close to four decades, says, “Using the available ingredients



(Left) Chef Paramjeet Singh Arora, Taj West End, Bengaluru; and (right) Chef Rajesh Wadhwa, Taj Palace, New Delhi

smartly and often with a twist in preparation, we ended up preparing deliciously different dishes. A simple bean like *rajma* (red kidney bean) if served as a curry with rice becomes a comfort food on a medical professional's food tray. For our guests, however, who'd been with us for 60-odd days, we needed to offer some variety. So, with the same bean, we prepared a *rajma* croquet. Similarly, with chickpeas (*chole*), we boiled and tossed them in a salad for the medical staff, prepared a traditional Indian *chole* curry for our room service guests, and used the aquafaba to make a soup."

Things were slightly different at Taj West End, Bengaluru. Chef Paramjeet says, "We made the same meals for everyone. The simple but nutritious food was prepared with a lot of care and only the best quality ingredients were used."

HEALTHY MEALS

The chefs and their teams planned home-style nutritious vegetarian meals for the medical staff. Chef Wadhwa says, "We ensured that the meals had proteins, carbohydrates, fibre, starch and fat. Though the menu changed regularly, it comprised a salad, lentils or other sources of vegetarian protein, rice or *roti*, and a simple dessert or fruit which was packed in a bento box. Chef Debinath says, "A citrus fruit, which has vitamin

Chef Atanu Debinath shares a typical day in a chef's life during the lockdown...

My eight-member core team and I were staying in our hotel, The Taj Lands End, Mumbai, in the lockdown. From 6am, we were busy cooking and packing a nutritious breakfast for 200 doctors, before they left for work. Then, we started prepping and cooking the a la carte menu as well as the takeaway orders. Post lunch, we took a short break. From 3:30pm onwards, dinner preparations began; given the large number of orders, we would wind up the kitchen close to midnight.

C, remained a daily feature in the menu to build natural immunity."

HYGIENE

Every IHCL hotel has standard procedures for hygiene and cleanliness. In the wake of the Covid-19 crisis, employees have been provided personal protective equipment like masks and



All employees were provided with personal protective equipment

gloves, with hand sanitisers and washing stations to clean their hands and face,” says chef Wadhwa, adding, “In fact, sometimes we feel we are safer in the hotel than outside.”

“In the kitchen, we have been using vegetable washing machines as before, and our standards for procuring meat as well as any other produce remains as high as before,” he avers.

THE UPSIDE

The new normal situation has had its upside too. “To a large extent, our kitchens are compartmentalised with staff largely doing work in their own sections. With limited staff during the lockdown, everybody is helping out with everything, and it is a great learning opportunity. I have a chef who specialises in cooking Chinese food; now, when he has some time, he helps in the *tandoor* and vice versa. Such interactions foster bonding and skill enhancement; in fact, even latent leadership potential comes to the fore in such times,” says chef Wadhwa.

“Our chefs and their teams have been passionate about cooking meals for our doctors and police personnel who are bravely fighting the pandemic. We feel honoured and privileged to be able to contribute in our little way to society,” chef Debinath concludes. **TR**

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Balanced Meals

TajSATS has delivered more than 1 million meals to the medical fraternity and migrant workers in India. Chef Rajendra Nayal, executive chef, TajSATS, Mumbai, says, “The healthcare professionals are the main warriors in the fight against Covid-19. We wanted to show our support by serving them a healthy, nutritious and balanced meal.”

Towards this, we planned a weekly menu for providing energy-dense and protein rich foods that are also comforting. In the wholesome meal box for the medical fraternity, we provided high carbohydrate foods that are healthy along with add-ons like bread, tea cake or muffin, juice/water, yogurt, dry snacks, chocolate and a fruit. For our migrant workers, it was a nourishing full meal, says chef Nayal.

TAJSATS MENU

The medical fraternity had the following menu choice:

- Vegetable *biryani* with *mirch salan*, or
- Lemon rice with veg stew, or





- *Kadhai pulao with rajma masala*, or
- *Jeera pulao with dal makhani*, or
- *Vegetable makhnwala with dhanial pulao*

For the workers' fraternity, it was a nourishing meal like *aloo paratha* with pickle, vegetable *pulao* among other choices.

"We were working round the clock, with only one-third of the workforce, to fulfil the daily meal orders that had to be sent. Abiding by the government regulations, we were managing with reduced staff who were issued e-passes. Special pick up and drop services were arranged by TajSATS to ensure employees' health and safety," says chef Nayal.

"As our kitchens are equipped for bulk production, we took up the challenge to serve the communities, despite being short-staffed.

In fact, there were days in the lockdown when we surpassed the flight kitchen's regular meal-preparation capacity," he adds.

"Hygiene is something that TajSATS is known for," says the chef, adding, "All TajSATS facilities are certified by internationally recognised food safety standards such as British Standards Institution, QSAI and ISO 22000."

"Expectedly, our families were anxious about our health, but they were also proud that we were making a small but important contribution in serving those who are battling this pandemic on the frontline," says chef Nayal, adding, "The team was often exhausted at the end of a long and hard day, but it has been a privilege and our way of showing gratitude to the medical fraternity."





Tata Tea Quick Chai premix boxes distributed to the frontline warriors



The Power of 'WE CAN'

Devang Pandya of Tata AIG and his teammates from other Tata companies take the fight against Covid-19 to a new battlefield

BY CYNTHIA RODRIGUES

If you thought that the fight against Covid-19 was happening only in hospitals and quarantine facilities, think again. Devang Pandya, chief manager and lead – CSR and Ethics, Tata AIG General Insurance Company, and other colleagues played a stellar role in the fight without stepping out of their homes.

Devang's desire to be a part of the battle against Covid-19 led him to track news about the outbreak. He says, "I realised that the coronavirus was spreading fast in India, particularly in Mumbai. I wanted to help medical personnel to combat the virus more effectively. Without the right equipment, they would be fighting the disease virtually unarmed."

STRIKING FROM HOME

Devang, on his own, reached out to three hospitals of the Municipal Corporation of Greater Mumbai (MCGM) in the city and asked them what they needed; Lokmanya Tilak Municipal General (LTMG) Hospital, Sion, responded. At the request of the Tata Sustainability Group (TSG), Devang developed a proposal. Lalit Allam, corporate materials manager, The Indian Hotels Company Limited (IHCL); Khushroo Tata, TSG; Raj Sharma, vice president – Facilities and Administration, and Anand Venkatachalam, chief manager – Facilities and Administration, Tata AIG, teamed up with him. Tata Sons agreed to offer funding support.

Together they reached out to vendors for

rates. When the vendors quoted prices arbitrarily, the team requested the hospital for a list of their empanelled vendors, the rates and technical specifications.

The team facilitated Tata Sons' donation of 2000 N95 masks, 10,000 3-ply surgical masks, 100 PPE kits and 11,250 litres of hand sanitisers to LTMG Hospital. These items were sourced from Gujarat, Karnataka and Maharashtra within 2–3 weeks.

SMART THINKING

While ordering medical essentials was difficult, bringing them to the hospitals was a bigger challenge, as the lockdown had sealed inter-state boundaries. A vendor of 3-ply surgical masks, based in Gujarat, offered 10,000 masks but found it challenging to deliver them in time due to lockdown restrictions.

The team thought of ingenious ways to procure the items. Since the supply of milk was unrestricted, they contacted the Amul dairy cooperative in Ahmedabad, Gujarat. Amul personnel collected the masks and delivered them to the Amul pickup point in Mumbai, from where the team fetched the packages. For the delivery of other items, the team sought the help of ambulance services of several charitable hospitals.

A SHOT OF LIFE

The rising number of Covid-19 positive cases and the insufficient number of ventilators prompted Devang's company, Tata AIG, to invite employees to donate a day's salary or more, voluntarily; Tata AIG would match the donated amount. A total of ₹1.33 crore was donated by Tata AIG to the Taj Public Service Welfare Trust for procuring 30 ventilators for MCGM and government hospitals in Mumbai.

The team consulted doctors from Tata Memorial Hospital and LTMG Hospital for guidance on the procurement process and the

best buys. Devang says, "We kept checking back with the doctors to make sure that what we were donating was what they needed."

This amount was used to purchase 6 ventilators for high-risk patients, and 24 ventilators for low- and medium-risk patients. These were a mix of imported and Indian machines. Devang and his teammates ensured that the ventilators they ordered were of the best quality, while keeping within the budget.

When the doctors asked for additional accessories that enabled uninterrupted use of ventilators, the team procured those too. All 30 ventilators have been delivered to Seven Hills, Nair, Sion, KEM and Tata Memorial Hospitals.

With additional CSR funding being made available by Tata AIG, the team is now responding to another request from MCGM hospitals by donating 116 multi-parameter monitors, 2500 finger pulse oximeters, 500 non-invasive ventilation masks and 10 video laryngoscopes. This equipment is planned to be distributed across Kasturba, KEM, Nair, Seven Hills, Rajawadi, Cooper, Sion and HBT hospitals in Mumbai.

REFRESHING THE FRONTLINE

Tata Consumer Products wanted to donate 4 lakh sachets of Tata Tea Quick Chai premix to frontline warriors. The material was in the company's warehouse in Bhiwandi, outside Mumbai.

Devang says, "We decided to donate to doctors, nurses and paramedics of MCGM hospitals in Mumbai. The second group consisted of municipal conservancy workers or sanitation personnel, the staff at the MCGM waste management department and the disaster management cells at Mantralaya and MCGM. The third group included the police who were on duty 24x7."

Getting the logistics right was a huge challenge. The team reached out to Seema Redkar, former employee of MCGM, now advisor – Tata Trusts. Contacting her former colleagues, Seema

got MCGM vehicles to pick up 2 lakh packets and distributed them to 24 city ward offices for further distribution to 296 police *chowkis*. The remaining 2 lakh tea packets were distributed through an NGO called Chhoti Si Asha which distributed them to hospitals, migrant labour camps, women rag-picker collectives and other underprivileged communities.

SPREADING THE MESSAGE

Tata Motors requested the team's help in creating communication material to spread awareness of how to combat Covid-19 among the vulnerable urban slum communities of Mumbai, including Dharavi. The team, along with Tata Motors and Tata AIG, created 16 posters using popular dialogues from Bollywood films to promote messages such as washing hands and social distancing. About 40,000 posters were printed in Marathi, Hindi and Hinglish and put up in MCGM Urban health posts, MCGM urban health centres and slums.

FOOD FOR ALL

Tata Trusts' Annapurna Central Kitchen in Nashik sought the team's help for making 2800 dry ration kits out of 53 metric tonnes of food material for underprivileged families in Covid-19 hotspot areas in Malegaon, Maharashtra. Devang connected them with Bharatiya Agro Industries Foundation Development Research Foundation, which mobilised local village volunteers to make the kits in a week.

On being requested, Devang shared ideas with IHCL and Tata Capital colleagues on potential impactful responses to the pandemic. While many people said, "It can't be done," the team said, "We can and we will." Devang says, "While financial capital is required, what is more significant is human capital. Great things happen when ordinary people, sensitive to the plight of others, rise to challenges." **TR**

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4 lakh sachets of Tata Tea Quick Chai premix were donated to frontline workers



Abhishek Shinde, portfolio manager at the Life Sciences account team, TCS



In the driver's seat

Following in the Tata tradition of caring for the community, Abhishek Shinde is working in the forefront of the battle against Covid-19

BY CYNTHIA RODRIGUES

No matter how crazy the traffic on the road is, Abhishek Shinde's vehicle of choice always commands respect and attention, turning heads and earning right of way. Not that it matters to him. Sitting behind the wheel, all he's conscious of is a deep sense of commitment and responsibility.

That is because this portfolio manager at the Life Sciences account team of Tata Consultancy Services (TCS) is also doubling up as an Emergency Medical Services (EMS) ambulance driver, rushing Covid-19 patients to the hospital.

OUR COMMUNITY

It had only been two years since his family had moved to Montgomery in New Jersey, but Abhishek had always wanted to do something positive for the

city that was now his new home.

As the Covid-19 pandemic spread its tentacles, Abhishek realised that it was the right time for him to do his part. He had already seen Montgomery EMS (MEMS) showcasing their commitment during the July 4 fireworks and learned that MEMS was an all-volunteer member organisation that provided emergency basic life support ambulance services 24x7, through the year, at no charge. Later, he even visited the squad to understand their contribution in detail.

SHOWING UP

Abhishek signed up for volunteer duty. He says, "First I had to undergo a background and driving history check. Once this was done, I began my CPR (cardiopulmonary resuscitation) training and

certification.” Additional certifications included the Introduction to Incident Command System, Basic Incident Command System for Initial Response, National Incident Management System by Emergency Management Institute operated by the Federal Emergency Management Agency, and Coaching the Emergency Vehicle Operator Courses Certification. Other trainings included ambulance familiarisation, driving all available ambulances, cone trainings, hospital visits, an introduction to emergency procedure, and Five-Five-Five Driver Training on-duty sessions as a driver trainee.

Most volunteers complete the training programme in 3 to 8 months. Abhishek, however, finished his training in 25 days. He laughs, “I took on almost every evening slot from 7pm to 7am to finish my Five-Five-Five drives.” Generally, these drives depend on the number of 911 calls received, and the number of patients an ambulance driver is able to transport.

Over the next few days, his training was fast tracked in order to meet the standard operating procedures for certain certifications, including driving practices.

His work responsibilities took up most of his day, so Abhishek made time after work hours for this endeavour. He says, “I put in 150 hours in March, almost every day after work, and continued well into the next mornings.” The goal of this relentless exercise was to prepare for the physical rigour and the mental strain of being an ambulance driver.

The effort paid off on March 31, 2020, when Abhishek was designated an official ambulance driver who could work on the frontlines of the battle against Covid-19.

Over the course of the last two months and more, Abhishek has enthusiastically reported for volunteer duty, particularly on weekends when numbers sometimes fall. On weeknights, he takes the 7pm to 7am shifts, so as not to affect his work commitments at TCS.

STAY HOME, STAY SAFE

Abhishek’s wife was naturally nervous for his safety. He says, “I told her that if we needed help and had to call 911, we would want someone to show up at our doorstep. This was my attempt to support the community and be there for others.”

Abhishek says, “My manager is flexible and supports my volunteer efforts. My team supports me if I need to pick up shifts during office hours. We are running services with only 40 percent of our volunteer strength, so I have to work more shifts sometimes, without impacting our customers or deliverables.”

WORK OF PRIDE

Donning his uniform and getting into his ambulance is a moment of pride for Abhishek. MEMS supplies the volunteer ambulance drivers with gloves, N95 surgical masks and disinfectants. The ambulances are equipped with the latest technology required for basic lifesaving.

Abhishek says, “Once I get to work, I ensure that the fuel tank is full, that the tools, lights and sirens are functioning well, and that the oxygen cylinders are at acceptable levels. I coordinate with other crew members and await a page or radio call from the 911 dispatcher.”

On receiving a call, Abhishek assists the Emergency Medical Technician (EMT), who accompanies the driver on every call, in transporting the patient to the hospital. On completing each call, he is required to disinfect the ambulance, equipment and stretcher, in preparation for the next call. He adds, “While driving, I need to communicate with the hospitals, 911 dispatcher and cops or paramedic as required, based on the type of call.”

It’s a hard day’s work, but Abhishek’s commitment is strong. He has already set himself another goal: to train to be an EMT once things return to normalcy. **TR**



The Tata Power team that worked long hours to keep the lights on

Dispelling darkness after 9 Baje 9 Minute

Tata Power ensured uninterrupted electricity supply to consumers in Mumbai and other parts of India in the wake of the '9 baje 9 minute diya jalao' campaign call

BY NAMRATA NARASIMHAN

On April 5, 2020, practically the whole country switched off their lights for 9 minutes in response to the '9 baje 9 minute (9 minutes at 9pm) diya jalao' call by the Prime Minister, Mr Narendra Modi, to show our courage and determination in overcoming the novel coronavirus.

As the people of India decided to respond wholeheartedly to the campaign call, those working in the field of electricity generation and distribution faced the herculean task of ensuring that power supply was not disrupted by the sudden, huge drop in demand.

Tata Power's Power System Control Centre (PSCC) team played a key role in getting uninterrupted power supply to Mumbai and other parts of India. According to Bhaskaran Thatra, head, PSCC, Tata Power, who has been with the company since 1982, "Electricity cannot be stored; it has to be generated as it is consumed, and the consumption pattern needs to be forecasted at

least a day in advance. So, you plan the amount of power you need to generate. It is a 24x7 job. Usually, 15-minute slots are used to forecast consumption; in case of demand variation, power can be drawn from a grid."

The PSCC team therefore needed to plan in advance for the 9 baje 9 minute campaign call. "We had sessions with the western regional load

LOCATION	EXPECTED DROP IN ELECTRICITY DEMAND	ACTUAL DROP IN ELECTRICITY DEMAND FOR
MUMBAI	250MW	500MW
MAHARASHTRA	1700MW	3000MW
INDIA	12000MW	31000MW

Tata Power, Mundra plant



dispatch centre on how to handle the situation. On the morning of April 5, we even conducted a mock session to ascertain what we will do if such a drop happens,” he said. “When everybody was switching off the lights, we expected a drop in demand, albeit for a short span, but electricity generation too had to be brought down accordingly or else the high frequency mismatch in the system could result in grid collapse,” Mr Thatra adds.

They decided to use only hydroelectricity during this period. “Hydro generators use water, and water input can be cut off fast so that power generation can be dropped and picked up fast as against thermal electricity,” he explains.

“To complicate matters, rumours and false news were doing the rounds, encouraging people to switch off not only the lights but all other appliances as well. This was worrying because if everything is switched off, then the entire grid has to be shut down,” he adds. The day before, Tata Power issued a press release dispelling this news. The official communication did ease the situation a bit.”

On April 5, there was a video call, connecting all the people in the power industry across the western states of India. Everyone in the power sector was ready. “The fall in power consumption started happening even before 9pm, as people started switching off lights in anticipation of the campaign call. Compared to the expected drop in demand, the actual drop was almost double (see table). However, we could sustain it because it was a well-coordinated effort; we were continuously

Carrying it off successfully

100 Tata Power employees, including PSCC team members, pulled out all the stops to ensure the 9 baje 9 minute campaign call went off seamlessly. Some employees of the PSCC team had to travel quite a distance to get to work in the lockdown. Expectedly, their family members were worried when they stepped out to work, but Tata Power had issued a detailed guidelines document to mitigate any issues caused by the crisis.

Buses were provided for employees and social distancing was maintained in the buses, which were sanitised before and after a trip. The temperature of employees was checked when they reached office. “Any employee who was feeling under the weather was encouraged to stay at home, as also those residing in containment zones,” says Mr Thatra.

On the return leg also, employees took additional precautions to prevent the spread of any potential infection. “Our employees were undeterred by challenges,” says Mr Thatra, adding, “As electricity is a basic requirement, they are proud of the fact that in these trying times they are able to help the country by working.”



monitoring the system and taking corrective actions even before 9pm,” says Mr Thatra. **TR**

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The Tata Projects team that established quarantine centres in KEM hospital, Mumbai

Building to Heal

A Tata Projects team worked overtime to complete three new quarantine and treatment facilities at KEM Hospital, Mumbai

BY CYNTHIA RODRIGUES

The art of construction is the art of getting over the obstacles that stand in your way. That is just what a team from Tata Projects has done in its endeavour to construct facilities for treating Covid-19 patients at KEM Hospital in Mumbai. Ravishankar Chandrasekaran, vice president & SBU head (Urban Built Form); SA Sunil, DGM – Construction; and Samir Abbas Amiri, manager – Planning, were responsible for seeing this project through. As the media broadcast images of the havoc that the coronavirus was wreaking in Wuhan, Tata Projects watched the situation closely. Seeing how China was working overtime to boost its medical infrastructure reminded the company of the woefully inadequate infrastructure available at home and the proactive role it could play in filling the need.

A SORE NEED

The effort began with the foresight of the senior

leadership. Vinayak Deshpande, MD, and Rahul Shah, COO – Urban Infrastructure, reached out to Ravishankar, asking him to put his team together for a quick conversion of unused areas to quarantine centres. The team, anticipating this need, had already embarked on technical feasibility and evaluation. Ravishankar says, “I visited six locations, including existing hospitals and open, unused spaces. I wasn’t sure how I would be able to mobilise my team in the midst of a complete lockdown. It was heartening to receive a positive response from them.”

Once the plans were approved, the team, comprising 90 workers during the peak time and 10 site engineers and managers, swung into action. The KEM hospital enhancement was the first to be approved.

CHANGE OF PLANS

Ravishankar says, “On the first day, just as we got ready to build a 115-bed group isolation facility at

KEM's orthopaedic centre, which was then under renovation, the dean requested us to prepare ward 4A and ward 4 on priority.”

The change of plans did not faze the team. Samir volunteered to stay on ground, interacting with doctors, designers and agencies. Sunil took

over as the project manager. Other colleagues pitched in from the safety of their homes to ensure that supplies and vendors were available with their resources.

Ravishankar says, “We tried to ensure that team members didn't stay on site on consecutive



Location	Facility	Total Beds
KEM Hospital, Mumbai	65 beds for serious patients, 115-bed isolation centre	180
HBT Trauma Center, Jogeshwari, Mumbai	70-bed isolation facility	70
Seven Hills Hospital, Marol, Mumbai	300-bed isolation facility	300
St George hospital, Mumbai	100-bed isolation facility	100
TCS premises, Noida	200-bed quarantine facility	200
ACTREC, Kharghar, Navi Mumbai	75-bed ICU cum isolation facility	75
Islampur, Maharashtra	45-bed isolation facility and 5-bed ICU	50
Buldhana, Maharashtra	6-bed ICU and 98-bed isolation facility	104
Gonda, Uttar Pradesh	10-bed ICU, 10-bed HDU and 104-bed isolation facility	124
Gautam Buddha Nagar, Uttar Pradesh	20-bed ICU, 10-bed HDU, 8-bed emergency and 130-bed isolation facility	168
Kasaragod, Kerala	80 quarantine rooms with 400 beds; 12 isolation rooms with 60 beds; 12 isolation rooms with 36 beds; 2 observation rooms with 10 beds; 1 resuscitation room with 5 beds. Additional 10 rooms for nurses and doctors to rest	551
Rudrapur Medical College, Uttarakhand	288-bed general ward, 36-bed ICU and 36-bed private ward	360
Sir CV Raman General Hospital, Bengaluru	20-bed isolation-cum-ICU facility	20
TOTAL BEDS		2302

days in order to reduce their exposure to the virus. These two wards were adjacent to the Covid ward. So we ensured that the workmen remained strictly confined to the work area.”

At all times, the team exercised the required caution, staying within designated areas and maintaining safe distance while wearing masks and following hygienic work practices. At the end of the workday, they had to bathe and wash their clothes using hot water.

FAITH OVER FEAR

The first phase of the lockdown was underway then, and there was an atmosphere of fear all around. Ravishankar says, “The Tata group’s commitment to fighting the Covid crisis had made a positive impact on my family. Even though my wife and kids were worried about my safety, they were also proud of me for contributing to this noble cause.”

Similar fears plagued Sunil. He says, “Initially, it was difficult to persuade my aging parents, but the work that the Tata group was doing convinced them. My wife and son too were very supportive.” Samir’s situation was the most bittersweet. The new father says, “I had to stay away from my seven-month-old baby for the project’s duration. I could hardly bear it.”

Overcoming fear, the team showed up at the site, tense and worried, but ready to do their duty. Ravishankar says, “The sense of purpose was visible.” The team took pains to boost the morale of the workers. Ravishankar says, “We asked the authorities for permission to let them stay on the premises. The doctors and medical staff were already getting food packets from the Taj. We were able to obtain some food from this quota for the workers. The fact that everyone was eating the same food motivated the workers to work harder.” The team also impressed upon them that in being a part of this project they were performing a great service to humanity.

“Personally,” says Ravishankar, “I was inspired by the doctors and medical staff who were in direct contact with patients. We were safer compared to them.”

READY TO FIGHT COVID-19

Thanks to the high motivation and strong work ethic displayed by the team, ward 4A and ward 4, with a capacity of 30 ICU beds and 35 ICU beds, respectively, took shape within two weeks. Both these wards were spread across an area of 5500sq ft each.

These wards were rigged up with beds, partitions and other hospital furniture, besides medical equipment, including ventilators and monitors. Oxygen lines were set up, electrical fittings put in place and toilets upgraded. The team also built in a new entry/exit with a ramp for patients. Ravishankar says, “Our goal was to provide a quick upgraded facility that would be available for treatment.”

Meanwhile, work at the KEM orthopaedic centre was in full swing. This three-storey isolation facility, an area of 18,000sq ft, which was supposed to house 115 beds, was completed in four weeks.

The success of the KEM project was followed by other projects. Currently, Tata Projects is busy delivering 2302 beds, in various stages of completion, towards the anti-Covid-19 battle across India.

Each of these construction projects involved civil, architectural and electromechanical work. The team also had the advantage of receiving inputs on medical planning and equipment from Tata Trusts. These inputs, coupled with Tata Projects’ own experience, helped the team in planning and executing the project well.

With each facility, the teams have the satisfaction of knowing that every brick and bed they have put in place will heal an ailing nation. **TR**

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The Tata Steel team distributing nutritious meals to the needy during the lockdown



Served with kindness

Tata Steel Foundation's #ThoughtforFood initiative served 20.80 lakh meals through the lockdown period

BY CYNTHIA RODRIGUES

English novelist Graham Greene once said, "A thought from you could be a prayer in the eyes of God." That's just what Tata Steel Foundation's (TSF) initiative, #ThoughtforFood, has proven to be for those stuck in lockdown with no idea where their next meal would come from.

REACHING OUT TO THE NEEDY

It was this thought that prompted members of

the Tata Steel Foundation, led by Sourav Roy, chief, CSR – Tata Steel, to consider the plight of the daily wage earners. Jiren Topno, head – Tribal Services, TSF, says, "These people do not have a permanent job, many living hand-to-mouth. The lockdown meant that they could neither work nor earn. In the absence of savings, their families would be starving. We decided then that we may not be able to prevent death by the novel coronavirus, but death due to hunger was

something we could prevent.”

Jiren, Sourav and Devdoot Mohanty, head – CSR Jharkhand, sat down to discuss how this intention could be translated to action. There were a number of logistical issues that needed to be managed. Should they distribute dry ration or cooked food? How would the distribution be done? Who would the beneficiaries be?

A plan was put in place under TSF’s 10-point #CombatCovid19 CSR programme. The initiative was launched on March 28, 2020, just 4 days after India went into lockdown.

WORKING TOGETHER

About 21 team members worked together to identify the needy populace. The exercise indicated the presence of a large group of informal wage earners. This group included street vendors, rag-pickers, construction workers, slag-pickers and beggars spread across 85 settlements. Once the distribution began, leprosy patients, transgender communities, stranded truckers and particularly vulnerable tribal groups were added to the list.

Together the team identified the areas inhabited by daily wage earners and the locations where large numbers of people could assemble, while maintaining social distancing, to pick up the food. They also made lists of the people who stood in need and collected their Aadhar numbers.

VOLUNTEERS REQUIRED

The task was huge, and there weren’t enough volunteers to carry it out. Tata Steel approached the Jamshedpur Notified Area Committee, an administrative body, which sent in volunteers from the notified area councils of Jamshedpur, and its peripheral areas of Jugsalai and Mango in Jharkhand. Additionally, they helped identify one point of contact, an opinion leader, from each community to maintain order.

Jiren says, “When you distribute, you have to

make sure that social distancing is followed, and law and order maintained. Only then would the effort be successful.”

The next step was preparing the food.

Once again, Tata Steel was able to call upon the goodwill it had generated by playing a positive role in the city. Jiren says, “We have a facility in Jamshedpur, which provides midday meals to school children.”

It was decided that the meal would be prepared in this kitchen. The district commissioner suggested that *khichdi*, a wholesome and filling one-pot food made using rice, lentils and spices, be prepared for distribution.

CATERING TO THE NEED

The numbers started small. At first, they prepared 1000 meals, then 2000, then 5000. Before long, the team had begun preparing 60,000 meals per day. Jiren says, “The district commissioner wanted us to pack the *khichdi* in small packets, but we decided against it. Packing 60,000 packets each day would have been a logistical nightmare. So we got volunteers to pack them in containers, which were then packed in large barrels.”

The barrels were loaded in vehicles and taken to the locations. The contact from the notified area council and the *bustee* (community) coordinator would receive the barrels, transfer the food to their own containers, and then distribute it to the people who had queued up for it.

Starting from Jamshedpur, the initiative was rolled out across Tata Steel’s operational areas, including West Bokaro, Jamadoba and Noamundi in Jharkhand, and Kalinganagar and Sukinda in Odisha. By May 11, 2020, they had served a total of 20.80 lakh meals through cooked food or by enabling grocery support to community kitchens. In doing so, the foundation and its partners had touched the lives of more than 70,000 vulnerable people. The act of sharing food went on for two



#ThoughtforFood served a large group of informal wage earners and other vulnerable communities and tribal groups

weeks. The numbers were reduced to 54,000 and then to 37,500 meals per day later, when the government started distributing dry ration items through the public distribution system (PDS). Jiren says, “Once we came to know that the PDS system was robust and that people had plenty of food grain, we decided to transfer our resources to some other location where the need was greater.”

At this point, the team also began the distribution of dry ration and basic hygiene kits consisting of soaps, sanitisers and masks, across the communities, in collaboration with the district administration. In all, they distributed 36,078 dry ration kits across Kolhan in West Singhbhum district of Jharkhand. Each kit was sufficient to see a family of 5 through 15 days.

Additionally, they provided ration under the Mukhyamantri Homeless Bhojan Yojana in collaboration with the district administration of West Singhbhum. They also distributed 1998 ration kits to Anganwadis, rural child care centres, across 16 blocks of West Singhbhum,


effectively touching 9000 lives.

POWER OF TEAMWORK

The highlight of this initiative was the fact that it galvanised so many to dip into their own resources for the good of the most vulnerable members of the community. The #ThoughtforFood initiative saw Tata Steel Foundation working in partnership with the district administration. They were also ably supported by the Annamrita Foundation, Jamshedpur Engineering and Machine Manufacturing Company Canteen and Dasaprakash who offered cooking infrastructure in Jamshedpur. Most importantly, the initiative was opened for crowd-funding; a total of 313 donors contributed ₹70.48 lakh. Many of these donors were individuals and organisations that were not part of Tata Steel.

Thanks to this support, Tata Steel Foundation was able to ensure that no one starved in Jamshedpur during the lockdown. **TR**

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Doctor on call

Dr Abhipsa Raut of TSRDS lets us peek into her life as the medical fraternity spearheads the battle against Covid-19

BY CYNTHIA RODRIGUES

Sometimes life puts you to the test early on in the game, even before you've had a chance to prepare. Something similar happened to Dr Abhipsa Raut. Having graduated in December 2019, she has been working as a medical officer with Tata Steel Rural Development Society (TSRDS) in Jamshedpur since late February 2020.

ANSWERING THE CALL

The reputed Tata Steel Medica Hospital in Kalinganagar is a collaboration between the company and the state government of Odisha. Seeing a spike in the novel coronavirus cases, the hospital set up its Covid wing and stocked it with equipment and medicines; but there weren't enough doctors to run it. The TSRDS therefore agreed to send three doctors while the district administration sent two.

Asked whether she would go to Kalinganagar for Covid duty, Dr Raut's answer was an emphatic "Yes". She says, "I was ready to go; my parents too encouraged me. People are suffering so much. This is not the time for us to think of ourselves."

In fact, Dr Raut had been eager to help when the nationwide lockdown was announced in March. She says, "I had been thinking that as doctors, we should go out on the field, but there was no opportunity then."

RIGHT TRAINING

Dr Tanmay Biswas, pharmacist Ajit Misra, nurse Pratima Kumari and Dr Raut drove to



Dr Abhipsa Raut, medical officer, Tata Steel Rural Development Society



Leaving home to prepare for the fight against Covid-19

Kalinganagar from Jamshedpur in Jharkhand. Two days later, they were joined by another TSRDS doctor, Dr Anmol Tigga, from Joda in Odisha.

From the outset, the team began working hard. Dr Raut says, “Dr Prashant Behera, anaesthetist, taught us how to treat the Covid-19 positive cases, based on severity and symptoms. He also taught us the right way to don and doff the hazmat suit, so as not to contract any infection.” The doctors were also trained to use the ICU and the ventilator, following protocols laid by the All India Institute of Medical Sciences, New Delhi.

The paramedics were trained to safely screen people with flu-like symptoms and to take the vitals of Covid-19 positive patients without risking exposure. They were also told to trace the travel history of the patient, and those they have come in contact with in the last 14 days.

SUITED FOR THE JOB

The suit was their protection against the

coronavirus, for it prevented droplets or aerosols that remain suspended in the air from coming into contact with the body. Its stringent efficiency, however, presented a huge challenge. Says Dr Raut, “It is very difficult for air to pass through it. Five minutes after wearing it, you start sweating very badly. Your glasses get fogged up, and it is hard to breathe properly.” Incidentally, there are three different types of suits for doctors, nurses and paramedics.

To add to the challenge, the doctors, nurses and paramedics must wear it for nearly 10 hours, during which they cannot eat, drink or visit the washroom. Meals must be eaten at least an hour before duty hours. Dr Raut says, “We have to reach the hospital at least 30 minutes before duty hours to take the handover and don the suit properly.”

Having donned the suit, doctors check on patients, fill in their case sheets, and check on the welfare of the nurses and other staff. At the close of the workday, Dr Raut says, “We doff our



suit and discard it along with our scrubs in a large dustbin filled with a disinfectant solution, shower, and then change into our clothes before leaving the hospital. Returning to our rooms, we shower again.”

The suit is doffed in the presence of a nurse who checks to ensure there is no blood stain or tear on the suit. If there is any blood or tear on the suit, then the doctors have to clean themselves up with greater care. The suit is discarded and is for one time use only; the scrubs are properly washed, disinfected and made available for reuse.

MIXED EMOTIONS

Dr Raut is overwhelmed by the scale and severity of impact of the virus. The hospital has admitted two pregnant women who have one older child each of seven and five years old. Their families have tested positive, and their village is infected too; so they cannot leave their children

with anyone. The women have been put in a separate room to receive the extra care they and their children need.

Dr Raut says, “I have tried to keep myself busy, doing what needs to be done, without allowing myself to stress. But when I saw the pregnant women infected, I broke down. There are so many medications that we cannot give them for fear of affecting the unborn babies. We have to think of other ways to provide succour. This breaks my heart.”

But the heart-breaking moments are balanced with heart-warming ones too. She says, “No one has died at our hospital, and we are happy. For a while, we were worried about an 85-year-old patient, but she recovered completely and was discharged.”

In a situation where everyone’s nerves are fraught, the doctors boost one another’s morale. They help each other and the paramedics to keep calm and composed, to better handle the mammoth challenge they are all facing.

EFFICIENT SYSTEM

Dr Raut is currently on standby duty, ready to pitch in if any doctor on active duty feels unwell. Doctors work in two groups in rotation. Each group works in three eight-hour shifts for 14 days, and then goes into quarantine for 14 days. This system ensures that the doctors aren’t overstrained.

During quarantine, says Dr Raut, “We stay in our rooms, stepping outside only to fill our water bottles. Meals are kept at the doorstep.”

The last few months have been very stressful for the medical fraternity. Dr Raut says, “I used to be a happy-go-lucky woman, but I have changed now. As doctors, we are all doing our duty and we will continue doing it while people need our support. The battle isn’t over yet.” **TR**



(L to R) Ravindra Pawar, senior cashier; Nithish Kumar R and Gowrisankar M – supervisor trainees, Titan



Keeping the novel coronavirus at bay

Three Titan employees sanitise their neighbourhoods to keep families safe in the wake of Covid-19

BY CYNTHIA RODRIGUES

Keeping one's surroundings clean is half the battle won when it comes to the battle against the novel coronavirus. It is with this view that three Titan Company employees took it upon themselves to sanitise their neighbourhoods. The trio — Ravindra Pawar from Borivali, Mumbai; and Nithish Kumar R and Gowrisankar M from Hosur, Tamil Nadu — took the initiative to do this important activity for the benefit of their communities.

DO IT YOURSELF

A few days into the lockdown, one of Ravindra's

friends managed to source a sanitising machine from one of his contacts. When the machine arrived, they learned that the operator was unavailable for the day. Ravindra says, "Rather than let the opportunity go waste, we decided to operate the sanitising machine ourselves. It was fairly easy, so my friends and I decided to put our time to good use."

About 850 families reside in their densely packed Borivali neighbourhood, which is separated by narrow lanes and by-lanes. Ravindra says, "We wore masks and gloves, and then took turns to do the spraying so that no one felt overstrained." The



The sanitising crew in Borivali, Mumbai

machine, with a 15-litre can capacity, had to be strapped to the back.

A few of Ravindra's friends walked ahead, requesting the families to shut their doors and windows and keep the children indoors at least for the next 30 minutes, while two others would follow to disinfect the area properly.

When they ran out of the fluid, they requested the residents to provide them with water in which they mixed the special chemical used for sanitising. Beginning at 11am, it was nearly 6pm by the time this selfless band of friends wound up, without even stopping for lunch. Ravindra says, "We would need to bathe if we went home for lunch, so we decided to complete the task at hand lest we became lethargic to take it up after lunch." The residents wholeheartedly welcomed the initiative.

FOR OUR PEOPLE

Nithish and Gowrisankar conducted similar sanitisation activities, out of their own will and using their own resources, in their hometowns in Tamil Nadu state.

Nithish, who hails from Arcot town, says, "I came to know that some people were doing it, so I too decided to do it in my neighbourhood. Three members of my family and I hired the equipment and fumigated the entire area ourselves." Donning masks and gloves and taking all safety precautions, Nithish and team completed the task in two days.



Carrying out sanitisation in their localities

Gowrisankar carried out the task in his community in Vellore district. Both Nithish and Gowrisankar have now moved permanently to Hosur.

It is the efforts of good samaritans like Ravindra, Nithish and Gowrisankar that have helped keep their community members safe, and the novel coronavirus out of their neighbourhoods. **TR**



(Left) Rakesh Mane, store manager, Star Market, Churchgate, Mumbai; and (right) Bharat Radhakrishnan, operations manager, StarQuik



Our Retail Heroes

The Covid-19 warriors who are taking care of your daily needs

BY NAMRATA NARASIMHAN

Rakesh Mane hasn't seen his newborn baby, his older child and his family since the lockdown began, but he makes sure South Mumbai's Star Market outlet in Churchgate, where he is the store manager, opens on time every morning despite the lockdown.

Rakesh has been staying in a hotel near the store since March. His employer, Star — Trent Hypermarket — has not only provided for his stay and other needs but also lauded his undying spirit and unfazed temperament in keeping the Star outlet running, especially as shoppers turned up in droves at grocery stores as soon as the nationwide lockdown was imposed.

“My family was a little worried initially, but they know that Star and Tata will take care of me,” he says, adding, “My wife, who is a nurse and is currently on maternity leave, is extremely supportive and understands that essentials like groceries need to be made available.”

Amar Valivarathy, store manager, Star Bazaar, Bengaluru, echoes the same sentiments. “Initially, I had my fears, and my family was also against me going to the store, but I explained the precautions we are taking; they do understand that we are in the essential commodities business.”

GETTING AHEAD

Both Rakesh and Amar admit that it wasn't easy at the start of the Covid-19 lockdown as people thronged the stores, worrying about the availability of essential commodities. “This led to shortage of a few items in our stores,” they say, adding, “We used to have long queues in the morning; by evening we would run out of fruits and vegetables. We ordered extra supplies to overcome the problem.”

“At Star Market, Churchgate, we started a token system to manage crowds and things began to settle down,” says Rakesh, who was most



Amar Valivarathy, store manager, Star Bazaar, Bengaluru

often working both shifts in a day to keep things functioning smoothly and, initially, did without his weekly offs too.

Shortage of staff was another problem during these times, with many employees staying far away from the store and being unable to commute to work. Working through and around a problem seems to be the ‘new normal’, including arranging for buses so that employees from some of the areas could commute and store managers directly taking delivery of supplies at the store because of personnel shortage. The senior leadership also stepped in on various occasions to ensure smooth functioning at the stores. Rakesh also spoke to various family members of employees, assuring them about the hygiene measures in place. When employees found it tough to find food options during the lockdown, Rakesh and Amar, along with the managers of various other stores, ensured the availability of food and beverages for employees.

It is heartening to note that the ‘One Tata’ spirit has been kept alive even in these trying times, says Amar, adding, “I didn’t expect to see employees from other Tata brands — Westside, Zudio and Croma under the larger Trent umbrella — pitch in during the lockdown. It was then that I realised why the Tata group stands apart.”

The transition from selling clothes and gadgets to groceries wasn’t easy, but they were willing to learn. “Leveraging their roles and backgrounds in their respective stores, some associates took on the responsibility of restocking the shelves, while personnel from Westside handled the cash registers as they were familiar with the software, having used a similar one in their stores.,” says Amar.

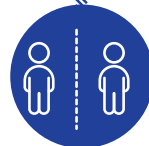
NEW PROTOCOLS

“In the post-Covid world, initially we had to urge customers to follow the new protocols of social distancing, wearing face masks, sanitising hands and getting a temperature check before entering the stores. By and by, they realised the merit in doing all of this,” says Rakesh. Today, they thank the staff profusely for being so meticulous and, occasionally, buy them a chocolate as a token of appreciation. “I’m happy to work and be of help to the society and my company in these troubled times,” he adds. **TR**

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Covid-19 protocols

- Social distancing norms on shop floor and outside the stores in customer queues
- Providing tokens to manage shoppers inside the store
- Sanitising hands and taking temperature checks on entering the store
- Wearing face masks is mandatory
- Wearing of gloves by staff while handling fresh food
- Disinfecting the stores on a regular basis
- Regular cleaning of all trolleys, baskets and other equipment



Welcome To



#AasaanGrocery

StarQuik – Delivering groceries at your doorstep

This date, March 14, 2020, will forever remain etched in my memory, for it was on this date that states began closing the malls due to the coronavirus threat; and we saw a huge surge in orders on our delivery app, StarQuik,” says Bharat Radhakrishnan, operations manager, StarQuik.

StarQuik – which currently offers delivery services in certain parts of Mumbai, Bengaluru and Pune – operates through a business model where pickers are responsible for picking the customer-requested items off the shelves from the local Star outlets, while the delivery executives do the last mile delivery on motorbikes, autorickshaws or vans.

“In the initial days of the lockdown, due to disparity in communication between what the government directives said and what the cops on the ground were told to do, we faced difficulties with not just deliveries but also our pickers could not reach the stores, resulting in delayed deliveries,” says Bharat, adding, “For instance, police personnel weren’t aware of autorickshaws being used for delivery, so they were sceptical about letting them ply. At the same time, online orders increased exponentially. We have never seen anything like it; all the slots would be full in a few minutes. It was almost

like people were staring at the app all the time waiting for the slot to open”. Given the ground realities, StarQuik had to reduce the number of deliveries in the early phase of the lockdown. As the situation on the ground improved with clarity on the delivery of essentials, things started looking up.

“Often, our intrepid delivery staff pick up colleagues from homes on their way to the stores so that more staff can reach the store,” says Bharat, adding, “They are willing to do it for the company, and say that more hands mean that orders can be delivered to more customers, and I am proud to say that our employees have stopped seeing this as a business and more as a service to humanity at this point.”

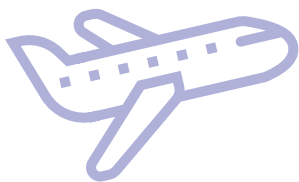
“It’s been a very surreal experience, seeing such crowded cities suddenly so empty,” says Bharat who has often gone out of his way to deliver orders personally, wherever possible.

“I am happy that I am in this place right now. Because I feel like I am making a direct difference. I did not anticipate this coming, and it feels good to be part of the fraternity of healthcare professionals, policemen and others who are working round the clock to fight the Covid-19 pandemic,” adds Bharat.





Vistara flight crew and ground staff all set for 'Mission Lifeline UDAN'



Flying Essentials

Vistara joins the frontline squad in the fight against Covid-19

BY NAMRATA NARASIMHAN

To support the Government of India in its initiative, 'Mission Lifeline UDAN', Vistara (a joint venture between Tata Sons and Singapore Airlines) has operated over 30 special cargo flights since mid-April to transport over 200 tonnes of relief material, essential commercial goods and medical supplies such as personal protective equipment (PPE), medicines, blood samples and more during the lockdown.

SPECIAL FLIGHTS

Vistara operated two types of special flights during the lockdown — cargo flights (with no cabin crew on the flight) and flights for medical personnel with no more than 6 passengers on board, with a cabin

crew lead and a cabin crew member in a hazmat suit. Refreshments were kept on each passenger's seat before the flight took off to minimise touchpoints of human contact on board.

"Interestingly, the travel restrictions have led to immediate air traffic clearance to take off and land as opposed to pre-Covid days, where we would be told how many flights there were ahead of us," says captain Amar Bhatia, who is a commander on Boeing 787-9.

"Planning for the flight was different. The checklist included a sanitiser, mask, extra pair of gloves, some healthy snacks from home, as well as opting to drive to the airport in your own car," he says.



“The airport was eerily deserted when I reached that day, only a few police personnel and airport security staff. After entering the cockpit, we first sanitised all the frequently touched areas before starting our routine work to prepare for the flight,” says captain Bhatia.

Pankaj Sharma, cabin crew incharge, Vistara, “Proximity to the airport, and the fact that the crew were staying in an area with fewer or no Covid cases were factors considered in planning the roster. Vistara also checked with the individual cabin crew members to ensure that they were willing to fly and had no hesitations or anxiety on that front.”

CHALLENGES

In the aircraft, passengers were requested to confine themselves to the zone they were seated in and to their respective seats. The crew, bound to their respective zones, had received training on minimising the chances of contracting or spreading the infection.

However, the biggest challenge for the crew was wearing the hazmat suit for 9 hours at a stretch. Mr Sharma says, “This suit is made up of non-woven fabric which is laminated and sealed to offer complete protection, and we had to wear a face shield, mask and gloves. It is a form-fitting suit, and the body cannot breathe with the heat trapped within. If you remove the suit even once, the purpose of wearing it is defeated,

so you have to wear it for the entire day. I did not wear one personally, but one of my colleagues on each flight did, and I kept checking on them to make sure they were comfortable and taking care of themselves. In keeping with the airline’s standards, the crew had to wear the hazmat suit over the uniform.”

STAY SAFE

Their families were naturally anxious about them. Captain Bhatia could explain to his family that he needed to fly the essentials in this hour of crisis; but for Mr Sharma, it was a challenge explaining to his 8-year-old son why he had to wear a uniform and go to work. “I had to reassure him that I’d be back that day, and my son asked me to ‘stay safe,’” says Mr Sharma.

Staying safe took on a new meaning, and as captain Bhatia says, “We are dealing with something that we cannot see, and we don’t know much about it. But that doesn’t dampen our morale. I feel fortunate that my crew and I got the opportunity to transport essentials in these troubled times.” Mr Sharma adds, “The crew was glad to be back in the aircraft. However, when they wore the hazmat suit it was challenging, but if this is what was required for the sake of public service, they would happily wear it again. In fact, if I get a chance to be part of such operations again, it will be an honour.” **TR**



Photographs: Tata Central Archives



Putting the people of India first every time

The Tatas have always lived up to the Founder's commitment of offering a helping hand in troubled times

BY ESTHER CABRAL

From the outset, our Founder, Jamsetji Nusserwanji Tata, envisioned a business that would work for the betterment of his country and his countrymen. It is this abiding ethos that Tata Sons, Tata Trusts and all Tata companies exemplify — working harmoniously to put India first, even today, when the world grapples with the Covid-19 pandemic.

Jamsetji Tata, who saw the bubonic plague epidemic of 1896 wreak havoc in Mumbai (then Bombay), was resolute and courageous in applying his leadership qualities to mitigate the epidemic's devastating impact.

INSPIRING LEADER

In early 1896, workers began discovering dead rats in the grain godowns near Mandvi docks, off the Gateway of India in Mumbai. Day by day their numbers kept increasing. The situation took a worrisome turn when workers ferrying produce to and from godowns began dying; these fatalities were closely followed by the deaths of grain merchants who handled the produce. By October that year, it was clear that an epidemic of bubonic plague had struck Mumbai.

By February, the mortality figures had reached 1,900 per week, with two out of every 10



infected persons dying of the disease. By 1899, the weekly mortality rate had exceeded 2,800. The plague devastated the city; many thousands fled and work in the markets, docks and mills came to a standstill. In 1898, the death toll exceeded 18,000 with a mortality rate of 91 percent.

In these turbulent times, Jamsetji focused his energies on curbing the epidemic's spread. Towards this, he recognised the efforts of a young Russian doctor Professor Haffkine who, at the government's behest, had embarked upon developing a vaccine. In January 1897, Haffkine — working in a makeshift laboratory in a corridor of Mumbai's Grant Medical College — came out with a vaccine that was fit for human trial, despite many mistrusting the professor's efforts. Jamsetji became one of the professor's ardent supporters, getting himself inoculated more than once.

He also set an example by getting his family, his servants and his friends inoculated. To dispel the fears of superstitious members, Jamsetji even enrolled as 'Justices of the Peace', accompanying the squads of soldiers, police and medical teams that went out to fight the epidemic and allay the

public's fears.

After four terrible years, the severe measures taken to fight the plague slowly began to take effect, although it took two decades to completely wipe out the pandemic.

Interestingly, some sources aver that one of the reasons Jamsetji Tata decided to build the iconic Taj Mahal Palace, which opened in 1903, was to resurrect the city's image.

TWO TATA COMPANIES SHOW THE WAY

In 1974, smallpox ravaged India, especially in the states of Bihar, Orissa and West Bengal. Tens of thousands of people were infected by this contagious disease, leaving many blinded, crippled or disfigured for life. Although the English physician Edward Jenner had discovered the smallpox vaccine in 1796, it was introduced to India only a century later.

To combat the rather alarming incidence of smallpox in Jamshedpur (then a part of Bihar) and its surrounding areas, a central organisation was formed under the advice of the World Health Organization (WHO) experts. Two Tata companies



Leading by example

Ten days before Sir Dorabji Tata's marriage, his to be father-in-law, Dr Hormusji Bhabha, who was the grandfather of the great nuclear physicist Dr Homi J Bhabha, visited Jamsetji Tata at his residence in Mumbai, only to find a doctor busy inoculating the staff of Esplanade House. Jamsetji insisted that Dr Hormusji also get inoculated to set an example to others.

— TELCO (now Tata Motors) and TISCO (now Tata Steel) — played a prominent role in the containment campaign.

TELCO's main aim was to comb Jamshedpur and its vicinity for smallpox cases in order to carry out the vaccination programme effectively. Two teams were formed: one targeting suburban areas and the other TELCO town; the teams searched every household in the area. A publicity van preceded the team's arrival in order to explain to the locals, in their native language, the visit's purpose. A jet gun, providing 500-700 shots in an hour, was used as a fast way to deliver the vaccination. Against all odds, the team of volunteers worked round the clock. According to Dr Erin Broacha who helmed the operations, "At

the end of this period, no one cried because they had no shoes, for they saw so many who had no feet."

To contain the outbreak in TISCO's areas of Jamshedpur, a WHO team headed by Dr Larry Brilliant, a WHO medical officer, took the company's help to contain the epidemic. Within 72 hours, 50 doctors, 200 paramedical staff, 600-800 searchers-cum-vaccinators, 50 vehicles and other facilities were mobilised; approximately 400 outbreaks in a 40km

radius were detected and containment measures initiated in a fortnight. This was in April, and by June 15, 1974, the area was declared under control. Subsequently, the Tatas provided a sum of ₹43 lakh to eradicate smallpox in the Chhotanagpur division.

However, the operation was fraught with tense moments. Once a medical team did not report to the base location for two days. TISCO then sent its plane for an aerial surveillance to search for them in the nearby jungles.

RESEARCH IN TROPICAL DISEASES

The Indian Institute of Science (IISc) in Bengaluru, the brainchild of Jamsetji Tata, was opened in 1911, under the leadership of his son Sir Dorabji Tata. In 1912, Sir Dorabji proposed to the institute's director to start a school for tropical diseases, along with a similar request to the Royal Society of London. However, both the organisations failed to carry the proposal to fruition then.

Finally in 1997, following the resurgence of malaria and tuberculosis, Sir Dorabji Tata Trust sanctioned a grant of ₹5 crore to the IISc for setting up the Sir Dorabji Tata Centre for Tropical and Emerging Tropical Diseases. **TR**

With inputs from Tata Central Archives

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The Humanitarian Spacefarer Ron Garan



Ron Garan, who started his career as an F-16 fighter pilot, has had the privilege of being in outer space twice. He has also spent three weeks in Aquarius underwater laboratory, the world's only undersea research station – NEEMO (NASA Extreme Environment Mission Operations) – and flown combat missions in operation Desert Storm. In this Back Chat, Ron – a humanitarian and social entrepreneur – shares his views on how to deal with isolation, stress, anxiety and fear in the new normal Covid-19 world and come out better on the other side.

Read on...

BY ANITA GUPTA

Excerpted from an interview with Ben Trounson, chief communications officer, Global Markets, Tata Consultancy Services

EXISTENTIAL THREAT

I would say that it is for the first time in human history that every single person on this planet is faced with an existential threat by the Covid-19 pandemic. Each one of us is affected by it one way or another; however, what that means is we truly are all in this together because what happens to one of us can happen to all of us.

Since humankind is paying a price anyway, we might as well benefit from it. If we find

ourselves with some extra free time because we don't have a 4-hour daily commute, let's apply it for self-improvement, for some real time with family. We can do it by looking after each other and by ensuring we are doing everything that we need to do for everybody around us. In ways like these we can get through this stronger, more unified than ever. Moreover, we'll be better equipped to deal with any crisis, for this will not be the last thing that we have to face together as a human family.

FEAR, STRESS AND ANXIETY

Having been an F-16 fighter pilot and flown a few combat missions in operation Desert Storm, I feel the most significant qualities in a fighter pilot are the ability to push through fear and work as a team. Being a fighter pilot is a dangerous profession, with death staring you in the face every moment; similarly, right now, the tentacles of an invisible enemy grip the entire human race.

While fear is a natural evolutionary response to danger, we should not allow it to become the focus of our natural energy, for it will then affect our immune system. What we do need is to ‘respect’ danger and take precautions to avert catastrophic outcomes; nonetheless, push through and be able to function.

Basically, we need to tell ourselves, ‘I know what I need to do; I need to do it. I will allow fear and stress and anxiety to come into play to the extent that it serves me, not to the extent that I serve it.’ In any crisis, what is really important is to know that none of us individually are as capable as a group of us together. Setting aside differences, we can augment each other: my strengths make up for your weaknesses, and your strengths make up for my weaknesses.

EXPEDITIONARY BEHAVIOUR

In the space environment, we often use this expression called expeditionary behaviour, which is all about being a ‘functioning’ team member in stressful and hostile environments. The Earth has become hostile right now for humans; that is why we are stuck in our homes. The first rule in expeditionary behaviour is we don’t do the team any good if we are having problems. Therefore, we need to be very self-aware and practice good self-care, to be an effective



Unforgettable Space Experiences

Every moment in space is memorable. From this bubble

of glass called Cupola, a windowed observatory and workspace for the ISS crew, I could view the Earth and universe on the other side. Our planet appears indescribably radiant and beautiful from outer space.

I did four spacewalks. The first time I went out into the vacuum of space, it felt surreal. That realisation is a big memory. I have absolutely no context to compare it with, but after four walks and being in space for almost 6 months, going out was like going into one’s backyard, and our backyard was the Earth – there’s Patagonia and that’s the Himalayan plateau.

Within 24 hours, the sun rises and sets 16 times in space, which means there is a sunrise and setting every 45 minutes; the spectacle is mind boggling!

IN SHORT

team member. With such a mental framework, we become perceptive about the stresses and challenges our teammates are under. Stress and anxiety affect us in different ways. Some people may lose sleep; others could show changes in behaviour. For instance, telltale signs could be a normally soft-spoken person demonstrating outbursts, or a talkative person becoming quiet and self-reflective.

Basically, it is about empathy and observation. ‘Hey! I noticed that you seem really tired. Is everything okay? Is there anything I can do?’ And that should come from within — a feeling of genuinely wanting to help. Being



Photo credit: Getty Images

altruistic helps to boost one's immune system and makes one healthier.

NEED FOR A BIG PICTURE PERSPECTIVE

The International Space Station (ISS) represents an amazing human accomplishment; living on it was a transformative experience for me. If 15 nations — some weren't always the best of friends, some with diametrically opposite political ideologies — could set aside differences and collaborate on this technologically complex undertaking, then we can definitely come together to promote peace and combat hunger, thirst, poverty and environmental harm on the most important spaceship — Earth.

This is also the essence of my book *Orbital Perspective* in which I've used the spaceship as a model to narrate stories about people who exhibit what I call the orbital perspective or a big picture

perspective of our planet. *Floating Darkness*, the sequel, takes the reader on a journey of inner discovery. It is a call to action to help steer the path towards a future we would all want to be a part of. This introspective book, in fact, helps us to understand how our biosphere is a highly interdependent living system, embracing the idea of not just being global but a varied planetary civilization.

As painful as this crisis is, it is also an opportunity and a wake-up call — this is not the first wake-up call though; we got many on which we have pressed the snooze button — to come together like never before as a unified species. Since no one on the planet has a monopoly on ideas and creativity, solutions can come from even the most unheard of places to fight the micro-enemy, the novel coronavirus. **TR**

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