

## ***India's Opportunities in the Decade of 2020s\****

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Good afternoon everyone and thank you very much for that kind introduction.

It is my honour to speak to you today and my honour to pay tribute to Lalit Doshi, a brilliant public servant whose integrity, dedication and good humour are examples to us all. By all accounts he was a doer: someone who got things done, quickly and without fuss. His mind was sharp, and his motives pure.

As a newspaper article marking his death put it: "Since Lalit was both efficient and honest, he had no enemies." Glory could have come the way of a man like Lalit, yet he did not seek it. Instead he sought only the quiet satisfaction of improving the lives and prospects of his fellow citizens.

That is an inspiring example for us all. Today, more than ever, our nation needs people like Lalit Doshi.

### **THE LESSONS OF A CENTURY AGO**

I want you now to imagine India as it enters a new decade.

A devastating pandemic has brought death and economic hardship.

New political and technological forces are transforming the nation.

It sounds familiar but I am talking about 1920. The theme of today's lecture is "India's opportunities in the 2020s". But in order to fast forward a decade, I first want to rewind a century.

A century ago the population of Mumbai was around 1 million - just over a twentieth of what it is now. Tata Group, which I am proud to lead, had big plans but it was much smaller than it is today. Between 1918-20, we launched Tata Oil Mills, Tata Power and the company that would become New India Assurance Co.

In 1920, India sent its first team to the Olympics, largely a result of a campaign by Dorab Tata, the eldest son of Jamsetji, founder of our Group. But in 1918, as the First World War was drawing to a close, India's ports were teeming with ships carrying soldiers back and forth from Europe. Lurking on one of them was a pathogen many times more deadly than the war itself.

The Spanish flu arrived, in the words of one Bombay health inspector, "like a thief in the night." On 10 June, 1918, seven Bombay police guards, one of whom worked at the docks, were hospitalised. These were the first cases of a virus that would spread to every corner of our nation.

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From the commercial districts of Mumbai where I stand today, the virus travelled to my grandparents' village in the southernmost part of the country. There was no state, no city, the virus did not visit. In the trenches and battlefields of the Great War, over 60,000 Indians died. Spanish flu claimed 16 million. In just two years, 6% of our population perished.

A second wave of the Spanish flu hit in September 1918. It coincided with a terrible drought. Grain shortages were worsened by widespread illness among the agricultural workforce. Food prices soared and starving hordes fled to the cities. The colonial government, which had long underinvested in public health, had to ask for help.

Many of the groups who responded had close links to the independence movement. Local community organisations provided medicine, blankets and vital supplies. The response of these community groups set India on a path toward self-determination. As a government report on the flu from the time said: "Never before, perhaps, in the history of India, have educated and more fortunately placed members of the community come forward in such numbers to help their poorer brethren in a time of distress."

We find ourselves now in a time of great distress. As I speak, there are 17 million Covid-19 cases across the world. Nearly 700,000 have died. In July, more than 7 million new cases were added as the global epicentre of the disease continued its migration from east to west. The spread of Covid-19 is unmatched by any respiratory virus in living memory.

An economic crisis is coming in its wake. For the first time since the Great Depression, both advanced and developing economies are in recession together. Here in India, we enforced the biggest lockdown in history. Quiet descended on this vast, bustling nation of ours. Everything stopped. This happened just as we were beginning to recover from a protracted slowdown from 2018. Now experts predict our GDP will contract by at least 2.5% next year. Some say it could be even worse.

The challenges ahead are daunting. I do not doubt that. But a century ago, a political revolution emerged from the ashes of a devastating pandemic. The lesson from a century ago is this: the worst crisis contains within it an opportunity for profound change. And today, if we're brave, we too can imagine a new way of living.

Covid-19 could be a catalyst. Towards the adoption of digital technology which will open health and education to millions. Towards a more resilient economy. And towards a more sustainable future. These are the three things we need to do to repair and fortify the fabric of the country. This is the springboard into a new India. This is the promise hidden in this crisis.

When we look back to the Asian miracle economies of the past few decades, we are pre-occupied with their strategy of manufacturing-led export growth. What if the miracle was not this strategy, but rather the tremendous investments made in health and education by these economies? The outcome was the ability to capitalize on the world's demand for manufactured goods.

Today, the new India I speak of can be the global leader in R&D, science and technology, AI, advanced manufacturing and next generation products and services. We have the right human capital. We have the scale. It's time to make the right investments. We need to start with our fundamentals.

## **DIGITAL ADOPTION**

I begin with the adoption of digital technology because this is the greatest opportunity of all.

In a few short months, Covid-19 may provide as much digital acceleration as the many billions of dollars of venture capital invested over the last decade. Many trends, already underway, have sped up. The decline of bricks and mortar retail. The rise of e-commerce. The decline of offices. The rise of remote working.

All will count for little unless digitisation occurs where we need it most: in our public services. I have said it many times before: India's two great problems are jobs and access. Our education and health systems, though often high in quality, do not extend far enough to meet the demands of our huge population.

This is not to say we haven't made progress. Three decades ago, India had only 794 institutions offering technical qualifications. Today we have over 10,000. Three decades ago, only 40% of our population could read or write. Now it is closer to 75%. We have come a long way. But we have so much further to go.

We see this in the rural schools where education attainment lags far behind urban centres. We see it in old fashioned syllabuses that favour rote learning over conceptual understanding. We see it in teaching standards and equipment which vary so much from region to region. Only half of rural children enrolled in fifth grade can read a second-grade text. Less than a third of third grade children can do basic arithmetic.

To solve these problems, we need a revolution in technological education. Months of lockdown in which children were banished from classrooms have exposed the shortcomings of our analogue system. We need something new. That is clear.

But the system we create cannot be a virtual replica of the existing one, which was designed for the industrial age. A nineteenth-century apparatus will not create twenty-first-century problem-solvers, even if we shift it online. We need to design an education system based on five principles: digital skills; twenty-first century skills, new-age apprenticeships, lifelong learning and entrepreneurial thinking. Let me touch upon each of these briefly.

- 1) Much as reading, writing and counting are taught as basic skills that underpin all other learning, today's students must be trained in how to navigate the Internet and Fourth Industrial Revolution fields.
- 2) Building twenty-first-century skills—creativity, collaboration, problem-solving—is easier said than done. The concepts can be introduced in early years and blended into other curricula, all the way up to adolescence, with increasingly deliberate assessment of skill.
- 3) Apprenticeships, broadly defined as structured learning-by-doing opportunities, typically under the guidance of a professional, will boost employability—especially if it is combined with a certification scheme used as a signalling mechanism for employers.

- 4) India must provide the scaffolding for skills a future workforce will require, with opportunities for learning, unlearning and relearning at every age and every stage of professional life.
- 5) Finally, India will have to nurture an entrepreneurial mindset—the willingness to take on risks, and the skills to assess these risks and opportunities wisely. Failure is still a stigma.

Digital tools can, of course, provide an array of new and engaging content. But we have learned an important lesson from the rapid and complete transition of education online. The lesson is this: the real power is in providing insights into how individual students learn, how they are faring relative to their peers, and how we guide them to do better.

New technology will not only educate more people, but will also lower education costs and make it more affordable. It will also help teachers take pride in their work. There is no more effective driver of social mobility than an inspiring teacher who loves what they do. This is what all our children deserve, no matter where they happen to be born.

The smart application of technology is key to transforming the other access problem exposed by the pandemic: health.

To grant everyone access to basic care, India needs 600,000 more doctors and 2.5 million nurses. They also need to be more evenly distributed. More than 65% of doctors operate in urban areas - where only a third of Indians live.

The first reaction to these figures is that we need more---more doctors, more nurses, more health infrastructure. In truth, we can bridge most of our needs with what we have already. The doctors we have spend a quarter to half of their time on activities that anyone else could accomplish: filling prescriptions, logging appointments, administrative paperwork.

This is also a problem solved by technology. With the smart application of technology scarce resources can be extended. Many pre-diagnosis activities currently undertaken by doctors could be turned into a checklist programmed onto a kiosk, a handheld tablet, or even a smartphone. These could be used by someone without a clinical background, but who has received three to four months' training on the technology.

The freed-up doctor time could be used to conduct virtual consultations with patients in underserved rural areas. The net effect would be to create jobs and increase the supply of medical help. As many as one million new jobs for low-skilled workers could be created and a million more would be suddenly more productive.

We have applied this approach in our programmes across the country. We have seen the difference it can make to the lives of ordinary Indians. We didn't just stop at introducing a health stack, we designed backwards from improving care coordination. This means creating a world-class technological layer, alongside technologically augmented fieldworkers on the ground as well as connected hospitals and sub-centres.

In our experiment we could see:

- A 55% increase in patients visiting primary care centres
- A more than four-fold increase in the number of patients with chronic illnesses included under care management

- A 50% increase in doctor availability for patients visiting primary care
- A 15% reduction in visits to tertiary care facilities, diverted to primary care or managed via call

In other words, increased coverage, better health outcomes and more jobs for less-qualified workers.

The benefits of such measures would extend well beyond health: across agriculture, financial services, retail and the justice system as well, digital solutions can place India at the vanguard of a fourth industrial revolution, while positively impacting 30 million jobs. To do this requires rethinking and redesigning our whole economy, suited to India's specific needs - not just building digital imitations of what we have now, or what we see in other parts of the world.

## **A RESILIENT ECONOMY**

This is what we need to do to point India towards the future.

Then we have to ensure that our economy is resilient too.

There are big questions of infrastructure. There are big questions of regulation and the bureaucratic overload of the private sector. There are big questions of investment, to ensure it is flowing into the right sectors.

Today, I want to concentrate on just two aspects of this enormous topic: women and the SME sector. It is not exaggeration to say that the future of India lies in the hands of its women. Or, perhaps more precisely, how India cares for its women.

Nearly 120 million Indian women—more than double the entire population of South Korea—have at least a secondary education, but do not participate in the workforce today. 26% of women with graduate medical degrees do not work. Overall, only 23% of all who could work are currently employed.

The pandemic has, of course, made the situation worse. As primary caregivers, many women who were working were forced to stop, in order to look after children and sick relatives. Around the world, the pandemic has exposed the challenges faced by women attempting to balance family commitments with careers.

In India the response should start with easing the burden of domestic care. A thriving economy of care centres would help Indian women pursue careers. It would also create millions of jobs. India's care industry has the potential to absorb 10 million women into the workforce and create another four million jobs, a vast majority also for women. Progressive legislation like the Maternity Bill can be simplified and improved. Above all, we need to break the stigma and stereotypes that discourage young Indian girls from thinking certain jobs - certain lives - are not for them.

If our efforts are successful - if we realise a vision of female electricians, architects, engineers; of commercial districts bustling with highly skilled women - our prospects in the 2020s will be transformed. Bringing into employment half the 120 million women with secondary education who are not working could add \$480 billion to GDP. Educated women will solve shortages of skilled labour. Families facing economic uncertainty and disruption will have an additional source of income.

Multiple economic problems solved at once.

The second aspect of a resilient economy that I would like to stress is the importance of a culture of entrepreneurialism among SMEs. A crisis of the magnitude of coronavirus cannot be overcome by one industry, one sector, or one government, working in isolation.

Just as important as large businesses like Tata, if not more so, are small and medium sized businesses. These businesses are the lifeblood of our community. They are the restaurants, health clinics and salons that fill our neighbourhoods.

In the US, the strength of the economy is built on its smaller and medium sized enterprises. After the financial crash of 2008 small-scale entrepreneurs helped America get back on its feet, creating 60% of net new jobs between 2008-2013. Today SMEs employ 40% of the country's workforce. Across the developing world, SMEs account for over a third of private sector employment.

In India it's a different story. Only a little more than 10 percent of employees are in similar enterprises in India. We have millions of micro-enterprises, but these are neither job-creating, nor resilient. Those who work for them do so informally, with little protections or security. For operations like these, the pandemic was a grave challenge. Many will not survive as they operate outside formal procedures of protection.

In their place, we need a new culture of entrepreneurialism. Unlocking small business growth would boost the stability and resilience of our labour market. Bringing India in line with other developing countries could shift 45 million workers into more productive employment.

We need to give SMEs access to the services enjoyed in India's entrepreneurial hubs. To do this, we should create a national digital platform that aggregates and localizes business services. We must ensure all our SMEs - in every corner of our country - have access to the financing and technological knowledge required to succeed. It is something we have needed to do for many years.

Now, in this moment of upheaval, we have the chance to act, and stabilize our economy for decades to come.

## **TOWARDS A SUSTAINABLE FUTURE**

This brings me to the third and final category: the need for India to embark on a sustainable future.

Recently I read an amazing story about a railway station in Bihar. Every morning and evening, for around two hours, over a thousand students assemble on the platform of Sasaram station. The students gather there not to travel but to study. Why?

The station is the one public space with uninterrupted electricity.

India has made tremendous progress in the last decade. Today, 100% of all villages in the country have some access to electricity. But too many of our citizens still lack access to a reliable, uninterrupted power source. To improve, we need to increase our output, but before we do, we have a choice: do we do it sustainably? Or do we look for a quick fix?

If India wants to be a leader in the world that comes next, we must be prepared to set an example, by placing sustainability at the core of everything we do. The moral imperative of this is clear, but there is an economic one, too.

The Covid-19 crisis should inspire us to get ahead-of-curve and invest in R&D in future growth sectors - and there are few sectors more promising than renewable energy. Within two decades, nearly 20 new energy sources could be powering the global economy. Fuel cells. Small, modular nuclear-fission reactors. Even nuclear fusion. Fossil fuels will be part of the mix, but dwindling oil reserves and environmental pressures will bring renewables to the fore.

Rising demand for electricity, particularly in buildings and road transport, will also drive growth. Today we have the chance to build companies that will lead the world in renewable energy - a sector which will be worth trillions by 2030.

Already we are seeing exciting innovation. One example is microgrids. A typical microgrid - with a capacity between 30 kilowatts and 1 megawatt, and a grid radius of 1-3 kilometers - can be up and running in as little as two months. It can power a small village, or an entire town, and serve a wide range of customers, including households, businesses, and public institutions such as health care clinics and schools. Solutions like these represent the future of affordable, reliable and clean electricity, not just in India but around the globe.

It is not only in energy that responsible solutions are needed. By 2030, the world will need 35% more food. By 2025 there will be a 60% water deficiency. More than twenty Indian cities have been predicted to run out of groundwater by this year alone. We can deploy big data analytics to understand usage and effective allocation better. This can help formulate a demand management plan after identifying points and reasons of loss. Mandating water audits and voluntary disclosures from industry could also be a step in the right direction.

Widespread scarcity means new sustainable practices are required across all sectors. We should see this as a challenge: the future global economy is waiting to be invented. India can be at the vanguard of that change.

## **Conclusion**

The last few months have shone a light on our economy and society. Not everything revealed has been good and perhaps the biggest blight on our society is how many people live such precarious lives.

Indians are forced to go to spectacular lengths for the most basic things. The rural traveller undertaking an epic journey from home to see a doctor while she worries about her work, her money, her family. The graduates who join millions to apply for a few dozen entry-level positions. When an endeavour is successful, the effort it takes is forgotten. The enormous odds, once they are overcome, gradually seem less daunting. But this success is also a sign of deficiency.

I believe there is a way to make things better. There is a way to solve our twin challenges of access and jobs. Using technology the right way, with targeted interventions, India can remove long-standing access barriers to vital services. By opening up a world opportunity for women and entrepreneurs, we can strengthen our economy and transform the lives of millions. And by embracing sustainable growth we can ensure our newfound success endures.

## *India's Opportunities in the Decade of 2020s*

The fact is that our two great challenges will not fix themselves. Jugaad, tweaks and tricks can only take us so far. We need to work harder to meet India's great needs.

At Tata Group, we have always seen it is our mission to address India's gravest needs. Our founder, Jamsetji, beat the Business Roundtable by 150 years when he said: "The community is not just another stakeholder in business, but is in fact the very purpose of its existence."

The past months have been some of the most challenging our country has faced. But history shows that, with the right spirit, progress can follow a setback. A century ago the response to a pandemic inspired a movement that became the change that people saw in the world. That is what we have in our sights now.

Progress of our own making. Progress of our own kind, not drawn in imitation of any other nation. Progress which is derived from our strengths and which rectifies our weaknesses. If it does, we can ensure something good comes of the pandemic. That is the lesson from the last century.

That is India's opportunity in the decade ahead.

Thank you so much for your attention today. It has been my pleasure to speak to you.