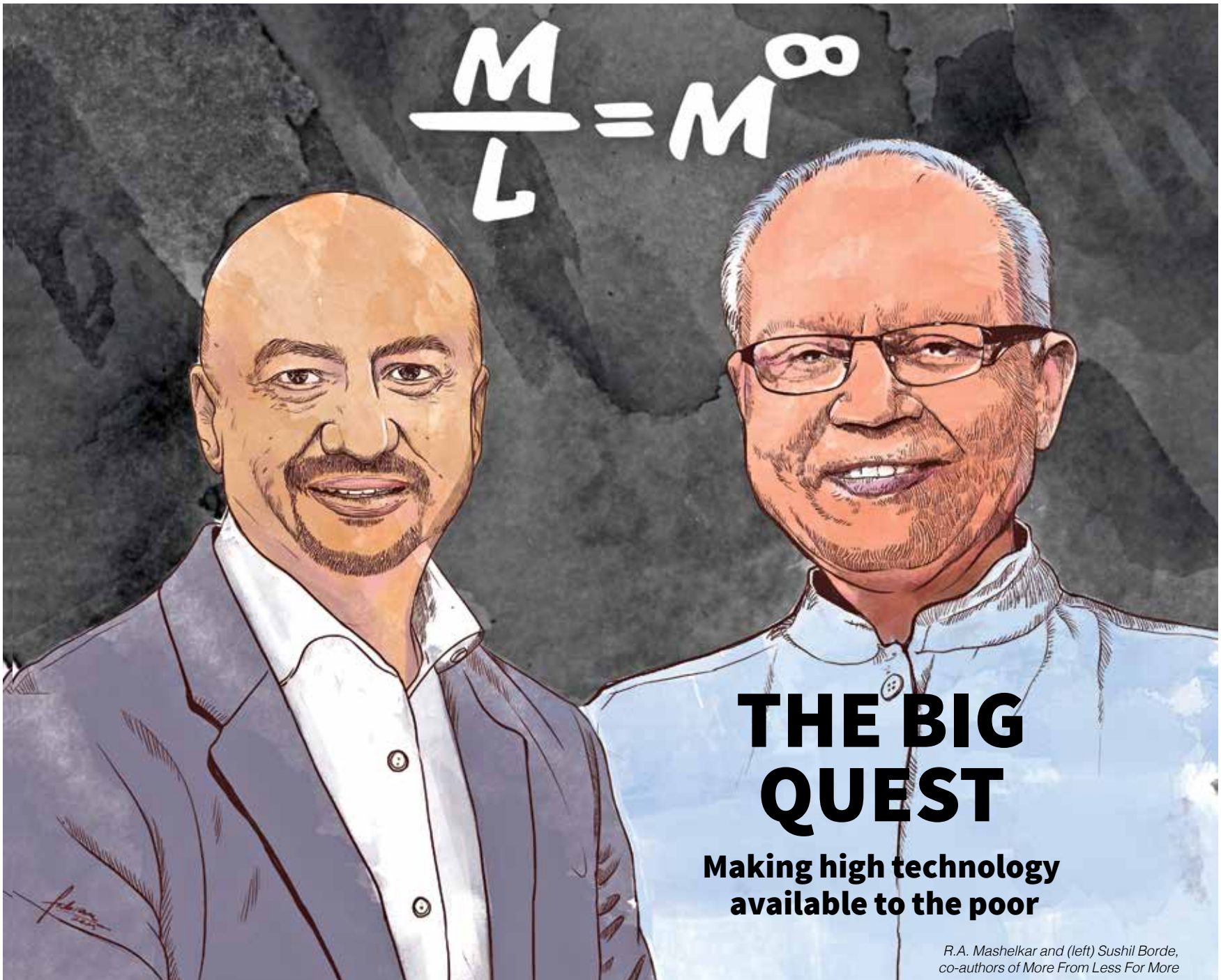


Civil Society



‘CODES FAIL LABOUR’

Page 9

THE STREET AS CANVAS

Page 14

MONEY FROM A LEMON

Page 17

INTERVIEW

‘PUBLIC VARSITIES ARE AT GRAVE RISK’

DEEPAK NAYYAR LAMENTS POLITICAL INTERFERENCE

Page 6

‘THE FUTURE IS MINE’

Page 24

FLAWED RABIES SHOTS

Page 28

GREAT ESCAPE TO KOCHI

Page 30

kirloskar
powergen

OFFERING THE Widest Range of Gensets 3 kW TO 10 MW

Cleaner · Reliable · Flexible



www.kirloskaroilengines.com
KIRLOSKAR OIL ENGINES LIMITED
A Kirloskar Group Company

880 633 4433
koel.sales@kirloskar.com

Marks 'Kirloskar' along with the suffix, or prefix, 'I' as shown and copyright 'limitless' are owned Kirloskar Proprietary Limited. Product improvement is a continuous process. Kindly contact Kirloskar Oil Engines Ltd. for latest information. Images are for illustration purposes only.

CONTENTS

Civil Society
READ US. WE READ YOU.

Viksit vision

VIKSIT Bharat is a laudable objective. India must aspire to be a developed country. All the better if a deadline can make things happen. But what is the path that is being taken? What is the vision? In this issue we have stories that are cause for disquiet. A robust education system, for instance, should be one of the load-bearing walls of Viksit Bharat. A rising economy draws on people with an education, skills and a capacity for critical thinking.

India, however, has a problem with learning standards in its schools and colleges which is not being adequately addressed. In our interview of the month, one of the country's leading academicians, Deepak Nayyar, laments the decline of public universities. He blames political interference and too much centralization — by governments, over time. But the present one hasn't been different. A new law which the government is passing seeks to give yet more power to the Centre. The intention is uniformity which, Nayyar correctly points out, is the enemy of quality.

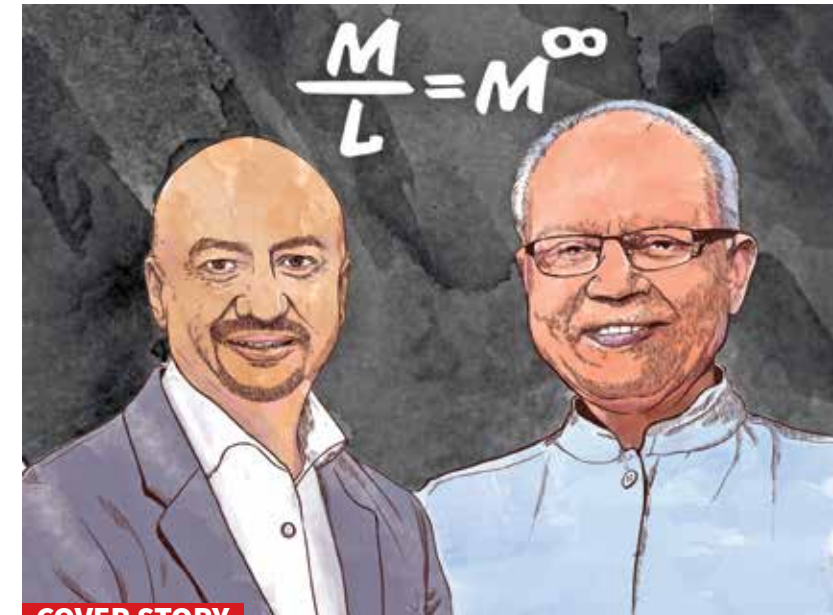
Labour sector reforms have similarly been a let-down. They were awaited by workers and employers alike because the old laws were serving no one's interests. Four Labour Codes have now been introduced to simplify hiring, firing and workplace standards. But they fail to address several realities, chief among them being that 80 percent of the Indian workforce is unorganized. We spoke to Rajiv Khandelwal of Aajeevika Bureau, a clear voice who engages with both industry and unorganized workers. An opportunity for more effective reform appears to have been missed.

There was insufficient consultation with regard to the Labour Codes. It was so also with MGNREGA that has been abruptly swept off the table despite serving as an effective social security measure. Aruna Roy and Nikhil Dey provide a critique.

Inclusion should be the hallmark of Viksit Bharat. Just how is brilliantly explained in relation to high technology by Dr R.A. Mashelkar and his co-author, Sushil Borde, in their book *More From Less For More*. It is for this reason that we chose to feature an extract from the book as our cover story. Whether it is technological innovations or policies the important thing is to have everyone in.

In our Living section we take you to Kochi for its many syncretic charms. And what is it like designing clothes for the disabled? We find out.

The Insights section brings you all our regular columnists with Sanjaya Baru on the dangers of authoritarian regimes, and Shyam Bhatia on the Indian force the Nazis raised.



COVER STORY

MORE FROM LESS FOR MORE

How should high technology be taken to the people who can't access it but need it the most? We bring you an extract from a bestselling book by R.A. Mashelkar and Sushil Borde.

20

COVER ILLUSTRATION: CIVIL SOCIETY/FABIAN GONSALVES

MGNREGA swept away.....	12-13
Ecologist rooted in realism	16
Forest rights in Kashmir	18
In a volatile world	25
Nazis raised Indian force	26
The fragile Sundarbans	27
Getting the fit right	29-32
Goa's art of serenity.....	32-33
Products.....	34

Contact Civil Society at:
response@civilsocietyonline.com
The magazine does not undertake to respond to unsolicited contributions sent to the editor for publication.

Publisher
Umesh Anand

Editor
Rita Anand

News Network
Shree Padre
Saibal Chatterjee
Jehangir Rashid
Kavita Charanji

Desk & Reporting
Aiema Tauheed

Layout & Design
Virender Chauhan

Photographer
Ashoke Chakrabarty

Write to Civil Society at:
A-16 (West Side), 1st Floor,
South Extension Part 2,
New Delhi -110049.
Phone: 011-46033825, 9354007703
Printed and published by
Umesh Anand on behalf of
Rita Anand, owner of the title, from

A-53 D, First Floor,
Panchsheel Vihar, Malviya
Nagar, New Delhi -110017.
Printed at Samrat Offset
Pvt. Ltd.,
B-88, Okhla Phase II,
New Delhi -110020

Postal Registration No.
DL(S)-17/3255/2024-26.
at Lodi Road HPO
New Delhi - 110003
RNI No.: DELENG/2003/11607
Total no of pages: 36

Advisory Board

R. A. MASHELKAR
ARUNA ROY
NASSER MUNJEE
ARUN MAIRA
DARSHAN SHANKAR
HARIVANSH
JUG SURAIYA
UPENDRA KAUL

Get your copy of **Civil Society**

Have Civil Society delivered to you or your friends. Write to us for current and back issues at response@civilsocietyonline.com.

Also track us online, register and get newsletters

www.civilsocietyonline.com



LETTERS



Women in cinema

Many thanks for Saibal Chatterjee's cover story, 'Breakout cinema'. It's taken a long while but it's good to know women directors are finally gaining recognition globally. Their unique stories and perspectives will enrich Indian cinema and make it more thoughtful. The male directors are also telling stories which deserve to be seen. On the whole, there's a renaissance happening in Indian cinema.

Arpita Dutt

Publisher's letter

I agree with Umesh Anand's opinion in his edit, 'So this is a new year and what have we done?' You are spot on. Between crumbling infrastructure and the greed, selfishness and apathy of the public as well as their representatives — who we elect for ourselves — the only way out is to look within. Or watch cinema.

Jyoti Pande Lavakare

Tackling trash

It felt good to read Rashmi Gopal Rao's piece, 'Litterbugs in Bengaluru are held to account'. Nice to know about various citizen groups and NGOs working to make Bengaluru cleaner. There are lots of reels and short videos being circulated on WhatsApp about proper waste segregation, composting and disposal of waste. But I think these messages can reach more people if they can be screened in movie halls.

Bayu Amus

The magazine is something we look forward to every month. It revives the emotions of waiting for the post, including the content. It also gives me a perspective on another India existing within.

The efforts at sustainable waste disposal, and the sharp critique of

IN PASSING DAL LAKE IS FROZEN

Photo: Civil Society/Bilal Bahadur



The cold winter converts Srinagar's lake into sheets of ice

the United Kingdom, which is also a critique of the subcontinent's adoration of English — we like it all.

Dr Rajesh Dey

Looking back

I thought your story, 'Students in Mysuru are keeping its past alive with walks', detailed an excellent initiative. With some friends in Delhi I had started a similar group of walkers. My initiative is called Knowing and Loving Delhi Better. We seek to explore the rich historical and environmental heritage of the city. I am now planning to settle in Mysuru and I would like to join the walks, if open to the public. Please let me know how to join.

Kishore Singh

All you have to do is log into their website, <http://wcfaheritage.wordpress.com>.

It has the details you need. All credit to Julie Ann Tharakan for this wonderful initiative. Involving students and patiently curating these walks will certainly go a long way in helping people experience the value of heritage. What is missing in the article is information about the availability of toilets. Most of us would love to go on two trips per day, but we avoid such plans due to lack of clean toilet facilities.

Jayasree Devineni

Farmer's friend

I refer to a story by Shree Padre which appeared in your magazine some years ago. Titled 'The Pepper Doctor', it profiled M.N.R. Venugopal, a retired scientist of the Indian Council for Agricultural Research (ICAR).

As a silent follower of Dr Venugopal's work, I felt compelled to express my appreciation after reading the article. Coming from a research background myself, I deeply admire the scientific clarity, commitment, and compassion Dr Venugopal brought to pepper

cultivation. His dedication to empowering farmers, simplifying complex agronomic concepts, and standing by them with genuine affection is truly inspiring.

His work doesn't just improve crops — it uplifts livelihoods, restores confidence, and strengthens the entire farming ecosystem. He sets a benchmark for what true agricultural leadership looks like.

Dr Girish H.R.

Letters should be sent to response@civilsocietyonline.com

Civil Society
EVERYONE IS SOMEONE

The magazine that goes places
Now make your connections

WHY ARE WE BEING READ?

Shimoga, Theni, Ooty, Leh, London, Tezu, Wakro, Nadia, Bundi, Chennai, Gangtok, Puri, Muzaffarnagar, Raigad, Bengaluru, Atur, Erode, Yavatmal, Vapi, Kolkata, Gurdaspur, Gadag, Mulshi, Sirsi Taluka, Tarnaka, Rewa, Mumbai, New York, Mount Abu, Port Blair, Jhargram, Sammu, Mada, Patna, Chembur, Idar, Indore, Dhenkanal, Varanasi, Barur, New Delhi, Kargil, Shimla, Panchgani, Ajmer, Tonk, Panchkula, Ghaziabad, Nainital, Denratoon, Cambridge MA, Mussoorie, Dahod, Pune, Hassan, Gurgaon, Chennai, Kohima Mandi, Jalpaiguri, Alwar, Salem, Shillong, Coimbatore, West Garo Hills, Guwahati, Dombivli, Hyderabad, Bhubaneswar, Kasaragod, Muzaffarpur, Ranchi, Shoranur, Virudhanagar, Nhapattinam, Gadalur, Proddatur, Shahpur, Panhatti, Tarikere, Kurnool, Mudigere, Dubin, Kudal, Honavar, Gaya, Khopoli, Latur, Bhagpur, Imphal, Ranchi, Bargarh, Nagpur, Udhampur, Midnapore, Khandala, Azamgarh, Sonebhadra, Itarsi, Nandurbar, Shirwal, Dumraon, Nashik, Bhadravati, Karwar, Satara, Thirthahalli, Kapurthala, Hingoli, Gulbarga, Katra, Manasa, Lohit Kalbher, Bhangir, Shirampur, Gadchiroli, Kodagu, Hazaribagh, Thajav, Ladwa, Udupi, Bhandara, Ottapalam, Belgam, Deesa, Sangli, Kolaput, Gochar, Moddi, Bulandshahar, Chikodi, Gottavari, Mahvi, Khandagiri, Lurda, Chandigarh, Solapur, Siliguri, Garkheda, Jaipur, Shahjahanpur, Ludhiana, Rajkot, Fatehpur, Kodaikanal, Sivakasi, Porayar, Narsinghpur, Chopda, Kovilpatti, Ahmedabad, Kalugamalai, Gandhinagar, Lucknow, Itanagar, Fontenay le Jeury, Brisbane, Naperville, Gundlupet, Aurangabad, Asansol, Hanru, Singphum, Jamalpur, Dharmapuri, Ujjain, Ganganati, Sidhi, Thiruvananthapuram, Semour, Sambhalpur, Bhatinda, Patiala, Gospe, Tughalwala, Mangalore, Tenneru, Noida, Santoshnagar, Gorakhpur, Jamshedpur, Wayanad, Puducherry, Vadodara, Margao ...

DEEPAK NAYYAR LAMENTS DECLINE OF EXCELLENCE



Deepak Nayyar: 'Standardization is the worst enemy of understanding and knowledge'

'Political intrusions put future of public varsities at grave risk'

Civil Society News
New Delhi

A robust education system should be the foundation of a rising economy. Children need to get the basics in school and, as young adults, they should leave college with degrees that equip them for the jobs they will do.

India struggles on both counts. Now, to improve higher education, the Modi government has drafted a law which will create a supreme central authority to govern colleges and universities across the country. The goal is to have uniformity and standardization.

But chances are that the government is going to end up doing more harm than good. As it is, political intrusion over the years has lowered standards of curriculums and teaching. Will the envisaged central authority further stifle higher education institutions through excessive control? *Civil Society* spoke to Deepak Nayyar, former vice-chancellor of Delhi University and a distinguished professor of economics.

Q: Does the current system of higher education in India serve the country's economic and social objectives?

There is a quiet crisis in higher education in India that runs deep. The educational opportunities for school-leavers are simply not enough. And those that exist are not good enough. The pockets of excellence that we

have are outcomes of an enormous reservoir of talent and of Darwinian selection processes. It does little for those with average abilities or those without social opportunities.

The challenges confronting higher education in India are clear. It needs a massive expansion to educate much larger numbers, but without diluting academic standards. Indeed, it is just as important to raise the average quality. What is more, in terms of access it needs to be far more inclusive than it is.

We need some institutions, each with a certain critical mass, that are exemplars of excellence on a par with the best in the world. Such excellence, sadly, is diminishing rapidly in the few pockets where it had existed.

I am not a fan of university rankings but if you look at, say, QS University Rankings for 2025, our performance is most disappointing. Of the top 100 universities in the world, 73 are in the rich countries — North America, Western Europe, Australia. Of the remainder, as many as 23 are in Asia. And, among these 23, we have none. South Korea has five, Japan has four, China has four, Hong Kong has four, Singapore has two. We are nowhere in the picture. I do believe that our universities have miles to go.

We are also diluting the brand equity of islands of excellence, such as the IITs, IIMs, the Indian Institute of Science, by creating more and more of them. Of course, the real problem is that the lifeblood of higher

education is not such small elite institutes, but large universities that provide educational opportunities for young people.

Q: India has a history of good institution-building. IIM Ahmedabad is an example of an institution created with a great deal of idealism. What is it that now comes in the way of Indian higher education institutions seeking to excel and meet global standards? Is it centralization? Is it too much political interference? Is it lack of money?

Every government in India has lamented the absence of world-class universities without realizing that government interventions and the growing intrusion of political processes are an important underlying cause. The downward trajectory of universities in India is but a consequence of that political intervention.

Such political intrusion started in the early 1970s. The turning point might have been the Emergency in 1975. It increased in incidence during the quarter-century of coalition governments from 1989 to 2014. And the competitive politics unleashed by changes in government spilled over into universities as spheres of influence or arenas for political contests.

However, after 2014, intervention and encroachment by governments with an absolute majority gathered rapid momentum. It has increased rapidly since 2019 when Prime Minister Modi entered his second term in office.

In the past five years it has reached a stage where the future of public universities in India is at grave risk. Intervention now is much more systematic than it ever was. It has a cohesive pattern.

First, there is the introduction of institutionalized control mechanisms that decide what universities can or cannot do. Second, there is growing intervention in appointments of not only vice-chancellors of universities but also faculty members.

Increasingly, particularly since 2019, the ideology of the BJP and RSS has entered the higher education system in a major way. It's not just that curriculums are straitjacketed. Reading lists are prescribed. What is included or what is excluded from readings and from courses is stipulated. There is a systematic attempt to control the academic content of what universities do by imposing on them restrictions that tell them what they can do or what they cannot do.

At the same time, the ideology of the BJP and of the RSS is exercising an enormous influence on appointments at universities. It's not just the appointments of vice-chancellors of universities or directors of IIMs and IITs which provide the leverage in the appointment of faculty members.

If those who are appointed are not good enough to teach, what will happen to the quality of education? If someone who is not fit to teach the subject is appointed a professor at the age of 40, such a person will serve until the age of retirement at 65. If you appoint someone as a lecturer, who is not fit to teach the subject, at the age of 25, he or she will serve for another 40 years.

Thus, the damage that is being done in the process of making such appointments is going to have long-term consequences. It takes decades to build institutions. It takes months to destroy them, and it can take as much as a decade to rehabilitate them if and when there is opportunity to do so.

The problem is accentuated by the fetish for standardization of curriculum, appointments, promotions, salaries, administration, institutional structure. The outcome is that every university will move at the speed of the slowest if not drop to the quality of the lowest. Standardization, in my view, crowds out or preempts excellence because it stifles diversity, pluralism and differentiation in higher education — all of which are necessary to develop academic excellence.

Q: What you're basically saying is that from centres of excellence come standards to aspire to. They bring others in the system up.

Absolutely. In this, I think we need to recognize that there are many things that are ongoing at the same time. Clearly, governments have

become more and more intrusive, and governments interfere more and more in higher education. But the blame for the state of our universities cannot be laid at the door of politics and governments alone.

Universities as communities and as institutions are almost as much to blame. The quality of leadership at universities has declined rapidly, in part because of partisan appointments by governments of vice-chancellors who are simply not good enough as academics or even administrators, and in part because most vice-chancellors simply do not have the courage and the integrity to stand up to governments but have an eye on the next job they might get.

The professoriate is mostly either complicit, as part of the political process in teacher unions, or just silent, preferring to look the other way, engaged in their narrow academic pursuits. Those who stand up are too few. The students are either caught up in the same party-political unions or opt out to concentrate on their academic tasks.

It is imperative to recognize that such compromises by university communities are as self-destructive as acts of commission. Opting out is an act of commission. Indeed, if universities want autonomy, it will not be conferred on them by benevolent governments. They have to claim, indeed, consciously protect their autonomy simply because autonomy is as autonomy does.

'The quality of leadership has declined rapidly, in part because of partisan appointments of vice-chancellors who are simply not good enough.'

To me, it is worrisome that higher education is caught in a pincer moment. For one, there is a belief that markets can solve the problem through private players, which is leading to education being seen as a business. Just as we now have healthcare as business. It is shutting the door on large numbers who cannot finance themselves. There is also the absence of regulation that would ensure quality.

For another, governments that believe in the magic of markets, UPA and NDA alike, are virtual control freaks with respect to public universities. This is motivated by their desire to exercise political influence in higher education for patronage, ideology, rents, or just vested interests. Besides, there is a terribly erroneous notion that maintenance of quality and standards is possible only through standardization and centralization. If anything, that is the worst enemy of understanding and knowledge, as well as teaching and learning.

Q: Institutions don't have an internal robustness which could repel such attempts to weaken them. Is that correct?

Yes, that is correct. Look at what has happened at JNU (Jawaharlal Nehru University), what has happened at the University of Delhi. By and large, there has been a silent acceptance of ongoing changes. There are concerns, questions, complaints in private conversations. But very few academics speak about this in the public domain. This may be associated with the psychology of individuals, people who are risk averse or people who fear adverse consequences. And there are some, not an insignificant proportion, that simply change their belief system and become part of the reward system. That's happened more in India than it has happened elsewhere.

Q: Society then must invest in the spirit of enquiry, must invest in the freedom of universities, the ferment of campuses...

Absolutely. Look at the unfolding reality in India. Curriculums are regulated and straitjacketed. Readings are prescribed. What is included

Continued on page 8

Continued from page 7

and what is excluded in prescribed reading is decided elsewhere, not by the teachers. Some readings are explicitly excluded. Promising research that departs from the mainstream, particularly in social sciences, is stifled. Research funding is controlled by the government. Now, it's no accident that our universities have not produced any Nobel laureates. And in fact, the probability of that, always low, has diminished sharply, indeed rapidly, in the past five years.

Q: How do you strike a balance between academic freedom and regulation?

You know, I think this balance cannot and should not be maintained by regulation. At the end of the day, governments provide resources for education almost everywhere. The United States is an exception given its philanthropic traditions. If governments provide the resources, it does not mean that they should be controlling universities. The reason is simple. It is taxpayers' money. This is what citizens contribute.

Q: Everyone's money.

Yes, everyone's money. Governments should not be exercising control on universities. Of course, universities must be accountable. But that accountability should be to students and society through institutionalized mechanisms, such as periodic peer reviews of public universities to assess performance. Vice-chancellors and deans should be accountable for academic standards based on assessments of teaching and research. Teachers should also be accountable through course evaluation by students. Peer reviews, public perceptions, published research — these are ways of fixing accountability and assessing a university.

Q: There is a law before Parliament, called the Viksit Bharat Shiksha Adhishthan, which seeks to create a single, uniform and centrally controlled system. Based on all that you're saying, this law would certainly not be the right way to go.

Absolutely not. I have always believed that the UGC (University Grants Commission) is the problem. It cannot be a solution. It has three functions: licensing or accreditation, assessment, and funding. There is no country in the world where one institution does all three things. It eliminates all checks and balances.

The proposed law, the Viksit Bharat Shiksha Adhishthan, seeks to create an apex education authority. But in my view education and authority don't go together.

Let me say that this will be far worse than the UGC ever was. It will also be worse than the Higher Education Commission idea that was on the anvil for some time but was shelved. There was so much public protest. I hope there

is major protest in the world of higher education and in Parliament about this bill.

What is it seeking to do? It is creating an apex education authority. It will have three councils, one responsible for accreditation, one responsible for assessment, and one responsible for standards. Interestingly enough, it will have no role in funding. The financing of higher education institutions will be decided upon, and disbursed, by the government. This is worrisome. The draft legislation also suggests that the government, through this authority, will have the right to take away the degree-granting status of any university. This could become arbitrary.

Universities are established by state legislatures and in some cases by acts of Parliament. How can this proposed authority have the right to override that? What is worse, the funding of universities will shift entirely to

'A number of private universities are of uneven quality and are in education for business.'

the government. The government will decide how much money university A, B, or C gets for faculty positions and research.

Taken together, all this is dangerous for the future of higher education in India. Even the erstwhile centrally-planned economies and communist countries did not have such centralization of higher education in government. It was the academies of sciences which oversaw universities, particularly in the sphere of research.

There is another problem here, which I hope state governments will recognize. In the Constitution of India, when it was originally passed in Parliament, in the Constituent Assembly, education was exclusively a state subject. It was only in 1976, during the Emergency, that education was made a concurrent subject. However, that provision essentially created a system in which the Union government could also establish some central universities and institutions such as IITs, IIMs, Institutes of Science and Research or Institutes of Medical Sciences. Similarly, it could fund some centres of excellence. But, by and large, higher education was the domain of the states. This new proposed legislation is going to substantially erode, if not undermine, the role of state governments.

Q: It will take diversity out of the system.

Yes, it is bound to do so. It will end up in stagnation. It will end up in decline. Higher education institutions are much like organisms.

You cannot standardize them. You cannot transplant them. You cannot import universities from abroad. In any case, such an arbitrary law is certainly the wrong way to go.

You need to recognize that the most important component of Viksit Bharat or being a developed economy will be creating capabilities in our people. Our people are our only asset, but they are an underutilized resource. The only way that the people can contribute to this is through education, particularly higher education, which creates capabilities of different sorts and levels amongst people.

If India is to make a transition from a lower-middle income country to upper-middle income country, it needs quality higher education. This proposed Viksit Bharat Shiksha Adhishthan will make Viksit Bharat an elusive quest and an unattainable objective.

Q: Are private universities the way to go? And in your view how have the private universities that have come up fared?

Well, it is not the way to go, in my view. Even now, on average, most citizens, most young people, see public universities as being better than private institutions. However, if the present decline in public universities continues, good students and good teachers will inevitably flock to private universities. Thus, we must ensure that private universities retain their autonomy and independence.

There are a few private universities that are regarded as good. Students flock to them for admissions. A very large number of private universities are of highly uneven quality and they are in education for business. Many of the medical schools and the private engineering colleges that exist are examples of teaching shops in education for business.

There are, of course, sub-standard or poor public universities, just as there are poor private universities. Private universities also are subject to the same political milieu, and the same ethos. I will not name private universities, but vice-chancellors have been removed. Faculty members have been removed, or have been forced out, because they were politically inconvenient.

I think that promoters of private universities in India are making one big mistake. Most of them run the universities themselves. And therefore, as people who are part of the corporate sector, they are subject to all the pressures that governments and politics create.

It is not only about appointments, but also about appointing or retaining faculty members who are critical of government, or about having people who have a critical or dissenting view come to the university and speak.

If private universities are to develop, I would say promoters should actually create independent boards, as in the United States. Philanthropists should not run universities. ■

'Labour Codes have missed opportunity for real reform'

Rajiv Khandelwal on a better deal for workers

Civil Society News

New Delhi

RELATIONS between employers and workers in India have for the longest time been governed by a bundle of opaque laws. Neither side has benefitted. Both have wished for more rational regulation.

Recently, the Narendra Modi government introduced four Labour Codes to simplify things. Investors needed to be reassured that entering and exiting from a business wouldn't be needlessly complicated.

But the Labour Codes do little for the interests and aspirations of workers, who in India are largely unorganized and vulnerable. An opportunity has been missed for some real reform which could lead to the shaping of modern workplaces on a par with other economies.

We spoke to Rajiv Khandelwal, co-founder and executive director of the Aajeevika Bureau, which helps workers protect their interests in dealings with employers.

Q: What is your assessment of the four Labour Codes the BJP-led government is planning to implement?

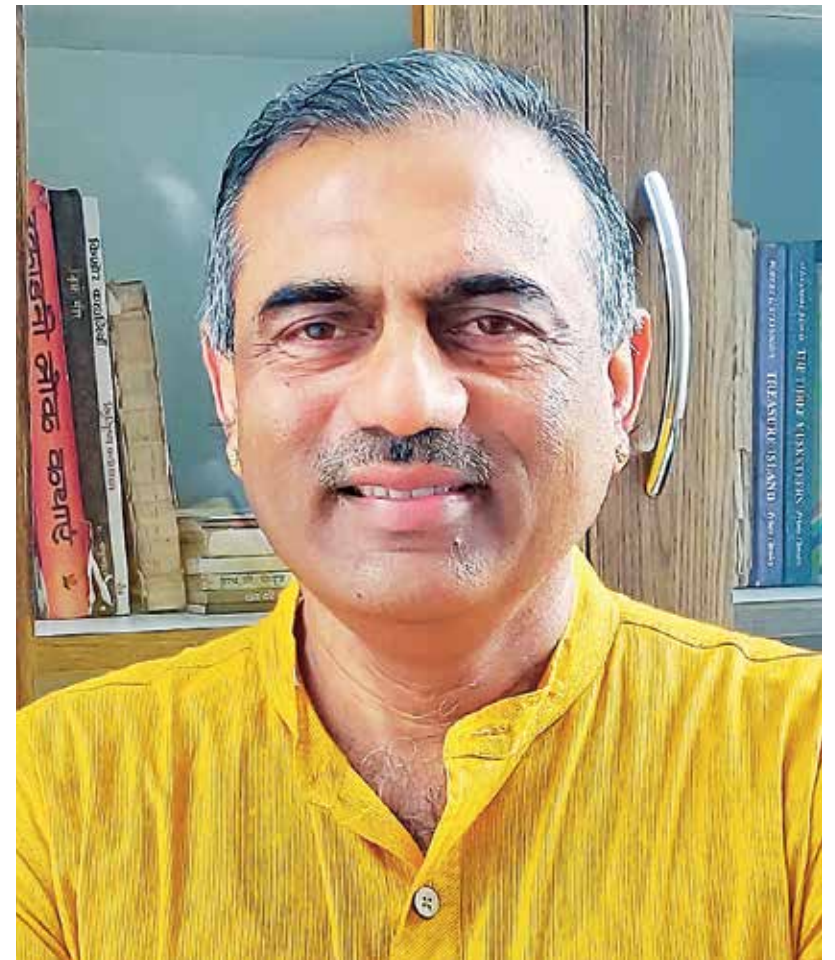
In my view the Labour Codes are a wasted opportunity for protecting and improving the condition of the Indian workforce. They privilege employers' interests and weaken the many rights that were available to workers to remain equal participants in the market economy.

You know, the Labour Codes came from the idea that we have a very complex network and architecture of labour legislation. There were 44 laws with different kinds of rules, compliances and provisions.

Codification of these different laws into four codes could have been a good opportunity to bring sense and coherence across laws, along with some universality as well as standardization of definitions of protections and thresholds across laws.

On that front, the codes fall short. What is really important is that the codes are failing to address the reality of the labour market in this country. Predominantly, our labour market is informal. It is unorganized. It is made up of casual workers who do not have formal employment status. They're largely contract workers or home-based workers or care workers with no documentation. Primarily, 55 percent of our labour force is self-employed. They're not even part of the labour codes because they are not employed workers. And that self-employed definition includes street hawkers, sanitation workers, rag pickers, sex workers... You know, there's this whole large swath of India's workforce that is not even in a formal work arrangement. This was a chance to think about work and workers more comprehensively, and not just tokenize it.

Q: Wouldn't that be attempting too much? The idea was to promote manufacturing through more rational systems of employing people and benefitting them. Is that then a fair comment?



Rajiv Khandelwal: 'The Labour Codes address just eight percent of the Indian workforce'

'Jobs grow not by deregulation of labour laws. They grow if there is good infrastructure, protection and highest standards of safety for workers.'

That aspiration is a fair one, I think. This is what the codes attempted to address but fell short on many fronts. Let's go a little deeper into where they are falling short.

First, as I have said before, there's a problem in the way the codes just cover a fraction of the Indian workforce. Let's also keep in mind that jobs grow not by deregulation of labour laws. They grow if there is good infrastructure, good protection and highest standards of safety for workers. India actually has significantly lower wage rates than China. But China grows because it scores better on all these fronts.

What the laws are trying to do here is to deregulate labour laws to make it easier for industry to employ and let go of workers in a way that suits their seasonal market cycles. When you legitimize easy entry, easy exit, it actually fragments the economy, not strengthens it.

In the revised thresholds in the Labour Code of what a factory is, it has been increased from 100 to 300 employees. This means that if an employer has less than 300 employees, he or she can retrench them at will. It gives employers an incentive to keep the number below 300. They will keep fragmenting their production processes, ensuring that they never cross 300 employees.

Look at contract workers. I'm speaking here of the manufacturing sector. Most industry has barely 10 to 15 percent of workers on their payroll. Everybody else is on contract. They're all workers outsourced to contractors. And compliances by the contractors

Continued on page 10

'Labour codes have missed opportunity for real reform'

Continued from page 9

are very thin and meagre.

Currently, the threshold for what applies by way of law to contract workers has been increased. Only if you employ more than 50 workers will contract labour regulation start applying to you. This means a very large part of the contract workforce will remain outside the ambit of law. These are the realities of our recruitment and industrial practices which have not been addressed.

Then there's this whole thing about securing a minimum wage. What the wage code is doing is announcing a national floor wage below which minimum wages will not fall. Typically, the floor wage that has been announced is significantly lower than the minimum wages in states.

For example, the last time the floor wage was announced, it was some ridiculous figure like ₹178 per day while the minimum wages were operating between ₹250 and ₹350 per day. This was about six years ago. Now, when you mandate or legitimize a floor wage and you say that wages will not fall below that, wages will actually stagnate at minimum wage level. Because even if you pay less than minimum wages, it will still be above the floor wage. In any case, 58 percent of the Indian workforce is not paid minimum wages. In effect we are legitimizing very low wages.

Q: You feel these codes are not realistic enough?

What they've done is they have addressed a small part of the formal economy. They've certainly reduced the compliance burden on industry and employers. And made changes which will work very well in the interests of big firms.

It's going to become virtually impossible to call any strikes now because unions have to issue a 60-day notice period before calling a strike. You cannot strike during the notice period when conciliation talks are going on. All kinds of different provisions are going to apply under which a strike can be held. So strikes will become very difficult.

One big failure in the formulation of these codes is that they have been passed by fiat. The codes would have made sense if tripartite consultations had taken place. The Indian Labour Conference (ILC) was not convened for a discussion on the codes. There was no tripartite discussion between trade unions, employers, and the government. Such talks are the very basis of how labour reforms and labour laws should be drafted. But the ILC has not been convened since 2002. The consultations that have taken place have been very cosmetic.

For example, take the Social Security code. It subsumes nine laws. Eight of those laws apply to formal sector workers. Only one, which is the unorganized workers (social security) law, is part of the code. And it only spells out the basis on which schemes will be formulated. It does mention gig workers and platform workers. So, there's a lot of celebration around that. But if you read the text carefully, none of that is law. It is actually an advisory to state governments to create new schemes for these segments of workers. Benefits such as ESIC (Employees' State Insurance Corporation), PF (Provident Fund), EPFO (Employees' Provident Fund Organization) apply only to formal sector workers.

Q: Do you think that the framers of these codes and the rules should have worked much more closely with the informal sector, the unorganized part of the economy?

Yes, absolutely. Ninety percent of the entire workforce is informally employed. The formal sector is barely eight percent. You have these Labour Codes that are addressing that eight percent and then making some cosmetic offers to this 92 percent. Basically, they have been left out.

Consider home-based workers. In most industrial supply chains, there are a large number of women in the last mile of the supply chain. They're not workers. They're just people who have been given work in the garment sector, for example. There are women who stitch apparel at home, sew buttons, work for four hours, maybe eight hours, and get paid ₹150.

They don't have a formal relationship with the employer but they are a critical part of the supply chain. They should have been recognized as workers. The codes don't say this.

Q: Industry has essentially welcomed the codes?

Industry is really celebrating the reduction in compliance load. They are saying the industrial relations bill has become more favourable, that it is good for workers because everybody will receive gratuity. They're celebrating fixed term employment since it is now perfectly fine to employ people for only a year. It suits them.

Look at the occupational safety code or OSH Code (Occupational Safety, Health and Working Conditions Code). Very important legislations have been brought into this. For example, even the Factories Act is now part of the OSH Code. The definition of what is a factory will change.

Earlier, if you had 10 or 20 workers, with power or without power, you came under the Factories Act. Now the legislation applies only if you employ 20 to 40 workers. This means an enormous number of units, small establishments, your retail store, all of them get left out. These are not factories. None of those laws will then apply. You're creating more precarity and actually legitimizing lack of safety for many, many workers.

Q: Would a segmented approach have been better? Big industry has its concerns. The informal sector has its own concerns. Do you think that the whole approach needed to be more segmented to actually deliver benefits to

employers and employees and build a more modern society?
Absolutely. Because you needed to recognize that there are large swaths of workers in highly precarious jobs that do not fall into the ambit of formal employment. Everything is now scheme-based. We have a scheme for sanitation workers. A scheme for construction workers. A scheme for this and that. Instead of scheme-based make it rights-based. The rights of workers in highly precarious jobs, their wages and safety, should be legally protected.

Q: Do the codes help migrant workers?

There is a chapter in the OSH Code that says the portability of the ration card will be ensured and schemes will be announced. What does it mean?

We are one of the most unsafe places of work in the world. And lack of safety does not occur in big firms or big industrial establishments. They occur in downstream industries, in little units in Manesar where Safe In India works or in the kind of units that we work with in Ahmedabad, in textile supply chains and so on. Now, if they are not even part of the factory purview, it means there will be no inspection, no regulation. Then you are basically leaving such units open to violation of safety laws without any punitive action possible.

Such violations were not compoundable which means that you could not have a settlement. They would face legal action. But now they become compoundable, which means you can also settle, there is no fine, no penalty.

A lot of inspection is now becoming facilitation. Inspectors cannot come into your premises without notice anymore. Do you know what that means? Anyway, they were not coming. But this means basically everything will be sorted out. ■

'The codes have been passed by fiat. There was no tripartite discussion between unions, employers and the government.'



YOUR POTENTIAL...YOUR FUTURE... YOUR STORY BEGINS HERE...

NIIT Foundation

Empowering youth through skills that matter - today and tomorrow

NIIT FOUNDATION

Career Programs that Build Future in Data, Digital & Emerging Technologies

Today, the fastest-growing opportunities lie at the intersection of Data, AI, and Digital skills. NIIT Foundation's Career Programs are designed to ensure that no one is left behind, but empowered and ready to thrive in these evolving roles

SOME OF THE COURSES WE OFFER

Cyber & AI Workforce

Professional Edge

Data Analytics

Digital Marketing

Cyber Smart AI Prime

IT & Networking Specialists

Global Service Desk

Web Development

Every year, NIIT Foundation supports over **1.5M learners** across India through structured training, mentoring, and access to modern learning environments. With placement support and strong industry partnerships, most of our eligible graduates begin their careers in roles that offer stability, dignity, and long-term growth.

Website: www.niitfoundation.org

Contact No: **011 - 45512650**

Scan to
know more



A law that came out of 11 years of struggle, repealed in just two days

BY ARUNA ROY & NIKHIL DEY



THE undemocratic, hasty repeal of the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and its replacement with the Viksit Bharat — Guarantee for Rozgar and Ajeevika Mission (Gramin) or VB-G RAM G

raises many questions. Why was it hastily rushed through Parliament in two days? Despite heavy publicity by both the government and the ruling party, this is an unwelcome move. The government publicity of providing universal eligibility of 125 days of employment annually is also a misnomer. Where MGNREGA established a demand-driven, justiciable right to work backed by enforceable obligations on the State, VB-G RAM G replaces this with a discretionary framework in which employment is mediated by designated areas, notified geographies, capped allocations, and centrally determined priorities. The drastic changes demand detailed deliberation inside and outside Parliament as they impact an existing guarantee of the legal Right to Work: the right to demand 100 days of unskilled manual work in a financial year anywhere in India.

The haste with which the law was passed raises serious questions about the intent of the government and, in fact, the state of India's parliamentary process. The determination of the government (assisted by the speaker) to pass the law without proper debate and by short-circuiting procedure was intended to deny time for understanding the proposed law; discussion would have raised questions with serious repercussions. The discussions over December 16-18, 2025, in Parliament when the bill was placed for passage were anything but analytical and deliberative. The various objections raised by the opposition and its pleas that the VB-G RAM G Bill be sent to a Standing Committee and discussed clause by clause were flatly disallowed. This flagrant violation of democratic procedure denied millions their right to expect the Lok Sabha to serve as a space for articulation, scrutiny, and debate.

Apart from repealing the act that had Gandhi's name and bringing in a new law that highlights 'Ram', the government exposed its continual attempt to focus debates on and gain political popularity just from the use of religious symbolism. The core guarantee of MGNREGA was the universal demand-based right to every rural Indian household to seek and secure up to 100 days' work in a year. This has been reduced to a scheme limited to 'notified' areas with budgetary caps to be decided at the whim of the Government of India. This move threatens the bedrock of dignity and access to development for over 2.6 million



Activists protest against the repealing of MGNREGA in Delhi

MGNREGA-registered households. To them, the MGNREGA was a safety net to tide them over days of unemployment. MGNREGA importantly gave bargaining power to India's poorest and most vulnerable workers.

More than 20 years ago, rural workers, drawing inspiration from the Maharashtra Employment Guarantee Scheme (passed in the 1970s), worked to convince the political establishment to frame and legislate a national rural employment guarantee law. This came to Parliament after the Congress responded to the people's demands and made a promise of such a law in its election manifesto. The United Progressive Alliance won the election in 2004 and placed it as its first promise, in the National Common Minimum Program (NCMP), one of the most significant pieces of legislation to secure the people's right to work.

People mobilization, led by social movements, brought unprecedented numbers from across India to Delhi in 2004. They carried over two million signatures inscribed on cloth in multiple Indian languages from Jantar Mantar to Parliament. These banners lined Parliament Street in late 2004, even as the legislative process had begun within Parliament. The essential components of the law were debated, reported in newspapers and reflected in policymaking circles across the country. Economists, social activists, trade unions, women's organizations, Dalit organizations, lawyers and so on, pledged to make workers enjoy a small measure of the independence that was promised to them in 1947. After intense debate, discussion, and consensus building, the MGNREGA was unanimously passed on September 5, 2005 by Parliament and became what was perhaps the most important initiative to secure development and workers' rights in India.

The MGNREGA was the result of an 11-year struggle sustained by these committed groups with wide and continuous consultation with workers across the country. The MGNREGA provided the frame for

implementing the first structural frame for transparency and accountability across India. Work had to be provided within 15 days, failing which the government had to pay an unemployment allowance — which acted as both a guarantee and a built-in accountability system to monitor performance, corruption and nepotism.

All this has been unravelled and demolished in a few tumultuous days in Parliament this past December. Joseph Stiglitz, Nobel laureate in economics, stated, along with world renowned economists, that he "strongly supports MGNREGA... the world's most significant demand-driven employment guarantee" and warned against its dismantling, highlighting its role in poverty alleviation, empowering marginalized groups (especially women), and creating rural assets. He cautioned that its weakening through underfunding and shifting the burden to states would be a "historic error" with severe social and economic consequences. The signatories included Thomas Piketty, who has demanded that as a landmark law, it needs to be retained as an essential support by being a safety net.

In the past two decades, cities have experienced a relative decline in distress migration, except among workers seeking higher wages and more skilled urban-centric work. Women workers have been the major beneficiaries of MGNREGA and financial inclusion, opening bank accounts and accessing money at critical times; thereby reducing distress migration. It has enabled their children to attend school, access local health facilities, pay back domestic debts, repair homes — gaining bargaining power at home. Guaranteed wages of 100 days' work armed them against exploitation by extortionist employers. The bottom-up, labour-centric planning process of MGNREGA increased rural infrastructure, and strengthened and enhanced productivity. Panchayats planned for works at the gram sabha. The labour-intensive nature of work focussed on appropriate technologies, including

traditional earth work which conserved the environment and doubled production by converting fallow land into productive farming and horticulture plots.

The most significant impact of the MGNREGA has been during times of economic vulnerability and recession. It served as a safety net for keeping depressed markets alive with injection of the workers' wages in local markets — the multiplier impact on the economy. In 2008, when the world faced an economic meltdown, local markets in India were thriving because of this multiplier effect. Earnings through the MGNREGA went to purchase of items in rural markets and those engaged in commerce found their businesses thriving — so much so that a silver merchant once sought us out in Bhim to say that the works programme benefitted his business because women invested in silver ornaments which they saw as security. Panchayat budgets touched almost ₹1 crore in most panchayats in Rajasthan, increasing expenditure on village roads, water harvesting structures, water sheds, grazing lands and infrastructure, including playgrounds and nurseries. Sustainable rural development became possible.

With the repeal of this law, crores of workers will be left without an employment guarantee they have enjoyed for almost 20 years.

VB-G RAM G is not an employment guarantee at all. At best it is a top-down infrastructure programme where the Government of India will pay 60 percent of the costs and the states will have to bear the

VB-G RAM G converts a worker with rights into a conditional beneficiary and substitutes democratic obligation with executive discretion.

remainder 40 percent to service the vision of Viksit Bharat and PM Gati Shakti. An examination of a few strategically changed legal clauses explains just how the new law is legislation with different and in some places contradictory objectives.

VB-G RAM G marks a decisive break from the legal logic that underpinned the MGNREGA. The shift is not merely administrative but constitutional: it converts a right-bearing worker into a conditional beneficiary and substitutes democratic obligation with executive discretion. In doing so, it weakens the architecture of accountability that once compelled the State to respond to demand, respect timelines, and submit to public scrutiny.

More significantly, VB-G RAM G recentralises power over rural development by subsuming state and local decision-making within a unified national framework aligned to the Centre's development vision. This reordering alters the balance of federal responsibility and dilutes the autonomy of states and local governments in shaping employment and expenditure priorities. What is at stake, therefore, is not simply the replacement of one programme with another, but a retreat from the principle that access to work is a guaranteed right central to citizenship, dignity, and democratic participation. VB-G RAM G signals a shift away from a rights-based development paradigm toward a model where employment becomes contingent, instrumental, and politically managed rather than legally assured.

By brazenly short-circuiting due parliamentary process, this repeal of the MGNREGA has compromised not just workers' rights but the universal democratic rights of all citizens, the right to a deliberative democracy. ■

Aruna Roy and Nikhil Dey are activists with the Mazdoor Kisan Shakti Sangathan

Street as a canvas of everyday life

Aiema Tauheed
Kolkata

KOLKATA's Colour Corridor is a riot of colours on two walls with images evoking the past. Set against ageing buildings, deep within Ballygunge, the murals stir nostalgic memories of growing up in the city.

There is the unobtrusive table fan, a grandfather's wicker chair, the morning ritual of *chai*-biscuit next to a half-folded newspaper, a colour television perched on a cupboard, old switchboards you no longer see.

A St+ART India Foundation project, the Colour Corridor has transformed a nondescript road into an open-air gallery for citizens, inviting all to come take a look.

"When I work on public art, it gives me immense joy to see people interacting with it," says Sayan Mukherjee (pictured), the artist who led this effort. "My theme is 'home outside home'. What if your home spills onto the street?"

Mukherjee draws on familiar domestic objects, items found within households, to anchor the murals in everyday collective memory. The artists dipped into Asian Paints' Chromacosc — an expansive repository of 5,300 shades.

An alumnus of the Indian Art College with a Bachelor of Fine Arts degree, Mukherjee spent nearly a decade working for advertising agencies such as Ogilvy and JWT. After he became art director, he moved to the US for a residency at the School of Visual Arts. His first mural was painted at Eden Gardens in 2017. Public art remained the core of his practice.

The two walls on both sides of the road add up to around 8,300 square feet. This space was painted in around 15 days by Mukherjee and a team of artists from the Indian Art College in Dum Dum.

The Ballygunge walls were dim and disregarded, with bricks jutting out and the surface crumbling. The walls were cleaned, repaired and transformed into a canvas by St+ART India Foundation before the artists turned up armed with paints and brushes.

The challenges Mukherjee faced while creating the Colour Corridor are largely common in street art. The lane is narrow, traffic flows constantly, and motorists rarely slow down for artists at work.

"Painting on a canvas is one thing," he says, "but painting on a public wall is completely different." The artists contended with constant interruptions, people brushing against wet paint, even damaging the walls mid-process.

At times, he recalled, people stopped to urinate against sections that were still being painted. There were people on bikes and in cars who shouted nasty remarks at the earnest artists.

Mukherjee is nonchalant. The rewards, he says, far outweigh the difficulties. Local residents stop during their evening walks to speak with the artists, telling them they have never seen the wall look this beautiful since their childhood.

"People are actually loving it," he says.

Those who live near the corridor supported the artists. Not only did they grant permission,



they also checked on the progress being made, and offered tea and samosas in the evenings. "We've had a good interaction with the crowd," he reflects.

People travel from near and far to see the Colour Corridor. The city has a symbiotic relationship with art. "It's an age-old relationship," says Suranjan Basu, a retired accountant with a camera in hand. People linger, take photographs, and quietly absorb the murals. Basu lives in north Kolkata and spent nearly an hour making his way here.

Debasmita Saha, who works for a company, discovered this lane through social media. She came all the way from Beliaghata, travelling for nearly 45 minutes. "It captures the essence of Kolkata," she says. "The food, the chess, the chairs, seeing all of this as a Bengali feels familiar."

For Anindita Roy Sarkar, a homemaker who also runs a small boutique, this is her second visit to the site. The directions on social media were confusing, she says, and she finally arrived at the right spot after walking from



Photos: Civil Society/Ashoke Chakrabarty



lane to lane. "Whenever there are murals or graffiti, I make it a point to stop. The colours always draw me in," she says.

Ananyo Dey, who works a nine-to-five job and pursues photography as a passion, had been waiting for the murals to be completed. He finally made the trip from Ultadanga today.

"Most of these objects were part of my childhood," he says, pointing to the *jhaal muri* painted on the wall. "It reminds me of winter evenings spent with family, sharing *jhaal muri*."

"Art, I think, is rooted in our genes," says Gargi Choudhury, who works for a company and is a photographer in her free time. She

pauses before the image of Goddess Durga. "It reminds me of *Pujo*," she says.

For Mukherjee, the idea behind the Colour Corridor began with a simple belief: art should not remain confined to galleries or drawing rooms. It should step into the street, and become a part of everyday life.

That thought, he says, is where the idea of 'home outside home' takes shape. The impact of such work is not easily measured. Nothing tangible changes, yet something shifts. As people walk past, they pause, look up, and feel lighter. "That's what colours do," he says. "We don't always know how they work."

The murals are inspired by Mukherjee's own

experiences — objects from his own home, the streets he has grown up in, and the people he knows. Many of these details, he reflects, already feel distant. What was once commonplace 20 or 30 years ago is slowly disappearing. By bringing them back onto the wall, the work becomes a form of not resisting change but remembering what shaped the city, and him.

As an old city, Kolkata is often recalled with nostalgia. Layers of history coexist with the present. As time marches on, many of the objects and markers that once defined everyday life slowly disappear.

Cities begin to resemble one another, their

buildings and public spaces become increasingly uniform. What gives a place its character, Mukherjee suggests, lies in the ordinary things that uniquely belong to it. The quotidian objects around which culture gathers and life unfolds. By bringing these onto a public wall, the mural becomes more than an artwork, it becomes a reminder.

In pausing before this spread of art, people are offered memories, and familiarity, and their roots. And in that moment of recognition, the city briefly remembers itself. ■

The team which worked with Sayan Mukherjee includes Pradipt Sarkar, Tushar Adhikary, Palash Poddar, Sayandeep Roy, Subrata Sarkar, Rahul Jaiswal, Sandipan Paul, Supriyo Maity, Soumen Majhi, Bibhas Kotal, and Pabitra Patra.

MADHAV GADGIL
1942-2026

Ecologist rooted in realism

Rashmi Gopal Rao
Bengaluru

OFTEN called the 'people's ecologist' for speaking up for the rights of marginalized communities, Madhav Gadgil will be remembered as one of India's best known ecologists. He championed the cause of tribals, who he said were an integral part of the ecosystem. His approach to conservation was democratic. Gadgil was known to 'speak' for forests, rivers and communities.

He passed away at the age of 83 on January 7 at his home in Pune after a brief illness. A well-known writer, columnist and scientist, Gadgil founded the Centre for Ecological Sciences at the Indian Institute of Science (IISc) in Bengaluru in 1983.

He meticulously researched sacred groves and the importance of such carefully conserved community forests. He spent years in the Bandipur Tiger Reserve studying the behaviour of elephants, their habitat and even mahouts. Gadgil played a key role in the establishment of the Nilgiri Biosphere Reserve in 1986. He was deeply involved in the Save Silent Valley Movement and in the protection of the forests of Bastar.

But his seminal work which made him a household name was as chairman of the Western Ghats Ecology Expert Panel (WGEEP), later known as the Gadgil Commission. The Western Ghats, a UNESCO World Heritage Site and a global biodiversity hotspot, was a landscape that Gadgil dedicated his life to.

In 2011, he submitted his report which recommended designating around 64 percent of the Western Ghats region as an Ecologically Sensitive Area (ESA). The report laid out several guidelines on activities like mining, quarrying and the construction of dams in the region. While it did not call for a complete ban on such activities, it advocated a decentralized approach on decision-making and called for the participation of gram sabhas (village councils).

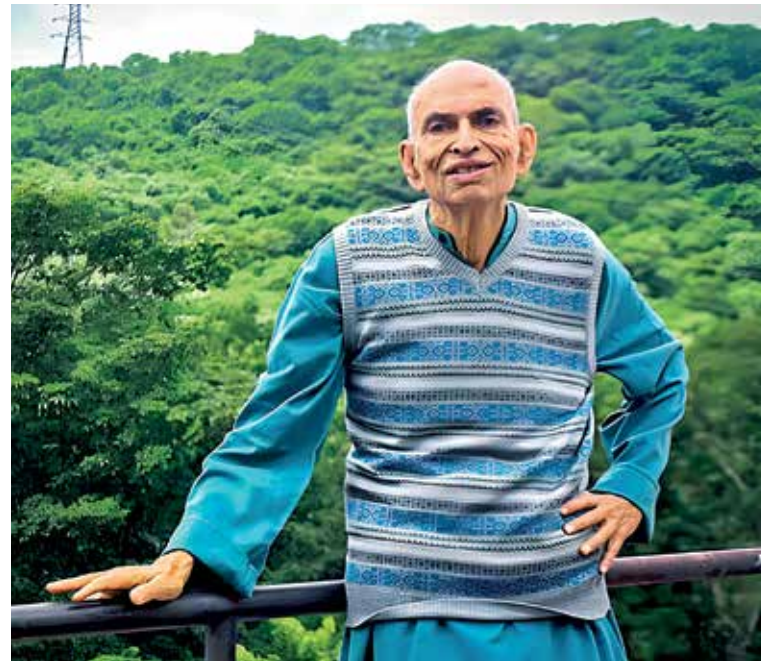
The report, however, was met with resistance and rejection by commercial and political lobbies. It was ultimately sidelined by the then United Progressive Alliance (UPA) government and later superseded by the Kasturirangan Committee which eventually reduced the areas under protection and recommended a top-down approach to decision-making.

Irrespective of the end result, Gadgil continued to have an immense love for one of India's most fragile ecosystems. Honouring his immense contribution, a new species of plant from the Nelliampathi hills of the Western Ghats was named in Gadgil's honour in 2021 — *Elaeocarpus gadgilii*.

Gadgil also had a prominent voice in public policy. He was a member of the Prime Minister's Science and Technology Advisory Council and also backed implementation of the Forest Rights Act. He was one of the architects of India's Biological Diversity Act.

LOOKING BACK AND AHEAD Born on May 24, 1942 to Pramila and Dhananjay Ramchandra Gadgil, a well-known economist and Cambridge scholar, Madhav Gadgil graduated in biology from Fergusson College in Pune and did a master's in zoology from Mumbai University. He went on to earn his PhD in theoretical biology from Harvard University after which he returned to India.

Gadgil was always passionate about nature. He went on birding



Madhav Gadgil: Scientist and campaigner

walks with his father as a boy and met the great ornithologist, Salim Ali, at a young age. He was deeply interested in wildlife. Even as a teenager he was aware of how destruction of natural resources and displacement were consequences of development. Pioneering Indian anthropologist Irawati Karve was his neighbour. She had a profound influence on Gadgil during his formative years. He often accompanied her on field trips. Karve encouraged him to develop an outlook that was beyond the barriers of class, caste and creed.

Gadgil joined IISc in 1973 and worked there for over three decades during which he made the institution a pioneering centre for ecological studies. He is credited with launching several research programmes in the institute and was known for his evolutionary approach in his extensive body of work spanning conservation biology and environmental policy. He retired from IISc in 2004.

Gadgil authored six books, scores of peer-reviewed journal publications and several articles. He co-authored the well-known book, *Fissured Land* and *Ecology and Equity*, with Ramachandra Guha. Apart from English he also wrote in Marathi.

He received several awards for his exemplary contributions in conservation and ecology. These include the Volvo Environment Prize in 2003, the Tyler Prize for Environmental Achievement in 2015, and the UN Champions of the Earth 2024. He was conferred the Padma Shri in 1981 and the Padma Bhushan in 2006.

"Madhav Gadgil's achievements in the field of ecological sciences was truly noteworthy. He balanced academics and activism with great ease and always exhibited deep sensitivity towards issues relating to people's concerns and livelihoods. His work will always be a source of inspiration and learning for many of us," said Ashish Kothari, an environmentalist based in Pune.

Gadgil is survived by his son and daughter. His wife, Sulochana Gadgil, who was a reputed Indian meteorologist and professor at the Centre for Atmospheric and Oceanic Sciences (CAOS) in Bengaluru, passed away in July 2025. ■

Vijayapura learns a lemon can be a moneyspinner

Shree Padre
Kasaragod

WHEN Siddu Pujari, an agricultural scientist, went to inspect 44 lemon pickle units in his district, Vijayapura, he came back dejected. As many as 30 were sick. He had himself got 41 units sanctioned under the PMFE (Prime Minister Formalization of Micro Food Processing Enterprises) scheme after he'd been appointed its district resource person. At the time, not even one unit in Vijayapura, in north Karnataka, was under the scheme.

"I had got an award for this achievement," says Pujari. The units were hamstrung because they weren't branded and therefore found it tough to sell their pickles, he realized. It's not as if they lacked the skills to make good pickles.

Pujari decided to help the units market their pickles by taking the initiative to form a Farmer Producer Organization (FPO) called Palanduh. "It was really more out of moral responsibility that we got our FPO registered in November 2022. We started branding the pickles of all these units and provided them marketing support for a nominal commission," says Pujari, who is CEO of Palanduh FPO.

The units were also helped to invent new lemon products. The enterprising FPO now has 11 products which it sells under its brand name, V-Joy.

Lemon is listed as Vijayapura's centrepiece product under the Central government's One District One Product (ODOP) scheme. Vijayapura, Sindhagi and Indi in the district are well-known for lemon cultivation. Indi alone grows 70 percent of the district's lemons. Karnataka's lemon output is about 300,000 tonnes annually.

Lemons are available in Vijayapura throughout the year. They are packed in sets of 1,000 called *daag* and an efficient marketing system exists to sell them.

The problem is that the price of lemon rises in summer, when demand is high but availability is low, and falls in winter during the harvesting season when availability is high and demand is low. A *daag* of lemons is priced at ₹2,500 in winter. In summer, the price spirals to ₹20,000.

A small percentage of lemons, brought to the market for sale by farmers, always includes a few yellow ones. These have ripened so they are sold at throwaway prices of ₹400 to ₹500 per *daag*. Palanduh FPO buys the yellow fruits with the help of another FPO. "We pay farmers ₹800 per *daag*," says Pujari, who comes from a farming family and has worked with NGOs.

Initially, the FPO didn't know what to do with the yellowing lemons. "We wracked our brains day and night, thinking of what new products we could make with yellow lemons," says Pujari.

The FPO launched two unique products which turned out to be bestsellers. One, recently launched, is an instant lemon drink mixture in a sachet called Insta Lemon. Twelve grams of the powder, priced at ₹10, is enough for 200 ml of water. All you have to do is pour the sachet's contents into a bottle of water, shake it and your drink is ready. It's also sugar-free.

"Our customers buy a half-litre bottle of mineral water. They mix two sachets of our Insta Lemon and enjoy instant *nimbu pani*," says Pujari.

The second product is Lemon Chatpati. It's made by adding salt to dehydrated lemon. "It's like medicine for diarrhoea and vomiting,"

explains Pujari. "Lemon Chatpati has caught on with truck drivers travelling long distances. They chew it to avoid falling asleep at the wheel. It also helps them stay away from chewing tobacco."

Both are unique products which don't face competition because no other company in South India is making them, so far.

The FPO also makes lemon concentrate and squash. The concentrate is a thick, pure liquid made only from lemon. There is a juice powder too. Like the Insta Lemon drink, it has no sugar.

Then there are two round dehydrated products it sells — black lemon and dry lemon. Pujari says these are in demand in the Arab countries of West Asia for making biryani. Dry lemon is used to make lemon tea. Dry lemon is further processed to make black lemon.

Three types of pickle are also made — sweet lemon, chili lemon and spicy lemon. Their bestseller is sweet lemon which is made with organic jaggery, not sugar. These are outsourced to women entrepreneurs in Vijayapura who are experts at making pickles. And the best part? "Unlike other pickles, we use no oil in our pickles," says Pujari.

Even lemon peel is not discarded. After extracting juice, the peel is converted into lemon peel powder. This is in demand by the detergent, cosmetic and Ayurvedic medicine industries.

The FPO also sells dehydrated moringa, curry leaves, mint and more. "When vegetable prices crash, farmers approach us. We buy their vegetables like onion and carrot, at a slightly better price than market rates, dehydrate and sell such products at our own pace," says Pujari.



Last year Palanduh FPO produced ₹46.08 lakh worth of lemon products for which it used 300 tonnes of lemon. In the past three years, the FPO's turnover was an impressive ₹3 crore.

The FPO is on the cusp of success due to its range of ingenious products. The Raichur Agriculture University helped by providing technical guidance for product development. Pujari says his FPO is especially appreciative of the hand holding they received from Dr Udayakumar Nidoni, head of the university's Food Engineering Department.

SHOPS AND MARKETS Palanduh FPO has three sales outlets. One is near its production centre, the second near its office in Bijapur city and the third in Basavana Bagewadi vegetable market. Twenty percent of its total sales comes from these three outlets. It also offers home delivery in Bijapur. A year ago, it began serious marketing of its products to other cities. It is in the process of setting up its own website.

In Bengaluru shops, GI Tagged, a shop in H.S.R. layout, and Utthejana in Malleswaram are stocking the products under a B2B deal. They sell the FPO's products under their own brand name.

While GI Tagged buys ₹15,000 to ₹20,000 worth of products every month, Utthejana buys around ₹50,000 to ₹1 lakh worth. With promotion, marketing and online sales, the FPO's Insta Lemon and Lemon Chatpati have a bright future in states with long, searing summers. ■

Contact: Siddu Pujari, CEO, Palanduh FPO — 70192 68550

Forest rights in J&K under tribal dept

Jehangir Rashid
Srinagar

A historic step has been taken by the Omar Abdullah government in Jammu and Kashmir by placing the tribal affairs department in charge of implementing the Forest Rights Act, 2006 instead of the forest department. The announcement was made by Chief Minister Omar Abdullah himself on social media, reaching out to all citizens.

The change of implementation agency was the key demand of the J&K Forest Rights Coalition. It had carried out a sustained campaign over the years, arguing that implementation of the FRA could be best handled by the tribal affairs department.

“The illegal rejection of 84 percent of FRA claims at the gram sabha level, often under the influence of the forest department, reflects systemic violations of the Act. These rejections occurred in breach of basic FRA principles — without due process, written reasons or hearings — reducing gram sabhas to mere rubber stamps,” said Dr Shaikh Ghulam Rasool, founder and chairperson, J&K Forest Rights Coalition.

However, this alone will not change ground realities, he explained, unless the tribal affairs department is empowered enough to override entrenched control of forest and revenue administrations.

In August last year, the J&K Forest Rights Coalition, the J&K RTI Movement and the Nature Conservancy Alliance (NCA) had expressed deep concern over the mass rejection of forest rights claims, alleging that it had been done without legal scrutiny, transparency or community consultation.

The three organizations said mass rejection of FRA claims represented a systemic failure of justice and governance. The FRA was expected to offer long-denied recognition to tribal, pastoralist and forest-dwelling communities. Instead, the authorities in J&K were subverting the very purpose of this landmark legislation, they alleged.

According to official government data, a total of 46,090 claims were submitted under the FRA. While 33,233 claims were individual claims, 12,857 were community claims. Of these, an overwhelming 39,924 claims, approximately 85 percent, were rejected. These include 32,727 individual claims and 7,197 community claims.



The forest rights campaign

Gram sabhas cannot reject claims but they were doing so influenced by the forest department.

“All illegally rejected claims must be mandatorily reviewed now. Gram sabhas have no authority to summarily reject claims,” said Dr Rasool. “Proper forest rights committees should be set up, there should be time-bound settlement of individual and community forest rights, independent monitoring, capacity building and a complete moratorium on evictions until claims are finally decided. The FRA must function as a statutory rights law, not as administrative discretion.”

Under the FRA and its 2012 rules, gram sabhas can only recommend claims. They are not authorized to reject them. Only the District Level Committee (DLC), after recommendations from the Sub-Divisional Level Committee (SDLC), has the authority to reject claims.

Rule 12A mandates a revision and appeal process before any rejection is final. The J&K Forest Rights Coalition has alleged that in Jammu & Kashmir these basic legal processes have been flouted with claims being dismissed at the gram sabha or SDLC level without revision, appeal or proper justification.

Zahid Parwaz Chaudhury, convener, J&K Forest Rights Coalition, believes that the nodal agency being the tribal affairs department is a vital step towards the proper and impartial implementation of the FRA in Jammu and Kashmir.

“Historically, the forest department has been viewed as an accused party due to its role in evictions and the fencing of traditional grazing lands. Shifting authority to the tribal affairs

department eliminates this inherent conflict of interest, ensuring that the agency responsible for implementation is motivated by community empowerment rather than land exclusion,” said Dr Chaudhury.

He said change is a necessary catalyst to begin an awareness and protection of rights campaign that has remained stagnant over the past five years. He said that across the country it was the tribal affairs department that was the nodal agency with respect to implementation of the FRA. Jammu & Kashmir had been the exception and this wrong had finally been corrected, he added.

Most forest dwellers and tribals are elated over the change of nodal agency. Their opinion is that the first step towards the effective implementation of FRA in the Union Territory of J&K has been taken by the Omar Abdullah government. They expressed confidence that with the passage of time more corrective measures would be taken by the political leadership.

“There is an old saying, well begun is half done. It may have taken the government more than six years to change the nodal department from the forest department to tribal affairs, but at the end of the day it gives us satisfaction that an important decision on the FRA has been taken,” said Mushtaq Ahmad, a tribal of Central Kashmir’s Budgam district.

Dr Chaudhury said that, to rectify past delays, a structured roadmap must be enforced immediately. He also said it was necessary to launch comprehensive awareness campaigns and reform the forest rights committees (FRCs) through rigorous training.

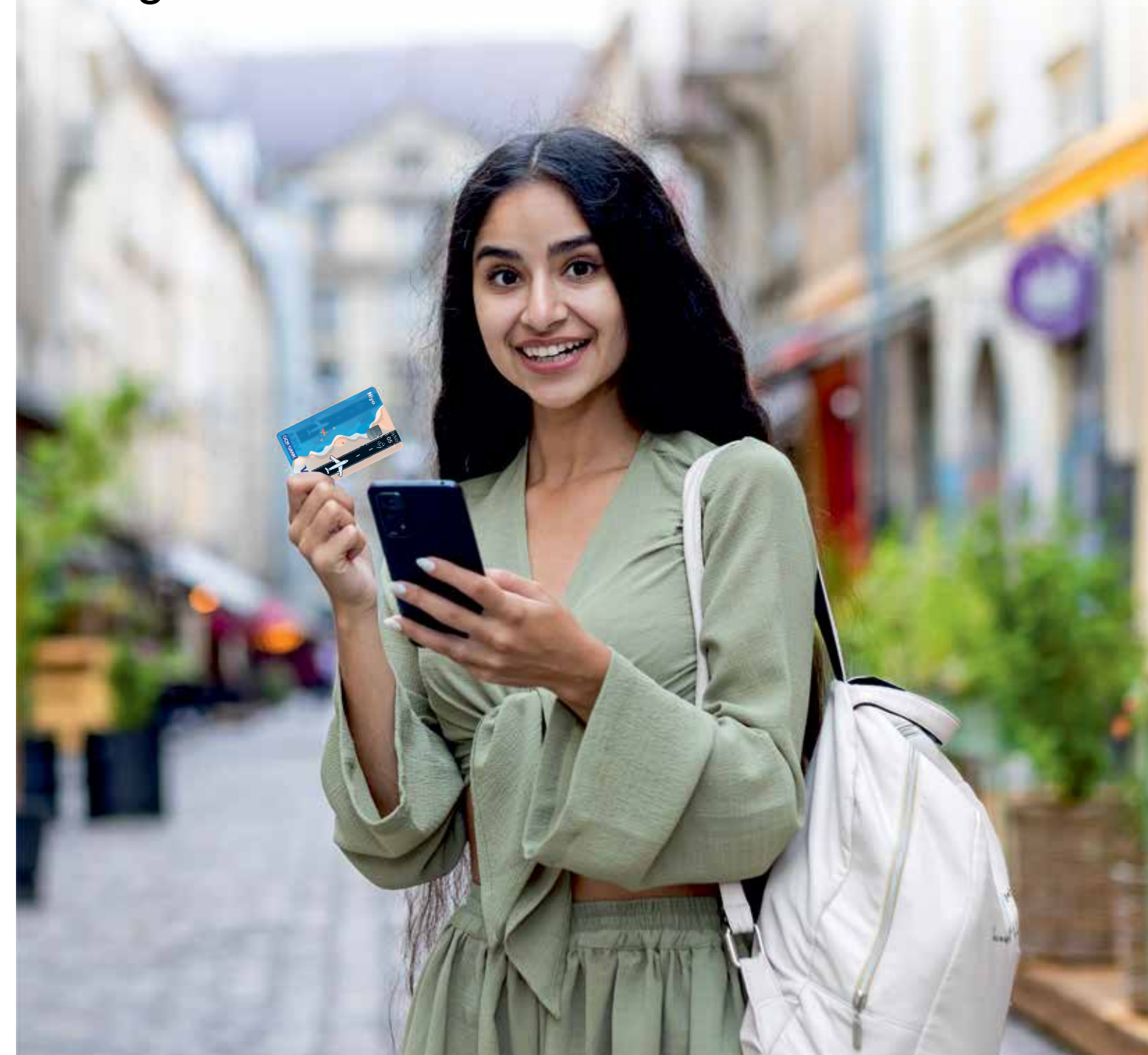
“Under the direct supervision of the tribal affairs minister, the process must require monthly progress updates to ensure transparency. This would keep the government machinery on its toes. Let’s not backslide in this matter. Once feedback is sought on a regular basis it is obvious that nobody will take things lightly,” Dr Chaudhury emphasized. ■

DCB BANK

DCB Niyo Savings Account

Zero foreign exchange mark-up on all international debit card transactions

Enjoy cash back upto **₹7,500 p.a.*** on eligible UPI transactions in India



DCB Customer Care: Call 022 68997777 ■ 040 68157777 Email customercare@dcbbank.com Web www.dcb.bank.in

Terms and conditions apply. *Minimum Average Quarterly Balance (AQB) to be maintained in DCB Niyo Savings Account for cashback eligibility is ₹25,000. DCB Bank Limited

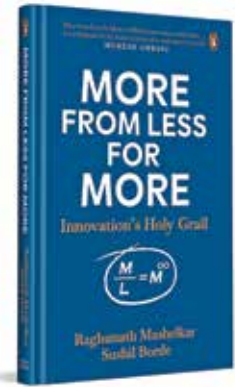
BOOK EXTRACT

Technological change doesn't benefit everyone at first shot. Innovations come at a price which keeps them from reaching masses of people. But what if they could be designed, built and distributed to

be affordable for those who need them most? Access equality is the burden of 'More from Less for More' by Dr R.A. Mashelkar and his spirited co-author, Sushil Borde. Dr Mashelkar is a celebrated scientist and thinker. His humble beginnings on the streets of Mumbai have led him to see innovation as a means of lifting up those who get left behind. It could be a pocket-sized heart monitor or a non-invasive scanner for cancer.

He has been speaking in forums across the world on 'Gandhian Engineering' or using science, tech and markets to serve the last man. It is an idea that has been around but whose time has come.

The Anjani Mashelkar Foundation, named after his mother, has identified and supported innovators who have made a difference through their pursuit of the larger good.



GREAT QUEST: THE INCLUSIVE INNOVATION

Gandhian Engineering to benefit the poor

BY R. A. MASHELKAR & SUSHIL BORDE



WE'RE living in unprecedented times. Some might call it an age of uncertainty — of wars, trade disruptions, climate volatility, and social unrest. But we belong among the believers. For us this is, in fact, the best era to be alive.

We see humanity standing more empowered than ever before. Breakthroughs in science and technology are accelerating and what was once unimaginable is now possible. Artificial intelligence redefines human capacity. Life expectancy has increased. Polio and smallpox have been eradicated. Global literacy has never been higher.

But looming over these huge successes, a major challenge now presents itself — of how to deal with inequality. A rising tide doesn't lift everyone equally. How then should those who get stranded be carried along?

India, for instance, has achieved milestones in poverty reduction, literacy and infrastructure. It is the fifth largest economy in the world, but it is also the most unequal among major economies.

The World Inequality Lab 2023 indicated that the richest Indians (top 10 percent of the country) owned 58 percent of national income share and 65 percent of the national wealth. The income and wealth share of the bottom 50 percent was 15 percent and eight percent, respectively, the lowest in India's recorded history.

In 1991, India had one billionaire; in 2022, there were 162. Indian billionaires now account for 25 percent of net national income.

AN IDEA WHOSE TIME HAS COME How can equality be achieved? The answer lies in 'Gandhian Engineering' or the philosophy of more from less for more. It is an idea whose time has come in the 21st century when the planet struggles with achieving equality with sustainability.

To the question "What kind of engineering is the most crucial for the twenty-first century? Chemical? Computer? Electronics?" the answer is 'Gandhian Engineering' which derives **More from Less for More**.¹

Mahatma Gandhi's two tenets were: "I would prize every invention of science made for the benefit of all" and "The earth provides enough to satisfy every man's need but not every man's greed".

These Gandhian tenets were intended to save the world and are especially relevant to a planet experiencing rapid technological change. The first tenet referred to affordability; the second to sustainability. They address the challenges of the 21st century.

The five words — **More from Less for More (MLM)** — hold the key to the world's sustainable future. They combine three compelling priorities — Equitability, Profitability, Sustainability.

This unique platform is humankind's response to enhancing prosperity for the largest number of people, increasing wealth for innovators and protecting environmental integrity. These three attributes hold the key to a new world.

In the pursuit of innovation, two dominant paradigms have emerged,

¹ R.A. Mashelkar addressing the Australian Academy of Technological Sciences and Engineering on Indian Innovation: From Gandhi to Gandhian Engineering in 2008.



Same city, two worlds: Upmarket Cyber Hub with its offices and shops in Gurugram



And a women labourer with her child at a construction site

both of which exacerbate inequality:

More from More for Less (MML): This MML strategy focuses on creating high-end, feature-rich products that are only affordable to the wealthy. It breeds exclusivity, creating a world where the inequalities of access rise exponentially.

Less from Less for More (LLM): This LLM approach caters to the masses but compromises quality, offering substandard products to the poor. While it increases accessibility, it denies dignity, aspiration and happiness to those who deserve better.

Both paradigms fail to address the fundamental need for equality — not just economic equality but the deeper, more profound equality of access, opportunity and respect.

On the other hand, the **More from Less for More (MLM)** strategy offers a transformative solution:

- **More from Less:** Leveraging technology, creativity and efficiency to reduce resource usage while enhancing quality.

- **For More:** Ensuring that the benefits of innovation reach the widest possible people, transcending economic and social boundaries. This strategy is grounded in the belief that excellence should not be the privilege of a few but the right of all.

MLM is not confined to innovators, scientists, startups or systems operating under "resource constraints". It empowers established businesses as well. It is about maximizing efficiency and serving a large population with few resources.

The difference lies in its focus: instead of focusing on profits, MLM prioritizes a larger and wider impact. The approach prioritizes inclusion and sustainability, demonstrating that it is possible to cater to more people without enhancing resource consumption.

MLM is the radical change in approach to use technology to solve inequality. It is not confined to startups, but also empowers established businesses.

MLM is the radical change in approach and the potential we hold today to use technology and innovation to solve inequality.

MLM BREAKTHROUGHS An MLM revolution struck our country a few years ago and spawned a new era of growth and inclusion like never before with a bold bet to make high-quality mobile internet as common as electricity and as cheap as a cup of tea.

The internet is a basic need these days in addition to food, clothing and shelter. It is a basic medium for access to information, education and a range of services.

It wasn't so a few years ago in India. Data prices were soaring and the majority in the world was excluded. Today the internet is accessible to people who might or might not have shelter. It is a necessary "highway" to essential services.

A conservancy worker and a corporate executive have a huge difference in income. But when both watch YouTube on their phone or make a video call to their family, the network they use is exactly the same — the

same speed, same quality, same reliability. That's access equality in action, made possible through affordable excellence. And that is More from Less for More!

Jio, the mobile phone company, is one of the biggest MLM revolutions that happened at scale in recent times. When Reliance, the petrochemicals behemoth, announced its entry into India's telecom market, the industry was in decline.

Most players were debt-ridden, voice telephony had been commoditized, and the future looked bleak.

Analysts called it a mistimed move that would erode Reliance's balance sheet. But Reliance saw opportunity where others saw saturation. Its insight was simple yet radical: the future of telecom was not voice, it was data — the new oil.

Reliance decided to democratize access. Rather than "playing the game better", it changed the game altogether. The guiding idea was MLM: generate more value, using less resources, for more people.

The company reversed the traditional sequence of business growth. Instead of starting with high prices and then reducing them gradually, it began with an ultra-low price — one that competitors could not match.

In 2016, Jio launched 4G LTE services free for six months, then offered data at less than \$0.10 per GB, just five percent of prevailing rates. Voice calls were made free forever. The result: the world's steepest price crash, not to gain short-term market share, but to unlock a vast under-consumed market.

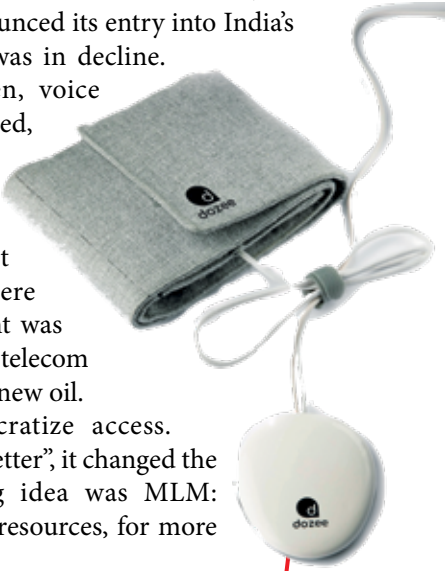
Jio's philosophy was that affordability fuels inclusion, inclusion drives scale, and scale sustains profitability. The company backed this conviction with innovation and execution. It built the world's largest all-IP 4G network, developed proprietary software replacing 95 percent of imported systems, and laid 150,000 miles of optical fibre using indigenous horizontal drilling technology. It engineered low-cost towers, automated customer onboarding using Aadhaar e-KYC, and achieved activation in under five minutes — onboarding millions of customers each day.

Every decision reflected "more from less": modular network architecture, local manufacturing, rapid scalability, and automation at scale. In less than three years, Jio turned India into the world's largest data consumer, slashing data prices by 95 percent. Monthly consumption soared from 0.15 GB to over 10 GB per user. Jio became the first exabyte network in the world, carrying nearly eight percent of global mobile traffic and connecting over 400 million subscribers — more than the population of the United States.

Jio's impact went far beyond telecom. It accelerated digital banking, e-commerce, online education, and startups. Rural internet users more than doubled, artisans reached global markets, and millions gained access to digital services once considered a privilege. By making internet access nearly free, Jio bridged India's digital divide and redefined connectivity as a human right.

Mukesh Ambani calls Jio "the philanthropy of the internet". Indeed, Jio transformed India from a voice-poor, data-starved economy to a digital powerhouse — achieving MLM at a scale that lifted millions.

Another of history's greatest technological breakthroughs is being witnessed in Artificial Intelligence (AI). It is transforming how people, businesses and entire nations operate. While AI has existed for decades,



Mudit Dandwate



Gaurav Parchani

generative AI, which creates text, images and more, has elevated AI to unprecedented heights. However, AI comes today with a huge cost. AI models demand enormous computing power, electricity and money to develop and run.

DeepSeek, the Chinese start-up, disrupted the global AI industry by building a GPT-4-level model at a fraction of the cost. While others spent billions, DeepSeek used smarter design and resource optimization to deliver More from Less for More.

Priced nearly 90 percent lower than OpenAI or Anthropic, its open-source model democratized AI for startups, researchers, and developing nations. DeepSeek proved that even in the world of trillion-parameter models MLM can power inclusive innovation.

MLM IN HEALTHCARE The Anjani Mashelkar Foundation was established in 2011 to improve the lives of disadvantaged individuals through science and technology.

The foundation gives a prize each year to innovators who come up with affordable, high-technology devices that take the benefits of modern science to the poor and marginalized.

The foundation further connects these innovators to funding so that they can develop their products and market them on a large scale.

The foundation's efforts have resulted in several innovations being recognized and adopted. These have been medical devices that make diagnostics simpler, cheaper and easily accessible.

The Dozee for instance, makes it possible to monitor a patient through a mat with sensors placed in a hospital bed.

It is based on vehicle dynamics by which a car is tuned by feeling the vibrations on a steering wheel. The idea came to Mudit Dandwate, a graduate of IIT Bombay, when he would worry about the health of his aged parents. How could he be instantly alerted if they were having a problem?

Dandwate was joined by Gaurav Parchani, also an engineer. They pooled their savings to develop the idea. Thus, the Dozee was born by repurposing automotive intuition into human care.

They started with a thin sensor mat to read thoracic micro-vibrations and infer heart and respiration. Then Mudit's puppy, Pi, kept chewing prototypes. The founders hid the sensor under a mattress, serendipitously discovering that the signals still came through. The Dozee would now be continuous, contact-free, remote. Place the mat, connect, and the system streams vitals to a central dashboard.

At its heart lay ballistocardiography — reading the mechanical forces of each heartbeat across time. Where ECG captures electrical spikes in short segments, BCG senses continuous micro-movements: heart rate, respiration, variability, even tremors and posture shifts. Algorithms learn patterns, clinicians set triggers, alerts arrive early.

The potential for the Dozee is enormous. India has two million beds for 1.4 billion people. There are just 125,000 ICU beds and the nurse to patient ratio is way below international standards.

The Dozee converts ordinary beds into step-down ICUs in minutes. It centralizes monitoring so that nursing time shifts from routine

With Jio, Reliance decided to democratize access. It changed the game. The guiding idea was MLM: generate more value, using less resources, for more people.

measurement to timely intervention. During COVID-19, when corridors became wards, the Dozee's sensors helped identify early deterioration, improved triage and reduced periods spent in the ICU. Hospitals monitored patients from command centres and apps, reducing exposure for staff.

The Dozee has provided medical-grade accuracy to disprove sceptics. It has surprised clinicians. For instance, Anjali, 22, was given a clean bill by her doctors. But the Dozee flagged an abnormal respiratory pattern. Further evaluation revealed asymptomatic tuberculosis which could then be treated before it turned visible. Each year she now blows a candle, whispering, 'For Dozee!'

The Dozee has been adopted by hundreds of hospitals for thousands of beds. Experience with the Dozee in collaborations with cardiac institutes and universities has shown that wrist movements mislead while thoracic vibrations are more accurate.

SanketLife is the name of a heart monitor which is the size of a matchbox. Rahul and Neha, both engineers, were living out the Indian middle-class dream of secure jobs, savings, home EMIs and good schools for the children.

They were on course till 2013 when Rahul's father felt a tightness in his chest. Forty minutes to the hospital felt like 40 years. Angioplasty in the golden hour saved him. Relief arrived with a question that wouldn't leave: the next time pain strikes, how to know whether it is a heart attack or just indigestion?

What if ECGs could be done at home — simply, affordably without having to rush to the hospital? They searched for a solution but none existed.

The chest pains recurred. Four-hour hospital cycles became a ritual. One evening Rahul decided to make that small and affordable heart monitor that would serve his family and countless others.

In a home lab and with a frugal budget, Neha and Rahul used their skills in coding to create a prototype. It took all of two years, but doctors rejected the prototype saying it didn't have the 12 leads which would qualify it to be regarded as a dependable device.

They went back to the drawing board, but soon money ran out. They were lucky to get a grant from the Tata Trusts. From their efforts finally came SanketLife: a palm-sized, 12-lead, medical-grade ECG that mirrors hospital output — without gel, wires, or the wait. Touch, record, transmit; a report and doctor review follow in minutes. Clinical studies showed high concordance.

They had shrunk the ECG machine to a device that could sit in your pocket at the cost of a family dinner. Miniaturization unlocked a new business model — testing anytime, anywhere; cohorts and cloud analytics; preventive triage before the ambulance.

The impact is tangible. Over 25,000 devices across more than a



Rahul Rastogi



Neha Rastogi



Sanket shrinks the ECG machine. Dozee monitors a patient with a mat with sensors in the hospital bed. SaveMom solves mother and child problems in tribal Kerala.



Mihir Shah, created iBreastExam



S. Murugesan invented SaveMom



dozen countries; one million+ ECGs run outside traditional labs — on rigs, ships, remote outposts, homes that are far from hospitals but now close to care.

For Rahul's father, Sanket meant dignity: daily vigilance without dependence. For millions living with uncertainty, it means the difference between panic and a plan. And for a health system stretched by queues and geography, it means shifting scarce clinical time from measurement to

decision-making.

Sanket's engineers kept pushing to reduce complexities, improve use of the cloud and keep cost down. In 2023, Sun Pharma acquired a strategic stake in the company, making it possible to widen distribution and step up manufacturing. The roadmap now reads Sanket 360 — a palm-sized device tracking SpO₂, blood pressure, beats per minute and more with 12 leads. It is clinical-grade anywhere.

What began as a son's concern for the health of his father became an innovation and then grew into an enterprise. The more miniaturized the device the wider is its use, allowing

more people to benefit. With compression intervention time also comes down.

There are dozens of such great stories under the Anjani Mashelkar Foundation. SaveMom was created to solve mother and child problems in the tribal regions of Kerala. iBreastExam is a portable hand-held device to screen for breast cancer painlessly. Swaasa is an AI-based solution for analyzing cough sounds to screen for respiratory disorders.

So, what is the key to getting MLM right? In our foundation, we have been using the ASSURED framework that stands for:

- A (Affordable)
- S (Scalable)
- S (Sustainable)
- U (Universal)
- R (Rapid)
- E (Excellent)
- D (Distinctive)

MLM is not just a mantra — it is a revolution born of creativity, compassion and courage. It dares us to build a world where dignity and excellence transcend privilege. As Nelson Mandela said, "Overcoming poverty is not a gesture of charity. It is an act of justice." MLM

embodies this justice — turning dignity into a universal right, not a luxury.

In fact, if MLM has fascinated you so far, the future is about more! It's not just more for less, the future has potential for 'Far More for Far Less'. This means causing not just disruption but extreme disruption; not just inclusion but accelerated extreme inclusion. And this is what we need today.

When inequality grows, Thomas Piketty warned, it 'tears societies apart'. MLM offers a way to heal and unite — a moral and social compass, not just an economic idea. It envisions a world where smiles replace tears and hope replaces despair. ■

In a volatile world

Tomorrow belongs to me



BLAME it on Xi Jinping. In 2012 he urged this people to look to a great future and called it the 'China Dream'. A decade later Narendra Modi promised a bright future for India with his Amrit Kaal and Viksit Bharat slogans. Donald Trump said he would 'Make America Great Again'. Not to be left behind in this celebratory futurism, Vladimir Putin promised his people to repair Russia's wounded pride through conquest. Closer home, Revanth Reddy promises a Future City.

It's all about tomorrow. Forget Omar Khayyam's *Rubaiyat* — "Unborn tomorrow and dead yesterday, why fret about them if today be sweet?" Today ain't sweet. So, think tomorrow. The Bharatiya Janata Party (BJP) in fact wants us to dream both about an unborn tomorrow and the dead yesterday. The distant past was glorious, damaged by the nearer past. The future is ours to take, so why obsess about our unhappy todays?

Xi's Dream, Modi's Viksit, Trump's MAGA and Revanth's Future City reminded me of a song from Bob Fosse's 1972 movie *Cabaret*, based on Christopher Isherwood's anti-fascist novel *Goodbye to Berlin* (1939). In the movie young customers at a beer garden outside Berlin join members of Hitler Youth standing up, with an arm raised forward, singing "Tomorrow Belongs To Me".

"Now Fatherland, Fatherland show us the sign / Your children have waited to see / The morning will come / When the world is mine / Tomorrow belongs to me." That was Hitler's rallying call that helped mobilize a sullen Germany.

The promise of tomorrow is an old political trope that politicians have used to enthuse cadre and the public, partly to mobilize their support and partly divert attention from the anxieties and miseries of today. It goes to China's credit that it has at least created a today that few would have even dreamt a generation ago. At home, however, the promise of a better tomorrow — Viksit Bharat — does not as yet

sound credible given the magnitude of the task ahead.

As we enter yet another New Year, when we wish each other a "happy, peaceful, prosperous" year ahead, the news was all about death and destruction. Christians attacked for celebrating their festival, Muslims attacked for partying with Hindu friends and people of different faiths dying after consuming contaminated drinking water. Indore's water supply did not discriminate between religions.

Let me not make much of a muchness. It is in the nature of democratic politics that politicians seek support based on promises. After all every political party goes into an election with a manifesto of future performance. Rarely do they in fact seek support based on performance. Sometimes they do, pointing to one big



A scene from 'Cabaret'

achievement — like K. Chandrashekhara Rao seeking office after the creation of a separate state of Telangana or Narendra Modi going into the 2024 general election after consecrating the temple at Ayodhya.

Sometimes voters reward performance, sometimes they don't. In 2009 the electorate rewarded Prime Minister Manmohan Singh for his performance in his first term, in 2014 it did not. In 2024 Modi's BJP lost majority in the Lok Sabha, despite delivering in time on the temple promise. In any case, rarely do politicians in power want too much attention paid to the present or the immediate past. It is always the distant past and the distant future that politicians prefer to invoke.

But celebratory futurism can become counter-productive. So, for example, Xi no longer speaks about the China Dream and when was the last time one heard Modi speak about 'Aache Din' or Make in India or Swachh

Bharat. Today talk does not go down well because one evaluates it against performance. So, keep the focus on tomorrow. Which is why it is important that the media remind politicians in power about their promises of yesterday.

On August 15, 2024, Prime Minister Modi announced from the Red Fort that he would constitute a "national mission for ease of living". Sixteen months later we still await the setting up of that mission, not to mention delivery on the objective.

After reading my new book, *Secession of the Successful: The Flight Out of New India* (Penguin, 2025) many have asked me what the government can do to discourage brain and wealth drain — the flight of human and financial capital — and encourage overseas Indians to return home. The answer is quite simple. The government — in New Delhi and in state capitals across the country and in every panchayat and municipality — has to deliver on the promise of 'ease of living'.

Simple things. End the tyranny of KYC — Know Your Customer — that banks, cooking gas dealers and a whole lot of others harass people with. Provide potable drinking water. Affordable healthcare. Better schools. Roads without potholes. The municipality collecting garbage. The list can go on. It is a list of simple demands. Nothing big, like Viksit Bharat or making the country a Vishwaguru or making Hyderabad feel

like Manhattan, or enabling every Indian a life from "Hawaii *chappal* to hawaii *jahaz*" (remember that one?).

Just the day to day stuff. Returning home to Hyderabad every now and then all I now seek is better roads, cleaner streets. Hyderabad, or at least the part I live in and usually drive around, has more fancy cars — from BMWs to Lamborghinis — than where I usually reside, i.e. South Delhi. But the roads are a torture. As one drives through Cyberabad looking at tall glass and steel buildings with fancy names my back is punished by bumpy roads.

Indore has been winning accolades for its performance on Swachh Bharat parameters. And then we enter the New Year with people dying drinking just plain water. Not hooch, but water. Swachh Bharat indeed! But, tomorrow belongs to me! ■

Sanjaya Baru is an economist, former newspaper editor and author. His most recent book is 'Secession of the Successful: The Flight out of New India' (Penguin, 2025).



VUCA¹, an acronym from times past, may have been considered — like other such fashionable and ephemeral buzzwords — to have long exceeded its half-life and set to cede space to some other smart formulation of alphabets. Yet, the reality is that we live in a world that is today more volatile than ever, with greater uncertainty and complexity. Ambiguity defines the times; for instance, with little difference or time between friends becoming enemies. Overnight, today's ally may become tomorrow's bugbear.

What better example of this than the Indo-US relationship which, in the space of a few months in 2025, moved from the warmth of friendship and strategic allies to a frosty, trust-less distancing. The US has now become India's tormentor, an unfaithful partner who is now practically in bed with Pakistan. To add insult to injury, it has weaponized trade, with Indian exports facing the highest tariffs (and other sanctions and restrictions, not faced even by US enemies). The only solace is that India is not alone; even long-standing allies in Europe are feeling abandoned.

In his new term, President Donald Trump has already unveiled his new, super-aggressive persona, marked as much by unpredictability as an uncaring transgression of all boundaries (metaphorically and also literally). This has reached new heights with his latest action in Venezuela, following bombing of Syria, Yemen, Iran and Nigeria. Earlier, standing four-square behind Israel in its genocide and demolition in Gaza, he supported its bombing of practically every country in its neighbourhood, extending all the way to Iran and Qatar. His disdain for a rules-based international order (long promoted by his own country, with "rules" being what it had created) has been evidenced by the way he has dealt with trade, tariffs, the World Trade Organization: raised to new heights with, first, the firing on Venezuelan ships in international waters and, worse, killing the survivors floating in the sea; now, in bombing that country and kidnapping its president and his wife.

The mercurial US president, in his

megalomaniac desire to be recognized as GOAT (greatest of all time) and expecting allies to be courtiers, seeks to create an American Empire. It would not be a surprise if he soon announces the annexation of Greenland ("essential for American security") and mounts greater pressure on Canada to be the 51st state of the US. Equally possible are threats, followed by Venezuela-style action, to Cuba and Colombia. Brazil may be next on the list: it is too autonomous, has a socialist leader in charge, and often aligns with Russia and China.

What might all this portend for India? Looking ahead, we should be prepared for jolts and even extreme contingencies (500 percent tariffs have been threatened), especially if we don't bend to US/Trump wishes. India did maintain a loud silence on the Gaza genocide,



The US has now become India's tormentor, practically in bed with Pakistan

abandoned the Global South on Palestine, took a wishy-washy stance on both the US-Israeli bombing of Iran and the recent events in Venezuela, and did not join in BRICS condemnation of US action in Venezuela. Despite this kow-towing to US sensitivities, Trump may yet be dissatisfied with our firm stand on some import tariffs, our strategic autonomy, and not giving him credit for ending the Indo-Pakistan conflict in May 2025. One sign of this is the punitive tariff on our exports to the US because we import Russian oil (though we abandoned Venezuelan oil, as also the economically advantageous Iranian oil). While Hungary was given a free pass on Russian oil, "close friend" India — and not "enemy" China — was singled out for the highest tariff.

If a trade deal is not signed on US terms, we need to brace for further tariffs, other restrictions, and even sanctions against Indian companies. Some kind of squeeze on Indian IT (our biggest export to the US) and restrictions on US companies operating in India may also follow. Who knows, beyond tariffs and

sanctions, we may well be put on Trump's "bomb list". For those who consider this outlandish, imagine (based on recent instances) his check list for such action. Long-range missiles and growing nuclear weapons capability (Iran); anti-Christian mobs (Nigeria); independent foreign policy, good relations with Russia and/or China (Iran and Venezuela); strong natural resource base, especially oil (Nigeria, Iran, Venezuela); a leader who projects himself as a champion of the poor or as a socialist (Venezuela). Though India lacks great oil reserves, we do have massive energy resources (coal and thorium, in particular) and other valuable minerals (iron ore). We, therefore, tick all the boxes and would qualify for the bomb list. Not so far-fetched, after all!

Another upheaval we should expect is a growth in aggression and war between countries. Russia, and then Israel and the US, have opened what may be the floodgates for open threats, gunboat diplomacy, territorial acquisition, and indiscriminate bombing. In the new era, kidnappings (*a la* Maduro) and murders on foreign soil (Israel's forte) will grow. Might this open the way for a new wave of cross-border terrorism through abductions and "collateral damage"? One wonders about world reaction (especially India's) if some country or group were to kidnap Netanyahu and produce him before the International Criminal Court, which has issued an arrest warrant against him for war crimes.

Meanwhile, embassies may no longer be required, as the US president has set the style of diplomacy being conducted and foreign policy being announced through social media or via press briefings, interviews, and decrees. Phone calls add to this style of direct diplomacy, leaving little scope (or jobs) for diplomats.

We seem back to 19th century colonialism: bombs, war, conquest, puppet regimes, spheres of control, and empires. The West was a past master at this, though the US itself generally preferred money power: acquiring vast territories through purchase. Other European colonizers have lost their military power as also whatever moral veneer they recently added, by being mute spectators to Israel's doings; worsened now by avoiding any condemnation of US actions.

In this turmoil, the biggest beneficiary is China: much of it the result of US consigning India to the doghouse, the rest by our self-goals. Clearly, we need to be wary and prepare for further storms ahead. ■

Kiran Karnik is a public policy analyst, author, and columnist. His most recent book is 'Decisive Decade: India 2030, Gazelle or Hippo'.

Indian force the Nazis raised



**WORLD
VIEW**

SHYAM BHATIA

SIX months before the Red Fort trials turned officers of Subhas Chandra Bose's Indian National Army into national symbols, another Indian force raised during the war was quietly dismantled and sent home. There were no crowds, no lawyers, no slogans and no trials. Most Indians have never heard of it.

That silence is now being disturbed not in Delhi or London, but in Berlin. The German Historical Museum has begun revisiting the story of the German-raised Free India Legion — often called the Tiger Legion — as part of its effort to examine German history “from the outside”. The rediscovery is not driven by Indian commemoration, but by Germany's own attempt to confront how it instrumentalized colonial soldiers. What emerges is not a forgotten battlefield epic, but a case study in how soldiers are mobilized, managed, and erased once they outlive their political use.

The timing matters. In the final weeks of the Second World War, as Nazi Germany collapsed, the legion attempted to withdraw southwards towards neutral Switzerland. Indian soldiers in German uniform marched through Alpine border regions hoping geography might spare them the reckoning they feared. It did not. They were disarmed by Allied forces near the Swiss frontier, taken into custody, and by the spring of 1945 the unit had ceased to exist.

Numbering roughly 2,500 to 3,000 men at its peak, the legion was repatriated quietly to British-controlled India months before the first INA trial opened at Delhi's Red Fort in November 1945. There was no equivalent public moment. No dock. No chance to defend themselves — or to be turned into symbols.

This is where comparison becomes unavoidable.

When the British prosecuted INA officers later that year, the charge was explicit and theatrical. They were accused of “waging war against the King-Emperor”. The trials were meant to reassert imperial authority at a moment when Britain's grip on India was already slipping.

Instead, they produced martyrs — and, in at least one case, a future minister. Shah Nawaz Khan, one of the three officers tried at the Red

Fort, went on to serve as a deputy minister in independent India. The attempt to criminalize the INA ended by legitimizing it.

Nothing comparable was allowed to happen with the men who had served in Europe.

The German Historical Museum's material helps explain why. Drawing on German military records, propaganda photographs and internal correspondence, it shows that the Free India Legion was never intended to become a sovereign Indian force. Historian Baijayanti Roy, whose research informs the museum's work, has described it as a product of “political calculation and Nazi propaganda”.

That calculation extended even to recruitment. Sikhs were heavily over-represented in the legion, not because of ideology but because German recruiters inherited the British Indian Army's own

A German museum revisits the story of the Tiger Legion. It is a case study in how soldiers are mobilized and erased.

“martial race” demographics. Many of the Indian prisoners captured by Rommel in North Africa came from Sikh-heavy regiments. German propaganda leaned into this inheritance, highlighting turbans, beards and martial imagery in parades and inspections. Muslims and Hindus were also present, but Sikh soldiers were made visually central to the spectacle.

The irony is sharp. A colonial stereotype developed to serve the British Empire was recycled intact by Nazi Germany for its own ends.

Yet for all the pageantry, the museum material makes clear how little trust underpinned it. Indian soldiers were not commissioned as officers. Command remained entirely German. They were mobilized but never empowered.

Daily life in the legion exposes the racial hierarchy even more starkly. German officers worried obsessively about discipline, sexuality and “moral corruption”. While stationed in southern France, the Wehrmacht established a separate brothel for Indian soldiers so that German troops would not have to share prostitutes with men they regarded as racially

inferior, according to records cited by the museum. This was not camaraderie; it was segregation.

To hold the unit together, German officers produced a daily internal magazine in Hindustani called *Bhaiband*. Written in awkward language by men who barely understood modern India, it mixed fabricated war news, praise for Hitler and Bose, crude humour, and clumsy lectures about Sikh gurus. The museum presents this as an attempt to manufacture loyalty in a unit the Germans themselves did not fully trust.

Nor was this a fighting army in any meaningful sense. Indian soldiers were photographed laying barbed wire, manning static positions, and guarding stretches of the Atlantic Wall. Aside from a brief deployment in Italy, the legion barely saw combat. It existed primarily as managed display.

That display included ritualized loyalty. They were made to salute and chant slogans as part of a spectacle they did not control. There is no evidence they initiated these rituals or embraced Nazi ideology. What the museum reveals instead is coerced performance under German command.

All of this shaped what happened after defeat. Because the legion never developed an Indian officer corps, Britain had no senior Indian commanders to put in the dock. There were no equivalents to Shah Nawaz Khan, Prem Sahgal or Gurbaksh Singh Dhillon. The German archives preserve many names of officers, academics and propagandists. They preserve almost none of the Indian soldiers'.

Britain's decision was therefore quiet, but not accidental. By early 1945, the empire already sensed the danger of turning Indian prisoners into future martyrs. Silence was safer than spectacle.

Subhas Chandra Bose grasped the limits of the German experiment and left Europe for Southeast Asia, where the INA offered Indian command, Indian officers, and a political future. He believed that sacrifice demanded recognition; if not victory, then dignity. What would he have made of Indian soldiers mobilized in Europe, denied command, denied trials, and denied even remembrance?

India has spent decades arguing about the meaning of the INA. Almost no one has argued about the fate of the Indian soldiers who surrendered near Switzerland and were sent home in silence months before the Red Fort trials began.

It has taken a German museum, 80 years later, to make visible what the empire chose to forget. ■

Shyam Bhatia is the London correspondent of The Tribune.

In a fragile Sundarbans



**LIVING
RIVERS**

VENKATESH DUTTA

THE Sundarbans, located in the Ganga delta across India and Bangladesh, is the world's largest mangrove forest. The forest covers over 10,000 sq. km of which about 60 percent is in Bangladesh and the remainder in India. The word Sundarbans comes from ‘Sundari’ which is the local name of the dominant-abundant mangrove species *Heritiera fomes*. There are two dozen other mangrove species found here.

The delta came into existence over thousands of years through sediments carried down by the Ganga, Brahmaputra, and Meghna rivers. These three rivers confluence into the Bay of Bengal, making the estuarine tails of multiple streams. The delta becomes the transition zone connecting the freshwater of the rivers and the saline waters of the Bay of Bengal.

There are numerous islands, typically 3 m to 6 m in height, made up of silt and silty clay brought from these rivers. These islands get inundated during high tide. From the Landsat 7 satellite image of the Sundarbans, released by NASA Earth Observatory, the entire landscape looks like a painting intersected by multiple tidal streams, drainage lines and channels. The waterways are so distributed in the forests that one can navigate through the forest by boat. And the boundary of the forests follows the natural river channels.

The entire mangrove forests are known for their unique maze of tidal waterways, mudflats, and rich biodiversity, especially as the only mangrove habitat supporting a good number of Royal Bengal tigers that can swim. The mangroves provide nursery, breeding, feeding and resting grounds to a variety of other animals and birds. The forests act as unique carbon sinks, also working as a crucial natural barrier against cyclones, supporting a rich variety of fisheries.

The Sundarbans has a long history of forest management. The British East India Company obtained proprietary rights over the Sundarbans from Mughal Emperor Alamgir II

in 1757. They started mapping the area and completed the exercise in 1764 — describing it as a “jungle” full of deadly diseases and man-eating animals like tigers, crocodiles and snakes.

They also found that the total area of the Sundarbans in India and Bangladesh was around 36,000 sq. km. Systematic forest management started a century later. In 1875 a large portion of the mangrove forests was declared reserved forests under the Indian Forest Act of 1865 (the first major British legislation to assert state control over India's forests).

Frequent tiger attacks were widely reported in the Sundarbans, and these incidents came to be viewed as a major impediment to human



The mangrove forests are known for their unique tidal waterways

settlement and economic development in the region. In response, the government appointed professional hunters and offered cash rewards for killing tigers. The British converted considerable areas in the Sundarbans to cultivable land between 1781 and 1875. However, they realized that it was not profitable due to the hostile environment and poor production capacity of the soil.

The Sundarbans Tiger Reserve came up in 1976 and was later declared a National Park in 1984. UNESCO gave it the status of a protected World Heritage Site in 1987. A 2009 study reported 1,259 tiger deaths during 1881 to 2006.

While deforestation is rising in many forests throughout the world, the Sundarbans' mangroves have been comparatively well-preserved, thanks to its designation as a protected World Heritage Site, inclusion of the Sundarbans among reserved forests and the presence of the inimitable Royal Bengal tigers.

However, in recent years due to increasing population around the area, there is much pressure in the buffer zone. Centuries of

habitation, fuelwood harvesting, and conversion of mangroves for agriculture and aquaculture have taken a profound toll of this unique landscape, resulting in extensive habitat loss and steep declines in biodiversity.

It also faces submergence threats from climate change and sea level rise. In fact, rising sea levels have already submerged around 20,000 acres of forest area and the Sundarbans faces severe coastal erosion. The Sundarbans floor varies from 0.8 to 2.5 metres above sea level, which means a two-metre rise in sea level may submerge 90 percent of the delta.

Considering the present sea level rise of about 4 mm per year, it is estimated that by 2050, almost 40 percent of the Sundarbans forests could be under water. There will be no

suitable tiger habitats remaining, especially in the Bangladesh part of the Sundarbans. Also, due to severe coastal erosion and flooding, thousands of people living around the fringes of the coastal forest delta will become homeless or environmental refugees. It is observed that the delta is bearing the brunt of several cyclones and storm surges in recent years. Almost 25 years are required for vegetation to recover from each storm. The climate scenario predicts that the frequency of these will increase in future. So the forests get little time to recover.

With rising sea levels, salinity is also increasing. The type of forest differs depending on levels of salinity. Where salinity is more, there will be a brackish swampy mangrove forest with salt tolerant species; with freshwater, there will be a freshwater swamp forest. It has been observed that with an increase in salinity, species that prefer low saline conditions, such as Sundari, have started to disappear. Therefore, the biodiversity of the mangrove forests is being reduced slowly.

The Sundarbans is indeed one of the most beautiful biospheres in the world, but also highly vulnerable with its unique fragility. It needs protection and serious conservation efforts. The degraded sites demand special restoration, by planting mangrove species in large gaps of the forest. Seagoing vessels increase habitat isolation for the tigers and they must be regulated. What we need is a dedicated agency or task force with a clear mandate and budget lines for resettlement, disaster risk reduction, biodiversity conservation, and livelihoods. ■

Venkatesh Dutta is a Gomti River Waterkeeper and a professor of environmental sciences at Ambedkar University, Lucknow.

Dubious rabies vaccine



**CITIZENS
IN COURT**

MEGHNA UNIYAL

in pets ignored in the national rabies strategy discussions? Why is there no data or reference to AEFI (Adverse Event Following Immunization) reports? Why is there an assumption of protocol deviation in every death but no consideration of product-level failure?

The grim reality is that multiple deaths, despite timely post-bite vaccination, have occurred across India. In several recorded deaths immunoglobulin was reportedly administered, and vaccination followed the required protocol. In almost all cases the burden of responsibility is put on patients, rather than looking at the vaccine itself. While there is no unified public reporting system to

Photo: Civil Society/Umesh Anand



At a PHC in Kerala

assess treatment failures, making blanket statements of patient error are unfair and unscientific.

In several recent deaths, bites were not always in high-risk areas, indicating the need for an audit of the vaccine rather than blaming bite severity alone. Therefore, instead of examining failures in the system, the blame is subtly shifted to supposedly incorrect protocols and victims themselves. These considerations deflect attention from the vaccine itself and promote the idea that the vaccines themselves are infallible.

But real-world evidence says otherwise: Children are dying despite full compliance with treatment protocols. There is no attention given to a lack of post-marketing surveillance (pharmacovigilance). This reinforces the monolithic solution that 'vaccine is the only saviour.' This singular focus on "get the shot and trust the system" erases public choice, shuts down discussion and absolves state failure.

Adverse events are underreported or dismissed, and there is no transparent public registry of AEFI cases for anti-rabies vaccines.

Defending anti-rabies vaccine efficacy also completely ignores the growing number of reported cases where pets vaccinated on schedule still contracted or transmitted rabies. This omission is serious because it undermines the core assumption that vaccination — whether in humans or animals — is fail-safe.

While courts are willing to consider compensation in cases before it, what must be noted is that compensation is often routed under medical negligence or improper handling, and not for vaccine efficacy as the burden of proof is on the victim thus making it very difficult for the victim or their family to prove the same. It also needs to be emphasized that compensation comes from tax payer money and makes little difference to the government agency doling it out. Most importantly, compensation does not bring victims back to life.

Taking cognizance of the issues with the efficacy of the anti-rabies vaccine, some in the medical community are now recommending mandatory pre-exposure prophylaxis, especially for children. The suggestion that mandatory, pre-exposure vaccination for the entire human population can fix this problem, is fraught with exactly the same issues as post-bite vaccination and is an absurd, unacceptable proposition.

To build an argument that rabies vaccines are 100 percent effective, the burden of proof must include rigorous, transparent, and systematic explanations for every failure case, without defaulting to blame-shifting. Declaring 100 percent efficacy without room for scrutiny, failure of documentation or system accountability, turns a scientific claim into dogma.

It is irrelevant whether 50 people die of rabies or 50,000. Even one rabies death is one too many and unacceptable. Animal attacks, and especially India's 80 million free roaming dog population, aren't about disease alone. They primarily include physical and mental trauma of victims, medical costs, man-hours lost and lifelong injury, disfigurement or disability.

Disease control primarily necessitates that the vector is removed — in this case free roaming dogs. Coupled with criminal, medical and financial liability for pet owners and strict pet control laws, prevention of zoonotic diseases and risks is better, more effective, cheaper and more practical than any proclaimed cure, especially when human life and safety are at stake. ■

Meghna Uniyal is Director, Humane Foundation for People and Animals

LIVING

FOOD | TRAVEL | REVIEWS | PRODUCTS | GIVING

Getting the fit right Clothes for people with disability

AIEMA TAUHEED

IT requires a lot of weird calisthenics to get dressed when you have disability. You fumble with buttons and zips, sleeves and pants. It's time consuming, painful and creates a frustrating dependence. So it was for Soumita Basu. Diagnosed with psoriatic arthritis, she started losing mobility from 2010 and by 2015 she was completely bedridden.

"Even an oversized nighty would cause her acute pain," remarks her mother, Amita Roychowdhury Basu.

Desperate for solutions, Soumita scoured the internet for clothing options. She even approached designers to create adaptive garments. Most dismissed it as a noble idea that wasn't viable. Eventually, Soumita and her mother found a local tailor and began developing clothes she could wear with ease.

In 2020, realizing there was a market for such clothes, Soumita and Amita founded Zyenika, an adaptive and inclusive fashion brand that creates clothing for persons with disabilities, the elderly, and those recovering from surgery.

"It was through experience, based on trial and error, that we founded Zyenika," says Amita.

Soumita graduated in sociology from Calcutta University. She went on to do a master's in governance and public policy from the International Institute of Social Studies (ISS) at Erasmus University Rotterdam. She completed a PG Diploma in Journalism from the Asian College of Journalism in Chennai.

Soumita then worked in the development sector as a researcher. She also worked as a journalist. Fashion was never part of her career plan, she says.

But, at a small family gathering, something shifted. She was hesitant to attend because she didn't have attractive clothing to wear that wouldn't hurt her. In fact, she had normalized missing celebrations, whether weddings or parties, because of her clothing dilemma.

"Oh, you must look better than this," her sister insisted that day. Soumita replied, "Try your luck." Her sister styled her in a drawstring skirt pulled up under her arms, paired with a scarf and belt that helped her feel good in what she wore. That tiny moment, of wearing clothes that were comfortable and looked great, motivated her to start Zyenika.

Photos: Civil Society/Ashoke Chakrabarty



Soumita Basu with her mother, Amita, who is also her business partner



Natural fabrics like cotton, rayon and bamboo are used



"So, between my journalism and starting Zyenika, I was also immersed in discussions on public policy as a development researcher," she says. "One core idea in public policy is, if you have a solution, scale it. Replicate it." Her research background helped her understand the market and the clients she wanted to serve.

She began connecting with persons with

disabilities and later, the elderly, to learn from their daily negotiations with clothing. "They may not have scaled it," she says. "But they've each figured out some kind of solution, even if it comes with struggle."

With no mentors to guide her, Soumita learnt directly from her customers. "That's why I say

Continued on page 30

Continued from page 29

they were like my teachers," she explains. Customized projects became her live laboratory. Funds were limited, and she would tell customers she was still experimenting.

"I'd say, 'I'm happy to style for you, but you'll have to be patient.' And I was surprised, they were willing to pay for it." Some even paid extra. "If I quoted ₹1,500 or ₹2,000 for a garment, they would say, 'Here's another ₹2,000 for someone else who might need it.'" Their generosity helped sustain the fledgling brand.

But the bespoke model wasn't scalable. "₹2,000 only covered costs. It wouldn't pay anyone or support a business. Standardization had to follow," she says. This phase focused on learning largely through all the available resources, YouTube and through trial and error.

Zyenika's clothes feature large buttons, magnetic closures, Velcro fastenings, concealed openings, and no-bend trousers, enabling users

With no mentors to guide her, Soumita learnt directly from her customers. 'That's why I say they were my teachers,' she says.

to dress with ease despite limited shoulder, back, or finger movement. Demonstrating her own limited finger flexibility, Amita says "small buttons wouldn't even make it between her fingers".

Zyenika's clothing range is diverse. It includes no-bend trousers for men and women, kurtas with back openings, full front-open dresses, Velcro shirts and slip-on tees. Customers can choose between Velcro or buttons. Undergarments designed to open completely are sold in bulk.

The placement and direction of Velcro fastenings are crucial for security. Strips of Velcro are not aligned in the same direction. Amita displayed an underwear design secured with Velcro strips that could open completely.

Soumita explains that by orienting the Velcro strips differently, if a pull occurs in a certain direction, only one fastener bears the force while the others remain secure. "Because of the adaptation aspect, I had to use lots of physics," she adds. For instance, the amount of force required changes depending on the direction of pull or push — a principle that applies universally, regardless of the wearer.

Zyenika offers a special service for persons with disabilities who want to wear a saree. Customers can send their sarees to Zyenika,

Continued on page 32

ESCAPE TO ANOTHER WORLD IN KOCHI

CIVIL SOCIETY REVIEW

WHEN you are fleeing the noxious air and grim life during winter in Delhi and its surroundings, where should you go for a complete reset? Just about any place at a safe distance would be fine.

If you are okay with a three-hour flight, you could try Kochi for the experience of being in a lively city by the coast. It has an unabashed secular spirit, history in its streets, some great food and the scope to walk around as you please at any hour. The most important box to tick would be AQI — be assured you can breathe here.

December is the time in Kochi when churches and homes are lit up and the mood is festive in the run-up to Christmas and year-end. Cafes and restaurants are full. Wind down the day with some beer or wine. Pavement stalls boasting of the best meals in town actually serve them.

Go to Kochi for its easy pace, diversity, friendly local people and brooding architecture. But isolation is not what you should wish for. At this time of the year Kochi is teeming with travellers from all over because of its international appeal. The Muziris Biennale, an iconic arts festival, is held every two years — and this was a Biennale year with exhibitions and events spread across the city. Yet opportunities to do your own thing abound and solitude can be yours if you seek it.

Kochi was the first European settlement in India. After the Portuguese, came the Dutch and then the British. Those origins show up at every corner. The Francis Xavier Church was built in 1503. This is where Vasco da Gama, the intrepid Portuguese explorer who found his way to India by sea and landed at Calicut in 1498, was buried after he died in 1524. There is also the Santa Cruz Cathedral Basilica, originally built by the Portuguese in 1505, almost demolished but spared by the Dutch and then demolished and rebuilt by the British in 1887.

There are homestays and heritage hotels to choose from. We opt for Tower House because it is run by Aman Nath's Neemrana Hotels and having stayed at his other

properties elsewhere we are pretty confident that we won't be disappointed.

Tower House sits on the edge of Vasco da Gama Square beyond which there is a promenade with fish stalls and other hawkers. A line of Chinese fishing nets in the sea comes next. These are large nets that mechanically cast for a catch. They are believed to have been introduced in the 1400s by traders from China.

Unlike the churches, the square is a lost opportunity to capture Kochi's history. It has been left to fend for itself with sundry stalls and is a messy, often noisy, public space in need of better attention.

But dedicated it is to Vasco da Gama. And it is left to Tower House, our hotel, skillfully restored, to make up for what the square could have been.

Aman Nath tells us, and then fishes out an old image, which shows Tower House much closer to the sea. During high tide boats came in and got parked at Tower House. Earlier there was a lighthouse at the location.

Now, as a restored building serving as a hotel, Tower House has high ceilings, arches, pillars and wooden staircases and floors. The rooms and common areas ramble with no attempt to monetize the space. A central cavity with wooden banisters allows you to peer down on the reception desk. Into this old structure have been gently added all the modern amenities you could ask for such as air conditioning and hot water and well-equipped bathrooms with all rooms.

The rooms have names, not numbers. Ours is Braganza. Others are Moens, Albuquerque, Vaz, Menezes — 15 in all. When you go out you leave your key with others in a brass salver at the front desk. A large Christmas tree, all lit up, dominates the lobby. But also, nearby a small Krishna idol is aglow.

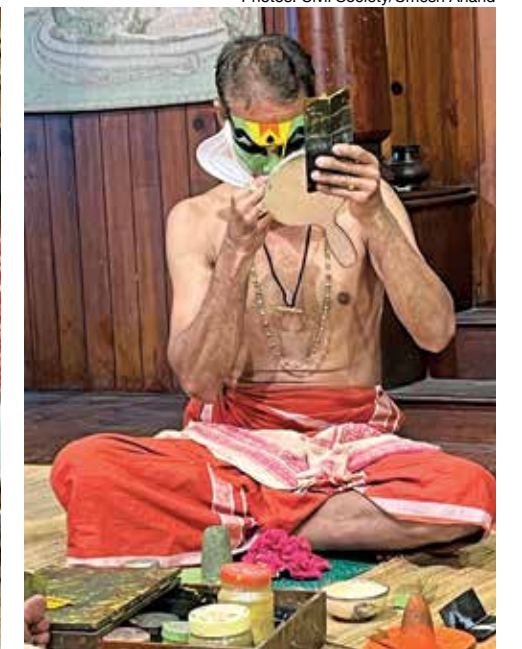
Tower House is a nice place to stay because of its ambience, location at the heart of Kochi's Fort area where everything is walking distance and, above all, its homely staff. Remember Aman Nath's hotels are non-hotels. The predictable is not on offer.



Room keys with names



A Kathakali performance



A dancer does his make-up



St Andrew's Church



Christmas and year-end lighting



Reminders of Kochi's history are everywhere



The lobby of Tower House with its central well and a twinkling Christmas tree



Wooden floors and rambling spaces

Kochi's Fort area is great for a ramble. Tower House gives you a shot at some solitude. The two go well together. So, sink into the hotel or go for a walk in the clean coastal air.

An evening well spent is at a Kathakali performance. It is by a group promoting classical art forms, including the martial arts.

The show begins much before the performance — the audience can watch the dancers put on their make-up. Next comes a brief but lucid introduction to Kathakali. Finally, the dancers take the stage.

The auditorium is a quaint structure at the end of a lane in the midst of other buildings. Walking down, one doesn't quite know what

to expect or where one is headed. Very soon you are at a gently managed ticket counter. It is an experience full of memorable surprises.

The Kathakali show is a stone's throw from the Basilica, one of the many reminders of Kochi's syncretic character. There are so many layers to discover. And though just a flight from Delhi, it's another world. ■

Getting the fit right

Continued from page 30

where they are pre-draped and transformed into a wrap-over, a “one-minute wear”. These aren’t regular pre-draped sarees — they are specifically designed to be disability-friendly. A high-quality petticoat is always included, since tucking can be a challenge for many. Unlike other brands that leave the *pallu* free, Zyenika offers clients the option of having it stitched in place. Prices for an altered saree are approximately between ₹950 and ₹2,200.

The Ananya series is a line of T-shirts illustrated by artist Ananya De, who has ADHD and autism. The thank you note included in every order is designed by Bengaluru-based Glevina D’Sa, diagnosed with autism at the age of two. The note and website carry information about these artists. “I always felt it would be good to feature expressions of artists with disabilities,” Soumita says. “Our clothes could be a medium of conversation. T-shirts felt like a good starting point.”

Natural fabrics are used unless specific adaptation is required. The focus is on durable, easy-wear clothing that won’t need to be discarded quickly. Most garments are made of cotton and rayon while bamboo is used occasionally. All fabric is sourced domestically within India.

The brand also works with factory waste and produces in small batches to minimize environmental impact. “We don’t have the pressure of having the same colour for multiple pieces,” Amita quips with a laugh. Their cutting techniques are planned carefully to reduce fabric waste even further.

She adds that Zyenika also challenges the usual narrative around disability. “Whenever we talk about persons with disabilities, or even senior citizens, there’s always this notion that we must do something for them. By offering products made by us, we’re trying to shift that narrative quietly because you are taking something from us.”

Soumita reaches her target group by partnering with various organizations, including hospitals and rehabilitation centres. Silvergenie, a company dedicated to providing elder care, and Samartha, a non-profit, are some of Zyenika’s partners.

The adaptive wear space is inherently collaborative. “All the people working here are what we today call social impact entrepreneurs,” Amita explains. “And when you talk about social impact, you can’t be boxing others out, you can’t create that impact by yourself.”

The market, they both believe, is huge and largely untapped. Take backache. An *Indian Express* report mentions a study by *Lancet* that says India may be having over 87.5 million people living with lower back pain. Products

like no-bend trousers aren’t just useful for persons with disabilities but also for anyone who struggles with movement. This positions adaptive wear as a solution with far broader appeal than the niche it is often assumed to serve.

Soumita also realized that while fashion and business have established streams of study, adaptive fashion still has no place in academia. “Today, I teach a course on adaptive fashion because there’s nothing like it available in the market,” she says.

Reaching the market continues to be the biggest challenge Zyenika faces. “I think not being able to access the market because of infrastructural inaccessibility upsets me a lot,” says Soumita.



Undergarments that open from all sides

Fashion and business have established streams of study. But adaptive fashion still has no place in academia.

Zyenika also directly or indirectly employs persons with disabilities or their parents, and outsources stitchwork to marginalized women, generating livelihoods.

Due to Zyenika’s clothes, the caregiver fatigue her mother once faced while dressing her daughter has eased. “I was under a lot of stress. Soumita would cry and struggle while changing. Even remembering it makes me dread that period,” recalls Amita.

Growing up, Soumita was never excited about shopping, often unable to find the right fit due to her body shape. As someone who was always conscious of her body, she wants the brand to cater to a wider range of body types and heights.

“The average height of a woman in India is 5 ft 2 in, but the average height considered when designing a garment is 5 ft 6 in, she chuckles at the absurdity. Alterations, she notes, aren’t always the solution. So there is a lot of scope to enlarge the idea of inclusion. ■

RANDOM SHELF HELP

The art of serenity

ANITA ANAND

THE hardcover book draws immediate attention. Eye-catching illustrations on textured paper portray aspects of Goan life: the cashew fruit, water waves, Portuguese architecture, fish, birds, palm trees, a guitar, a boat on water, folding deck chairs on a beach, and the famous *azulejo* tiles.

I found D’Souza’s book at the 20th anniversary celebration of the Literati bookshop in Calangute, Goa, a month ago. It was a day of book readings, music, drinks, and food, which I attended with four friends from my complex in Revora, North Goa.

The nearest village from my complex is Colvale, and I was delighted to learn that it is D’Souza’s ancestral village. He describes his ancestral home as a traditional Goan house starting with a *balcao*, a sitting area as you enter the home, usually in a veranda-like space. It opens into a hall, a living room, and a storage room for pickles, rice, coconut, and jaggery. There are bedrooms and a kitchen that lead into a backyard filled with trees. And there is a well.

Of Goan origin, D’Souza is a media professional based in Mumbai who started visiting Goa in the 1980s and became enchanted with the *susegad* mindset. ‘*Susegad*’, writes D’Souza, comes from the Portuguese *sossegado*, which literally means quiet, contentment, peace, and satisfaction.

The three elements, as D’Souza describes, responsible for *susegad* are climate, culture, and habits. He explores the history, geography, songs, dances, food, drink, and overall way of life in Goa, all presented in a charming, relaxed style. He interviews various Goans about what *susegad* means to them.

He introduces us to some important Konkani words and Goan proverbs, which are entertaining. For example, ‘Don’t eat salt before rice’ means doing things in proper order. ‘You can’t catch fish if you don’t wet your loincloth’ means hard work requires getting your hands dirty.

Goan cuisine is a blend of Konkani and multi-continental influences. But central to the meals are fish, rice, and the all-round *poi*, or bread. For those with a sweet tooth, the Goan queen of desserts is *bebinca*,



Festivals in Goa are linked to harvests, nature and religion

rumoured to be named after a Portuguese nun, Sister Bebinca. The seven-layered custard is cooked with flour, ghee, egg yolks, sugar, and coconut milk. It’s one of my favourites. Others include *serradura* (or ‘sawdust pudding’), *dodol* (a coconut-jaggery fudge), *patoelo* (rice flour and jaggery steamed in turmeric leaves), and *bolinhas* (small, sweet coconut balls). As you can gather, coconut and jaggery are key ingredients in the sweet dishes.

And for mango lovers, according to D’Souza, there are more than 82 varieties. The most popular is Alfonso, but other varieties are equally delectable.

For those who enjoy the local tippie, *feni* and *urak* are the most popular drinks. They are made by fermenting and distilling cashew or coconut sap. The first press results in *urak*, which is only available from January to March, while the final product is *feni*. *Feni* is typically enjoyed with a splash of lime juice and ice, topped with *Limca* or soda of your choice. A pinch of salt and a sliced green chilli are added for a bit of flair.

The book describes numerous festivals in Goa, too many to list here, but they are linked to harvests, nature, and religion.

Goan open markets are a pleasure to shop in. The most famous and my favourite is the

‘There is no clear demarcation of white collar, blue collar, no boss or employee. No pondering about job or career.’

Mapusa market, especially on Friday mornings when locals bring their produce — what they have grown, cooked, pickled, or created.

D’Souza says that for many Goans, this is life. “There is no clear demarcation of white collar, blue collar, no boss or employee. No pondering about a job or a career. There is a sense of ownership and self-respect.”

What about the beaches? D’Souza states there are 48 official beaches, each with about 375 shacks allowed to operate by the tourism department. The tourist season runs from mid-September to the end of May.

The book serves as a helpful guide for tourists who want to learn more about Goa, respect its culture and traditions, are planning an extended stay or have moved there to live.

The strength of the book, and what I like, is its focus on how much of the valuable aspect of the Goan way is connected to nature. It also highlights how nature is linked to Goan food, drink, and lifestyle.

D’Souza covers a wide range of topics in his book. While his main message is about *susegad*, he discusses the uniqueness of Goans, how their history has shaped the *susegad* lifestyle, and the strong community spirit supported by a distinctive system of local governance.

The interviews with select Goans are somewhat stiff, and there is some self-help advice on how to live amid *susegad* (both in and out of Goa), although D’Souza claims it’s not a self-help book.

Goa is unlike any other state in India. While it’s blessed with a tropical climate, lush forests, natural beauty, water bodies, and a mix of commercial and leisure activities, it is also evolving like other places. Its appeal to tourists and the focus on tourism create challenges for *susegad* and the traditional Goan way of life of contentment.

In such times, D’Souza’s book is highly relevant. It’s not just about nostalgia, but a record of the slice of history that keeps people sane. ■

Anita Anand first visited Goa in 1986 and continued to do so for many years. She moved to Goa in January 2025. She writes, paints and enjoys nature.

After a long hiatus, Dilli Haat, the capital's craft hub, sprang to life. It hosted a Dastkar Mela with an impressive line-up of stalls displaying artisanal products. Crowds thronged the place, jostling to shop and buy, masked dancers moved rhythmically to the beat of drums and eateries spilled with people on a cold Saturday afternoon. Here are some products that caught our attention.

The Jaipuri quilt



A new addition were stalls selling a range of quilts, *dohars*, bedcovers and cushion covers. The quilts, made of cotton and encased in pretty printed cloth, felt soft and warm. You could pick and choose quilts from a range of handblocked prints in all the colours of the rainbow. As for *dohars* and bedcovers, shoppers were spoiled for choice. At the Jaipur Hastkar stall, Vishal, in charge of sales, said they had their own manufacturing unit and supplied to well-known boutiques in Delhi. The quilts,

he said, could be washed in a washing machine and that colours would not leak. Prices were reasonable. A single quilt cost ₹1,850, a double quilt was priced at ₹3,500 and double bedcovers cost just ₹1,300.

Contact: Jaipur Hastkar, Near Calico Printers, Sanganer, Jaipur - 302029; phone: 9799408637, 9990583799, 8766066036; website: www.jaipurhastkar.com

Art on everything

Najma Chitrakar sat in her stall surrounded by a jumble of products with bright Pattachitra art on them. There were mugs, kettles, trays, paintings and even T-shirts. Najma said she was from a village in Paschim Medinipur in West Bengal. Her family of nine had made all the products she was selling. The children go to college but return and help out, she says. Natural colours are used for the artwork. The state government pitches in by giving her an allowance of ₹1,000 every month. She and her husband depend on government-sponsored exhibitions to sell.



Bengal's famous folk art, Pattachitra, used to be painted exclusively on canvas or paper. The artwork told stories from religious texts like the *Ramayana* and *Mahabharata*. Folk stories of birds, animals and trees were also depicted. The painter was an artist and a storyteller who went from village to village, regaling people with his artful stories. Times have changed. Pattachitra is now painted on a variety of household items.

Contact: Bahadur Chitrakar at 9734536388



The eye-catching tic-tac-toe



One of the earliest games children learn to play is tic-tac-toe. With pen and paper x and y are crossed to fall in line. Rajesh Roy, a self-taught artist, has infused new ideas into this simple game. Instead of x and y his tic-tac-toe sets have birds, bees, mice, elephants, kites, threads and other emblems on small squares in a larger colourful box. The squares are made by grinding marble into dust and then reshaping the material into squares. There's also a story in some. Each set costs ₹900.

Along with his wife, Monali, Roy also designs artwork using the same methodology. The themes are different, and range from plants to people. His microenterprise, Pallet's tagline is 'Colour your mind'. He can also undertake artwork on order.

Contact: Rajesh - 9811546336; Monali - 8800321505
Email: palletpallet721@gmail.com

Many uses of glorious grass

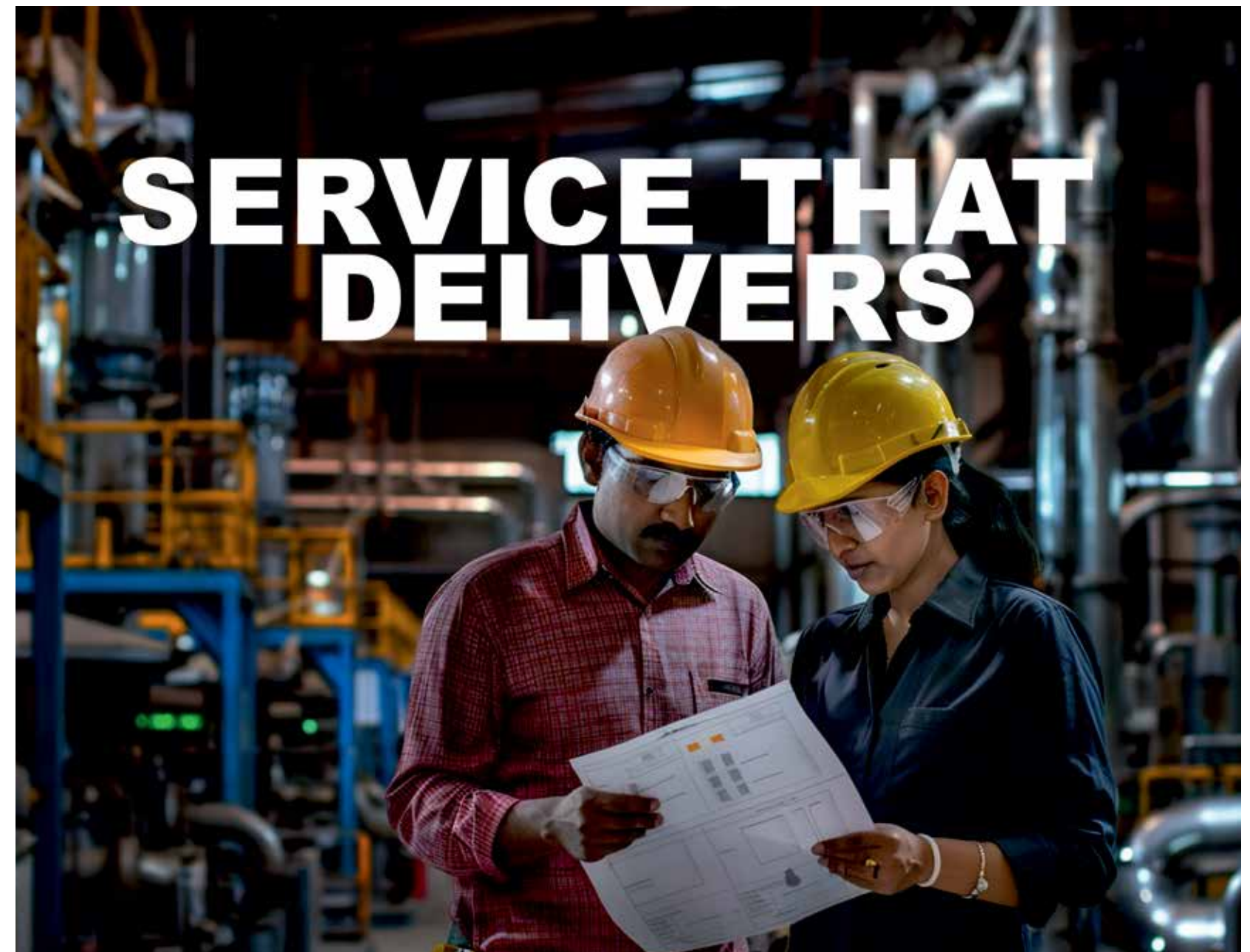


Kadam Haat, a social enterprise, is masterly at converting wild grasses into stylish products. Sabai, moonj, sikki, bamboo and many more are all reborn as mats, trays, baskets, bags *et al* by deft hands in villages. Also available are laundry bags, roti boxes and table linen.

The social enterprise's big plus is quality. All their products are designed keeping the urban consumer in mind. The finish is neat and price reasonable.

Starting with West Bengal, Kadam Haat has expanded to six states, training artisans, reviving lost skills and ensuring a steady income by improving market access. Founded by Payal Nath, Kadam Haat's expansion appears remarkable. Nath was recently honoured by NITI Aayog for her exemplary work.

Contact: 1/1B4 Ram Krishna Naskar Lane, Beliaghata, Kolkata - 700010; phone/WhatsApp: 91 6291352897
Website: www.kadamhaat.com



SERVICE THAT DELIVERS

Service is our foundation built on the ethos that "It pays less to talk about the product and more to understand the customers' problems". It's our daily practice, through over 1,250 customer connects, applying our knowledge, to understand what customers truly need for real, tangible long term benefit.

It drives our actions to Improve Uptime, Improve Plant Performance and Sustain Benefits, and enables us create lasting customer partnerships.





TATA STEEL FOUNDATION



WOMEN IN LEADERSHIP: BRIDGING UNSEEN BARRIERS

Tata Steel Foundation enables women to realise their full potential through the Disha programme that facilitates comprehensive and grassroots-level interventions to assert their rights, engage in community decision-making, and contribute to socio-economic development.

Sure, we make steel.
But **#WeAlsoMakeTomorrow**.

- Collaborating with 18,156 women
- 5000 underwent Disha training till FY24

