

**Music therapy for mother & child**

The Rajasthan government has taken a decision that all hospitals especially where the delivery of children takes place will now have a music system to dull the pain of the mother. And what music will the music system play? The *Gayatri Mantra*. This is part of a new Sound Healing Therapy launched by in all government hospitals under a project called 'Lakshya'. And you thought a Congress government was in power in the state?

**Complaint against Priyanka**

Uttar Pradesh's Animal Welfare Board has sent a complaint against Priyanka Gandhi (pictured) under the Prevention of Cruelty to Animals Act and the Wildlife Protection Act, after the leader stopped enroute campaigning in a village of snake charmers, spotted a snake charmer and asked him to open his basket and took a Cobra in her hand, stroking its head and playing with it.

The matter was brought to the attention of the District Magistrate, who has instituted an enquiry led by the Additional District Magistrate. The committee has been asked to submit its report as early as possible. Whether the enquiry will include the circumstances in which the snake charmer captured the cobra is not known. Further action will be taken once the DM gets the report.

**DID THEY REALLY SAY THAT?**

**"It is a painful thing that Modi has forgotten his status. The way he is levelling allegations is atrocious. He is not talking about youths, about farmers, about traders but trying to divert people's attention. He is misleading people"**

Madhya Pradesh Chief Minister Kamal Nath at a press conference in Bhopal, May 9

**OPINION**

WILBUR ROSS

**Indo-US trade relations need to be well balanced**

Two years ago, President Trump laid out his vision for a free, open, and prosperous Indo-Pacific Region — one where independent nations grow stronger.

The Indo-Pacific Region is strategically and economically significant. It accounts for two-thirds of all global trade.

These countries are seeking high-quality goods and services to sustain and develop their economies.

US companies are extremely well positioned to meet these demands, including in the important area of infrastructure.

The Asian Development Bank estimates that \$1.7 trillion needs to be invested in the region's infrastructure every year.

But, with its strong and growing economy, India is key to the Administration's approach to the Indo-Pacific region.

Last year, India's real GDP reached an estimated 7.1 per cent growth; and is projected to increase by a very healthy 7.4 per cent this year.

India's population has grown by an astonishing 341 million people over the past 20 years to 1.35 billion.

Just the growth since 2000 is greater than the total population of the United States.

Combined with the 281 million people in India between the ages of 20 and 35, there are almost 600 million people either in — or soon to be entering — their primary years for consuming goods and services.

India is already the world's third largest economy, and by 2030, it will become the world's largest consumer market because of the rapid growth of the middle class.

Yet, today, India is only the US's 13th largest export market, due to overly restrictive market access barriers.

Meanwhile, the US is India's largest export market, accounting for something like 20 per cent of the total.

There is a real imbalance!

And it's an imbalance we must strive to counteract.

Last year, it's true that bilateral trade between our countries totaled \$142 billion, up almost \$16 billion from 2017. It's also true that US exports of goods to India increased last year by \$7.4 billion, or an impressive 29 per cent, to \$33 billion.

But the problem is that goods imports from India were also up by more than 7 per cent, in fact by 12 per cent, to \$54 billion, representing a trade deficit in goods of \$21 billion. In the services sector, the United States also had a trade deficit with India last year, of \$3 billion. This is especially unusual — we generally have a surplus in services with most countries. But in this case, the deficit is largely due to IT services, for which there is a very strong capability here in India.

President Trump and Prime Minister Modi have jointly committed to further expanding and balancing our commercial relationship.

American companies offer world-class goods and services and the highest standards of quality, safety, and innovation.

They improve the economy in every country in which they operate. And they are eager to be more engaged here and throughout the Indo-Pacific region. The Indian government is actively pursuing a range of development priorities, including revitalization of urban infrastructure, ensuring access to energy, and digitizing services. We are confident that US technologies and expertise can play an important role in serving India's critical development needs. Our strict Foreign Corrupt Practices Act also assures the Indian government that our companies will not cause scandals here.

But American companies need to operate in a transparent environment supported by the rule of law, and a level playing field. As President Trump has said, trade relationships should be based, and must be based, on fairness and reciprocity.

But, currently, US businesses face significant market access barriers in India. These include both tariff and non-tariff barriers, as well as multiple practices and regulations that disadvantage foreign companies.

India's average applied tariff rate of 13.8 per cent, and that remains the highest of any major world economy. The very highest. It has, for example, a 60 per cent tariff on automobiles; it has a 50 per cent on motorcycles; and 150 per cent on alcoholic beverages. Its bound tariff rates, namely the highest rate they can charge, on agricultural products average and incredible 113.5 per cent, and some are as high as 300 per cent.

These are not justified percentages. They are way too high. We are working diligently with the Indian government and our private-sector partners to address market access issues through the US-India Commercial Dialogue, and the recently reconvened US-India CEO Forum.

Our goal is to eliminate barriers to US companies, operating here, including data-localization restrictions that actually weaken data security and increase the cost of doing business.

Other obstacles include price controls on medical devices and pharmaceuticals, and restrictive tariffs on electronics and telecommunications products. Tariffs for network routers and switches and parts of cellular phones are as high as 20 per cent. In stark contrast, the US rate for these same products exported from India to the United States is zero — zero versus 20 per cent.

That's not a justified imbalance.

These high tariffs undermine India's goal of improving digital access and digital literacy. We applaud India's commitment to addressing some of these barriers.

In the World Bank's Ease of Doing Business report, India climbed an impressive 23 spots this year, but it still ranks only 77 out of 190 countries. So there's lots of room for further improvement. We also look forward to welcoming another large India delegation to our SelectUSA conference from June 10th through 12th in Washington.

Last year, Ambassador Juster led a delegation of 95 Indian business leaders to the Investment Summit. We are hoping and praying he will have a bigger delegation this year.

*Edited excerpts from a speech by US Secretary of Commerce Wilbur Ross at the Trade Winds Conference in New Delhi, May 7*



ILLUSTRATION BY BINAY SINHA

Three-time MP from Rohtak, **Deepender Singh Hooda**, son of former Haryana CM Bhupinder Singh Hooda, is contesting the Lok Sabha elections again. He tells **Nitin Kumar** how a Congress victory will change the dynamics of power in the state. Edited excerpts:

**'My victory will unsettle the BJP'****Do you think this time it is a tough contest for you: Top leaders are campaigning for the Rohtak seat...**

No, in any election, each candidate from a party visits their constituency. It was not that I didn't want to campaign. Like others, I campaign too. It is natural. I have done it in the past as well. This is not because it is a tough election but a natural process of democracy. All candidates campaign.

**What are the achievements of the last five years that you will show to the people and seek votes?**

Some of the achievements of my constituency include the longest national highways (1,080 km of four lane and six lane) in India.

My constituency has all three top higher education institutions — AIIMS, IIT and IIM — which I was able to get from the government of India and Haryana. Apart from this, I have been able to establish around 48 other educational institutes in my constituency.

**In 2014, the Congress was wiped out from Haryana, only you were able to save your seat. How will the 2019 election be different?**

I think the Congress will win majority of seats in Haryana this time.

**The BJP holds you up as an example of dynasty politics. How do you see it?**

When I won my first election, being from a

**CHECKLIST****GOING TO THE POLLS TODAY: INTERESTING CONSTITUENCIES TO WATCH****■ Sultanpur in Uttar Pradesh**

Union Minister Menaka Gandhi is contesting from this seat, currently held by her son Varun Gandhi. In April, Menaka was banned from campaigning for 48 hours for violating the Model Code of Conduct. Why Menaka Gandhi was ordered by the BJP high command to exchange seats with her son Varun (who is contesting from Pilibhit, his mother's former seat) is not clear. Anyway, the constituency is new for both Gandhis and the outcome should be interesting.

**■ Dhanbad in Jharkhand**

Cricketer-turned-politician and former BJP leader Kirti Azad is contesting here on a Congress ticket. He is challenging BJP's Pashupati Nath Singh who has held the seat since 2009. In a sense, Azad has come home to the Congress — his father, Bhagwat Jha Azad was former chief minister of Bihar.

**■ Guna in Madhya Pradesh**

This constituency in northern MP is the bastion of the Gwalior's erstwhile royal family — the Scindias. It is currently held by Congress leader Jyotiraditya Scindia and was earlier represented by his father Madhavrao and grandmother Vijaya Raje. In 2014, this was one of the two seats that the BJP failed to win in the state. But, the BJP had managed to cut Jyotiraditya's victory margin to around 86,000 votes, from over 4 lakh votes in 2009. This time there is an added problem. A Bahujan Samaj Party (BSP) candidate from the constituency was made to stand down after he had been given the ticket. This has incensed BSP leader Mayawati who has threatened to review her party's ties with the Congress in the state. The Congress government in the state has only a slender majority and is supported by the sole BSP MLA in the assembly.

political family helped me to get a ticket and I won. But when I went to the people for the second time, I told them: Vote for me if you like my work. The same happened the third time around.

In most cases, people don't accept the second and third generation. This time I'm seeking the support of the people for the fourth time and if you look at my speeches you will find that I tell everybody: "You have seen my work and my behaviour and if you think I'm fit to represent you and you are satisfied with my performance in the Parliament, you should vote for me".

So, it's up to the people. In a democracy people's representatives are elected by them — they are not selected by anybody sitting on a throne. It's the people who are electing me and that's the supreme power in a democracy.

**This election is a test to know who will rule the state this time as the Assembly polls are around the corner. How do you see it?**

I think the results are going to have a huge impact on the Assembly polls, especially the win in Rohtak, where the BJP is targeting the Congress' leadership namely Hooda Ji and me personally. This win will pave the way for the change in Haryana and Congress' victory in the state.

The prime minister came to my constituency on the last day of the campaign. Even that gambit did not succeed.

I am confident that I'm going to win this election by a big majority and it will shake the BJP government's setting in Chandigarh.

**This time the Congress is betting on former chief minister Bhupinder Singh Hooda. Is it a move to secure a seat? or does the Congress have no new faces in the state capable of delivering a victory for the party?**

There are certain decisions that party leadership takes that have many meanings. Like Captain Amarinder Singh contesting from Amritsar. That doesn't mean that the Congress doesn't have candidates. It is to indicate something else... and to send a message to the cadre. When a leader of that stature, who has been the CM contests a Lok Sabha election, it is to send a message to the people.

**In Haryana, there are always allegations of groupism among political leaders like Ashok Tanwar and Bhupinder Singh Hooda factions. How do you think this will affect the forthcoming polls?**

There is no group in the Congress. The party is united.

**Q&A**

DEEPENDER SINGH HOODA

Congress MP

**The Congress lost Jind bypoll by a huge margin, even when they fielded a heavyweight like Randeep Singh Surjewala. Why?**

You would see that we will win the Lok Sabha election and we had our own internal assessment on that and we need not share it with everyone.

**This time you're fighting against a former Congress leader Arvind Sharma. How are you looking at this challenge?**

Sharma doesn't have any credibility. He wanted a ticket from Karnal. He was not willing to contest from Rohtak initially but was persuaded by the BJP to contest from Rohtak — as I am told. He has changed six parties and five constituencies to finally land up

here by a parachute and that too, not by choice. So I don't think his candidature will have any impact.

Once Jat leaders were politicians who called the shots at the national level and used to focus on agricultural issues. Now you see a change in current Jat politics. There are a lot of cycles in politics.

**There have been allegations that the Congress is a Jat party, which led to a massive defeat in 2014. How do you see it and if Congress wins, will the CM be a Jat CM?**

No, the Congress belongs to everyone, which means every caste, community, and religion has their own space in the party. That's the party's ideology. The BJP wants to pursue a divisive agenda by excluding certain sections of the society. That exclusion through divisive politics is not good for anyone and you will see that this time, the developmental agenda that we are bringing to the people will triumph over the divisive agenda of the BJP. The Congress party believes in meritocracy, democracy, which implies voice of the people and I think people will decide the next CM of Haryana.

**The BJP accuses the Congress of playing politics of minority appeasement, what do you have to say on this?**

The Congress party's politics is not driven by any particular section of the society. We take everyone with us whether someone is from minority or not, and strengthen the country unlike the BJP, which is making people fight with each other on the basis of caste and religion. The Congress works to connect people. The BJP tried doing the same in Rohtak but they could not succeed. People are aware of their tricks now. They will show that through their vote.

**Time to look beyond marks**

The examination season — and results — represent enormous pressure, both for students and parents. Children killing themselves because they were unable to meet expectations is commonplace. How can parents, teachers and children cope? **Sneha Bhattacharjee** finds out

A 17-year-old committed suicide in Telangana after she failed to pass in just one subject in examinations. Up north, in Roorkee, a class 12 student committed suicide because he secured 74.5 per cent and not 80 as he was expecting. A Noida girl took her life even before the results were announced fearing she would fail. She secured 70 per cent. These are just a few among the lakhs of stories behind the success of 90 percentiles. Stories that shock, and reflect nothing but grief and anger.

Today, board examination results have become all about celebrating how high you can score. A 90 per cent is nothing, when marks are being distributed in freefall. All across newspapers, you will find mugshots of smiling children, pictures of parents hugging their top-performing children, stories about what they did, and how they achieved such a feat.

However, Nikil Jonathon, a Delhi-based film photographer, feels there is another side to this: What about students who have had learning disabilities and still managed to score what they did. "Why not talk about their strategy or learning techniques? How about kids who did not give up on their passion or hobbies in order to excel in exams? That would make for a different and heart-warming story," he adds.

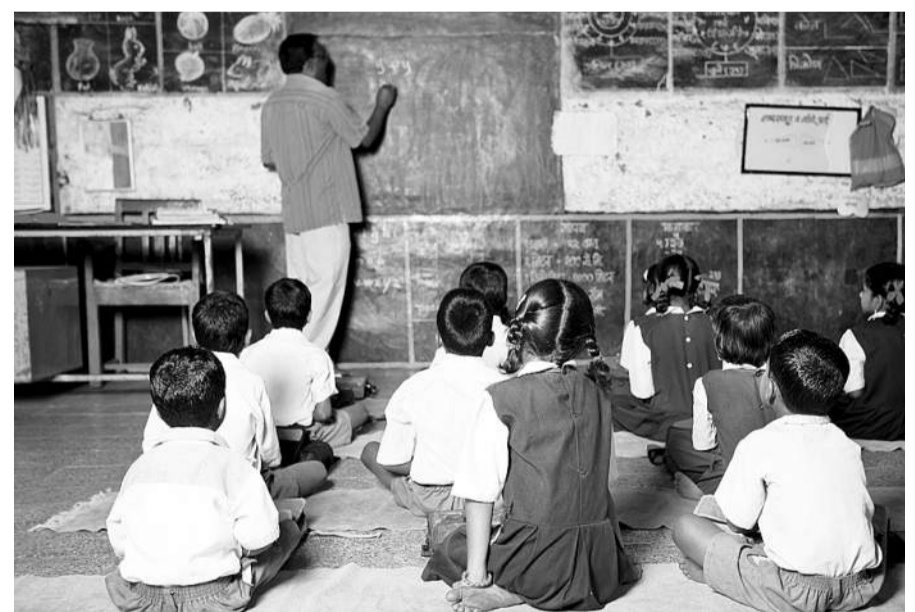
It is not just Jonathon who thinks so but also a mother whose social media post praising her boy for scoring a 60 per cent

went viral. A communications professional, Vandana Sufia Katoch, in the post said, "Yes it is not a 90, but that doesn't change how I feel. Simply because I have seen him struggle with certain subjects almost to the point of giving up, and then deciding to give his all in the last month-and-a-half to finally make it through! Here's to you, Aamer. And others like you — fishes asked to climb trees. Chart your own course in the big, wide ocean, my love. And keep your innate goodness, curiosity and wisdom alive. And of course, your wicked sense of humour".

Katoch makes a very valid point — that marks are not the end. "I was a 90 per cent scorer during my school days but when I look around now — from those who scored high, to those who scored average, or those who scored low — everyone is charting their own course in career. The children need to focus on who they are and what they want to be," she says.

Sometimes, it is the parents who want their child to excel, setting impossibly ambitious benchmarks for their children. Saloni Singh, a Delhi-based life coach dealing with parents and teenagers for over a decade, has

had several such cases both in India as well as the UK where she practised initially before returning to India. Singh notes how parents are under pressure when they see their child not performing up to the mark, or the standard set by other students. She, however, holds the education system as well as teachers responsible for this. "Most students I spoke to after their results couldn't express



their joy though they had done well in exams. The fact that someone else in the class scored a 95 per cent or above made them question their own success," she says. Teachers are critical of the students who aren't performing well. Singh has observed how there have been instances where the teachers instead of being a support, have rebuked the child. "That can lead the child into depression or may even push him towards bad choices just to be part of the peer circle," she notes.

Parents too feel embarrassed to share the marks their child has scored. "Instead of observing whether the child has improvised on his skills, they focus more on the numbers," Singh notes. This can be a deterrent for the child as he is likely to give in to cramming without applying his brain into learning. "Rote learning is what we are making our children do, when what you need is creative

**"Educate the child to be a good human being. Make them understand their strengths and passion, and let them serve where they can. Why push the child towards that end from where he may never be able to return?"**

and practical approach to study," she says.

Katoch feels parents need to work with their child, look beyond numbers and understand the child's inner potential. "Instead of comparing your child with that of another, it is better to be comfortable with what you have and help the child do what best he can," she adds.

Like Jonathon, both Singh and Katoch, are of the opinion that this hype over marks across all media needs to stop. The colleges too need to change their admissions criteria by focusing on the overall development of the child, and not just marks. "Educate the child to be a good human being. Make them understand their strengths and passion, and let them serve where they can. Why push the child towards that end from where he may never be able to return?" Singh concludes.

# Cracking the test

Schools should focus on learning, not examinations

Each year, "results season" for the Central Board of Secondary Education (CBSE), the largest all-India schools exam, grabs newspaper headlines for the progressively stratospheric nature of the grades. This year conformed to that trend. An amazing number of students have scored in the high nineties, or even maxed their papers. This year, for instance, the all-India pass percentage for the Class X was 92.5 with regions such as Thiruvananthapuram recording an astonishing 99.85 (Chennai and Ajmer were but decimal points behind). For Class XII, the total pass percentage appeared saner only by

comparison at 83.4 per cent, with Thiruvananthapuram leading the charge again with an average of 98.2 per cent. The two joint toppers scored 499 marks out of 500.

These numbers are at once awe-inspiring and thought-provoking. Such high marks appear more conducive to the pure sciences and math, but humanities' students scoring up to 99 per cent or even 100 per cent in papers such as English and history strongly suggests the use of the percentile marking system. Teachers would be the first to acknowledge that these progressively high grades do not necessarily point to an exponential rise in the level of academic bril-

liance of Indian children. In a country where white-collar jobs tend to be scarce, school and university exam results remain the principal means of determining quality. Over the years, this chronic problem has had a detrimental impact on the education system in which exams become an end in themselves rather than a way of testing a student's intellectual capabilities.

This has created three problems. First, it has fostered an uber-competitive system that encourages parents to place immense pressure on students - India is unique in the number of student suicides for this reason alone. Second, the exam-oriented system downgrades a student's analytical ability in favour of rote learning. Third, an exclusive focus on exam-cracking techniques that schools are all too willing to encourage to show good academic results. Even more deleteriously, the examination system itself has

played along, so much so that an answer may be flat-out poor but the student scores high marks if she has recorded the right "keywords". How do they know these keywords? Because the system itself offers rote-books that list every possible question and model answer, skewing the system in favour of students with the most retentive memory rather than capability for independent thought. The "keyword" approach has also caused a deterioration in syllabus design. For instance, "humanities" subjects tend to be lumped into one paper with the result that students learn little of such critical subjects as the Indian Constitution. Many young people buy into the majoritarianism of current political thinking because they are unaware of the founding principles of the Indian Republic, subjects once routinely taught in school until the eighties.

The principal sufferer at the other end of

the education chain is the Indian employer. Reputed colleges set impossibly high cut-offs and decline to hold entrance exams to test students more meaningfully (one reason students graduating from reputed B-schools and engineering colleges are in demand is that entrance tests act as a sifting process). The same high-scoring student with untested analytical abilities then emerges into the working world singularly unarmoured for the challenges it poses. Small wonder that the 2018 edition of the India Skills Report says that less than half of Indian graduates are employable. Whether in specialised skills or generalised ones, corporation after corporation reports the high cost of training graduates in basic knowledge (including language). That is why, instead of exulting at the results each year, India's education establishment would do well to urgently address the deepening defects to which they paradoxically point.

# The right prescription

A separate set of rules is needed to address the special nuances of India's medical devices industry

ABHA JAISWAL

It's election season. Both major parties have dedicated a chapter on health in their manifesto. This is encouraging but poses several questions. How will our country, one which accounts for nearly one-fifth of the global disease burden, achieve "Health for All"? Is there any country that we can draw lessons from? Are there strategies to ensure equity and sustainability? Has the government been able to generate policies that bring the interests of the industrial and health sectors closer together, to collaborate for mutual benefit?

The three key industrial pillars of the health care system are drugs, vaccines and medical devices. While India boasts of robust drugs and vaccine manufacturing sectors, medical devices are primarily import-dependent. In FY 2017-18, the export of drugs and vaccines touched \$17.27 billion, while 80 per cent of medical devices were imported.

In the last decade alone imports of medical devices and diagnostics have more than doubled. Moreover, many of these devices are inappropriate, as they mostly cater to the needs and societal context of the developed countries. Some estimates claim that only about half of all medical equipment in developing countries is in use.

The cost of medical devices to overall health care alone stands at about a mere four to five per cent. But, since medical devices are intrinsically linked to health care services, when both these costs are taken together, they could add up to 25 per cent of health care costs.

Furthermore, it is estimated that medical devices can amount to about 30-40 per cent of the cost of setting up a tertiary care hospital. In such a scenario, if one has to rely on imports, it could lead to an unsustainable fiscal burden on the country, especially in the context of Ayushman Bharat.

Recent policies have provided an enabling ecosystem for the development and growth of the medical devices industry. In 2015, the government recognised medical devices as a key sector of the Make in India initiative. It allowed 100 per cent foreign direct investment (FDI) under the automatic route. As per government data, FDI in medical devices has grown by 25.4 per cent between 2012 and 2016.

The inverted customs duty structure whereby imports of raw material incurred higher import duty than finished products was corrected. The government has also funded the establishment of clusters such as the Andhra Pradesh MedTech to help create the much-needed infrastructure. The Kalam Institute of Health Technology, entirely funded by Department of Biotechnology, became India's first institute dedicated to medical technology.

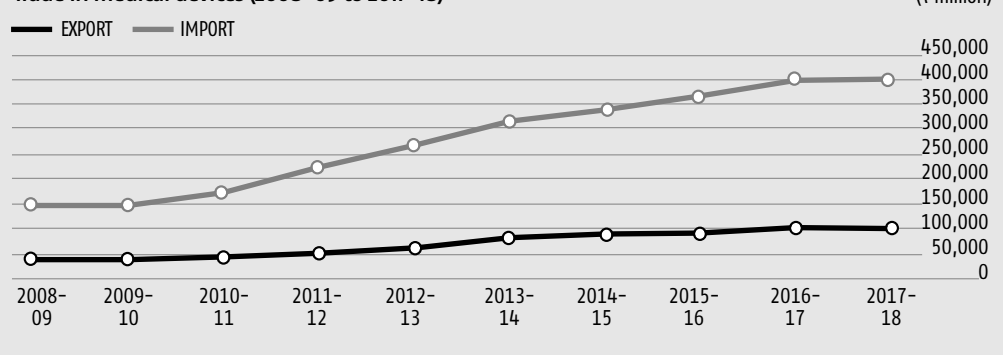
In order to promote local industry, the National Health Policy 2017 envisages that domestically sourced components must account for 25-50 per cent of the cost of medical devices in order to qualify for public procurement tenders.

It has also institutionalised the Medical Technical Advisory Board under the Indian Council of Medical Research (ICMR) to ensure transparency in demand for goods and services associated with



## A yawning import-export deficit

Trade in medical devices (2008-09 to 2017-18)



health care. This will assure efficient and equitable health care provision and create a market for health care products.

Such strategies are not new. Brazil, for example employed a "Buy Brazil Strategy" to incentivise the growth of domestic technological capabilities, reflecting the demands of the Universal Health Programme that was launched in 1988. More importantly, it bought to the fore that demand constitutes the principal stimulus for innovation in developing countries.

In that sense, the implementation by the government of the Medical Devices Rules 2017 in January 2018 is a significant step forward. For the first time, regulations specifically pertaining to the manufacture and import of medical devices have been put in place. Regulations are like the GPS of the industry, as they ensure patient safety and ultimately determine the uptake and absorption of products in the health care system.

Inadequacies still exist. It is vital to address them as we move forward. Rules for medical devices come

under the Drugs & Cosmetics Act; as such, they are regulated as drugs. Here lies the problem; devices cannot be regulated as drugs, as they represent completely different technologies. There is a pressing need to adapt medical device rules to specifically address the nuances of the industry.

Lessons can be learned from the US Food and Drug Administration (FDA), which has different subsidiaries to regulate drugs, dietary supplements, biologics and medical devices. A similar approach would be useful. The 2015 Draft Drugs & Cosmetics Amendment Bill and the Draft Medical Device Policy have made provisions to address some of these gaps.

Policies and their implementation must go hand in hand. These interventions must, therefore, be backed by adequate financial and human resources. We must keep in mind that the process of building industrial strengths and health system synergies is a long-term commitment. The complex 30-year trajectory of Brazil's health-industrial collaboration aptly illustrates this point.

The writer is a Visiting Fellow at Research and Information System for Developing Countries. These views are personal

# Why PPPs are key to good public transport

B G SREEDEVI

Hundreds of people gather at bus terminals every morning, standing in line for tickets and jostling with the crowds to reach their destinations on time and in a cost-effective manner. The transport system of our country is built upon and primarily functions through services provided by state-run bus corporations. But change is the need of the hour for these corporations.

According to the International Road Federation, India's bus penetration is 1.4 buses per 1000 people, as opposed to South Africa's 6.5 buses per 1000 people and Thailand's 8.6 buses per 1000 people. In India, where many people cannot afford the higher tariffs that metro services and cabs charge, buses are the mode of travel they turn to. Buses, with their ability to connect obscure routes together in a cost-effective manner, continue to be the champions of the common man, accounting for more than 90 per cent of public transport in Indian cities. And yet, there are only 1.4 buses per 1000 people in India!

The public relies on the services provided by these corporations and the well-being and smooth functioning of these state-run corporations is directly proportional to the well-being of the masses. Strengthening their infrastructure is a public service that these corporations should strongly consider.

The world we live in today is dominated by technological innovation. The pace of change is rapid and the scale of innovation high. Technologically enabled solutions are changing the face of industries that were not traditionally impacted by technological advancement. Key to this changing technological landscape are private sector enterprises that are challenging our traditional notions of how things are supposed to work, by constantly updating the definitions we are used to.

State-run corporations can adapt the ever-evolving business models of the private sector. Start-ups and private sector companies constantly need to evolve their business models to keep up with market needs and work on providing significant value-add or face redundancy. As a result, their business models are agile and their delivery rapid.

Agility and innovation can add tremendously to the output of state-run corporations. The best way to accomplish such a transformation is by entering into public-private partnerships (PPPs) with entities best suited to solve the needs of state-run corporations. PPPs have the potential to yield results that are beneficial to all the parties involved. In India, especially, PPPs have historically been very successful in running state-run corporations -- witness the Mysore transport project that was begun in 2012. The transport sector can especially benefit from a PPP set-up because of the

high return on investment possible therein.

One of the biggest hurdles to infrastructure development that governments face is the ROI (return on investment). Often, high inflow of investment is met by a slow turnaround rate on the projects, which leads to greater spending, eventually leading to lower profits for the government concerned. PPPs can be an effective way to counter such a problem, because it draws on one of the strengths of the private sector -- their agility in responding to imminent business needs with innovation and efficiency.

If technology and PPP can individualise about such tremendous change in the systems they touch, together they can unlock a combination that can resolve the struggles faced by many state-run corporations, especially so in the transport sector. Innovations like live monitoring and instant booking have already revolutionized the ride-sharing space, an important aspect of public transport. Our cities are growing in size and commuting between cities is becoming increasingly common. The demand for inter-city transport is on the rise.

SRTC buses majorly service inter-city routes and the need for strong infrastructure on this front is eminent. Developing technologically advanced models for mass transport should now be the priority for government across the country. India's demography and economy both demand efficient mass transport systems that can ease road congestion by reducing the number of private vehicles on roads.

The National Urban Transport Policy (NUTP), in both 2006 and 2014, encouraged building of transport hubs, which should provide seamless inter-change between inter-city regional and sub-urban services, and the public transportation system of the city. NUTP also recommends introducing intelligent transport systems (ITS) for traffic management in our urban transport models.

Intelligent transport systems are the key to the future of smooth public transport. They are an assemblage, an aggregation, and application of information on transport gathered through technologies such as GPS and sensors, and work to achieve the aim of improving safety, mobility, and economics for smooth public transport.

ITS can bring together various transport service providers, both public and private, by bridging information gaps and allowing these enterprises to collaborate and provide mobility as a service, enabling individuals to make informed and intelligent decisions about transport. They can change the face of transport by adding efficiency and ease to the system, and encourage greater use of public transport modes.

The writer is Chief Scientist, National Transportation Planning & Research Centre

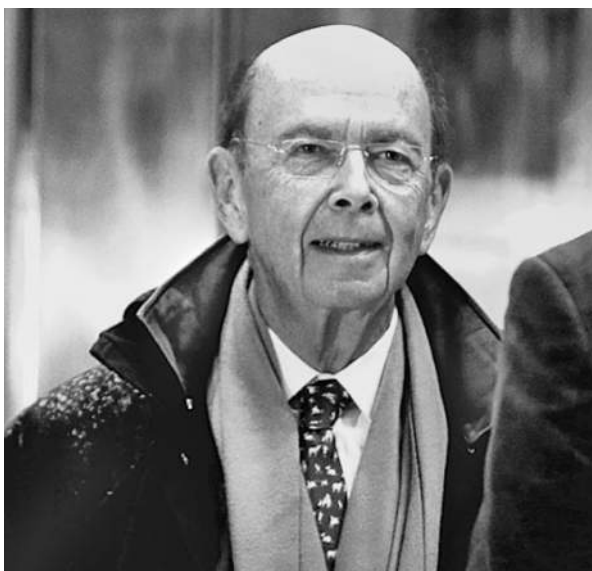
## OTHER VIEWS

### India must snap out of denial on discord with US on trade

New government will have to urgently consider the options that lie ahead

After a scathing speech by US Commerce Secretary Wilbur Ross in New Delhi this week, it is no longer possible for the government to brush under the carpet its differences with Washington. Mr Ross repeated President Donald Trump's accusation that India is a "tariff king", and threatened India with "consequences" if it responded to US tariffs with counter-tariffs, something New Delhi had threatened but not yet implemented in the hope of hammering out a comprehensive trade package. In the face of growing US aggression on the issue, the government that takes office after the election will have to urgently consider its options ahead. New Delhi and Washington need to make a more determined attempt to sort out issues, starting from scratch if required, with tariffs.

While the 50-60 per cent duties on motorcycles and cars and 150 per cent duties on American liquor that India imposes need a second look, the US must see that average tariffs imposed by India (13.8 per cent) are not much higher than those levied by economies such as South Korea and Brazil. In addition, the government will need to revisit some of its decisions like data localisation requirements and new e-commerce regulations, which were declared suddenly, while the US must



show some flexibility on India's price caps on coronary stents and other medical devices. Perhaps the most worrying signal from Mr Ross's outburst was that Washington may not be willing to meet India halfway on trade issues. New Delhi must prepare accordingly.

The Hindu, May 10

### Data under a cloud

Credibility of official statistics at stake

The Union government finds itself in the eye of a data storm over a new report of the National Sample Survey Office (NSSO), which states that at least one-third of the companies in the database used for GDP calculation could not be traced or surveyed. The older GDP series had relied on a survey of companies conducted by the Reserve Bank of India for the private corporate sector, while the newer one -- started in 2015 -- employed the database maintained by the ministry of corporate affairs (MCA) that contains a list of registered companies. The report has observed that in many cases, the selected enterprises either did not compile their annual audit reports for 2015-16 or did not prepare balance sheets any time

before.

The Union ministry of statistics and programme implementation is already in damage-control mode, claiming that the discrepancy will have no impact on the existing GDP estimates as the corporate filings are "appropriately adjusted at the aggregate level". According to the ministry, the NSSO technical report on services sector enterprises -- which will now be examined by an official committee -- had been commissioned to understand the data gaps and take remedial steps. However, the presence of thousands of ghost firms in the official database needs to be investigated thoroughly, not swept under the carpet.

The Tribune, May 10

### An absurd proposal

Sex determination ban should stay

Persistent problems often require modern solutions. That, unfortunately, is not how the Indian Medical Association's proposal to the government and parliamentarians -- to fully repeal the Pre-Conception and Prenatal Diagnostic Techniques (Prohibition of Sex Selection) Act, 1994 -- can be described. The IMA said the ban on sex determination has achieved little by way of tackling the actual problem of sex-selective abortions and trapped doctors under an avalanche of paperwork in which even minor mistakes can cost them dearly.

Rescinding the entire legislation ought to be out of the question. A mere look at census data on India's sex ratio reveals its appallingly

skewed nature as well as its steady deterioration. While these figures do bolster the IMA's argument that precious little has been achieved by way of prevention of sex-selective abortions under the law, it should be clear that the problem does not lie with the law itself but with its implementation and the conditions that make it easy for those with vested interests to flout. At the same time, in keeping with the opinion of many doctors across the country, instead of entertaining the absurd appeal for repealing the ban, the lacunae in the law must be examined so that it can be re-imagined and better implemented.

The Telegraph, May 10

# Opinion

SUNDAY, MAY 12, 2019

**IN THE RUN-**up to the elections in 2014, Mr Narendra Modi made a thoughtless remark on the economy. I responded by saying "Mr Modi's knowledge of economics can be written on the back of a postage stamp." It was a fair comment but, I believe, Mr Modi has not forgiven me for that comment! Not an issue, but time has proved that I was right.

At the end of five years of Modi sarkar, we can compile a long chargesheet on the government's acts of omission and commission. Top of the list, in my view, will be the management of the economy. Among the reasons for the mismanagement are (1) the Prime Minister's unfamiliarity with macro-economics and unwillingness to learn; (2) the finance minister's inability to anticipate how trade, business, investors and consumers will respond to policy changes; and (3) the government's disdain of economists and over-reliance on bureaucrats.

## A different league

Running a state government is very different from governing India. A chief minister does not have to worry about the exchange rate or the current account deficit or monetary policy or external developments (e.g. the trade and tariff war between the US and China or US sanctions on Iran). A chief minister will do well in economic management if he manages the revenues of the state, keeps a control on expenditure, gets large grants from the Central government and attracts sufficient private investments. Many well-grounded chief ministers, without much formal education, have earned praise for their management of the state's economy.

Managing India's economy is playing in a different league. Successful chief ministers have floundered when appointed finance minister. On the other hand, Dr Manmohan Singh, without any political experience, was an outstanding finance minister because of his mastery of macro-economics and willingness to engage continuously with reputed economists. Without Dr Singh, there would have been no liberalisation or the many reforms that were undertaken.

## Mistake after mistake

When the management of the economy is entrusted to novices or tyrants, the consequences will soon follow. Demonetisation was a classic example. No economist worth her undergraduate degree would have advised the Prime Minister to declare 86% of the currency in circulation as illegal tender, yet it was done. Since Mr Arun Jaitley has never publicly owned responsibility, it must be concluded that the decision was entirely the Prime Minister's. To his credit, Mr Modi has owned responsibility, but he has refused to admit that demonetisation derailed the economy, killed MSMEs, destroyed jobs and aggravated the crisis in the agriculture sector.

More wrong decisions followed demonetisation. Budgets were made with little understanding of the economic behaviour of human beings; the GST was poorly designed and hurriedly implemented; the NPA issue was handled in a crude and ham-handed manner; unrealistic revenue targets were chased using despotic powers and unfair means; and there was a constant

## ACROSS THE AISLE

P Chidambaram



# Economy has entered danger zone



Vendors waiting for customers at footwear stalls in the suburb of Bandra in Mumbai

BLOOMBERG

search for quick-fix bureaucratic solutions to structural economic problems.

## Dismal report card

The Department of Economic Affairs, Ministry of Finance, has prepared a report card at the end of five financial years. Helpfully, the report has highlighted data for the post-demonetisation years beginning in 2016-17. Let me capture the major headlines from the report:

- Real GDP growth in the three years 2016-17, 2017-18 and 2018-19 declined from 8.2% to 7.2% to 7.0%. Implied growth in Q4 of 2018-19 was 6.5%.
- Gross Fiscal Deficit was 3.5, 3.5 and 3.4% of GDP. The last number for 2018-19 is suspect because tax collections have fallen short by 11% of the revised estimate.
- Capital expenditure was stagnant:

at 1.7% of GDP in 2018-19 it was the same as in 2015-16.

- GDP deflator, which is a proxy for inflation, rose from 3.1% to 4.2%.
- The current account deficit increased from 0.6% of GDP to 1.9% to 2.6%.
- Both private consumption expenditure and government consumption expenditure were stagnant.
- The fixed investment rate was stagnant between 28.2 and 28.9% of GDP, much below the high of 34.3% achieved in 2011-12.
- The distress in agriculture sector was reflected in the sharp decline in growth rate of GVA from 6.3 to 5.0 to 2.7%.
- Growth in GVA in industry was stagnant; growth in GVA in services declined from 8.4 to 8.1 to 7.4%.
- Net flow of portfolio investment turned negative in 2018-19.

The boasts of the BJP have been blown away. Our worst fears about the state of the economy have come true. Further, the growth rates declared by the CSO (already suspect in the eyes of many economists) have come under a darker cloud. The NSSO which reported the highest unemployment rate in 45 years has now punched a big hole in the MCA 21 data base used by the CSO. It turns out that 36% of the companies in the MCA 21 data base are defunct or not traceable!

India's economy is at its weakest point in many years. Hence, Mr Modi is trying to take the narrative away from the economy. That is a loud caution for those who will vote on May 12 and May 19.



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## INSIDE TRACK

COOMI KAPOOR

## Numbers game

The Capital's political grapevine is abuzz with possible scenarios after the election results on May 23. Some like TDP chief Chandrababu Naidu are already active. The Congress camp believes that if the party crosses 125 and the BJP gets less than 200 seats, the BJP cannot stake claim to form government. The Congress, as the largest party in the anti-BJP coalition, will take the lead in spearheading a *mahagathbandhan* government with Rahul Gandhi as potential prime minister. If the Congress gets less than 100 seats, then regional party leaders will stake their claim to head an anti-BJP coalition. However, if the BJP wins more than 230 seats, it will be on the threshold of government formation. With the numbers from the three major NDA allies, the JD(U), Shiv Sena and Akali Dal (the AIADMK may not count for much) and potential backers such as Jagan Mohan Reddy's YSR Congress, Naveen Patnaik's Biju Janata Dal, Chandrashekar Rao's Telangana Rashtra Samithi and some Independents, it could reach the half-way mark of 272 fairly comfortably. But what happens if the BJP gets somewhere between 200 and 220 seats? Some believe that the BJP could still hope to get support from other political parties if it agreed to replace Narendra Modi and settle for a more pragmatic and conciliatory leader, such as Nitin Gadkari, Rajnath Singh or Devendra Fadnavis. The BJP brains trust dismisses such talk as nonsensical kite-flying. Whatever the strength of the BJP, it will be entirely due to Modi and no replacement for him is possible. In any case, Modi and Amit Shah have ensured that the majority of the BJP candidates owe loyalty to them. The BJP is convinced that the NDA will cross the half-way mark on its own. In this election, Modi has completely overshadowed his party. Supporters seldom mention the BJP, they simply say they are voting for Modi.

## Credit only for PM

External affairs minister Sushma Swaraj is an avid tweeter who is quick to trumpet her ministry's achievements and name the Indian Foreign Services officers involved. But when India scored a major diplomatic coup in getting Masood Azhar designated as an international terrorist, Swaraj did not tweet congratulating the ministry. She simply re-tweeted the Prime Minister's tweet. She was aware that on this Narendra Modi must be given all the credit.

Interestingly, three Indian officials, who happen to be Muslims, played a key role in persuading the international community, including China, the UAE and Saudi Arabia, to blacklist Azhar — Syed Akbaruddin, India's permanent representative at the UN, Asif Ibrahim, former Intelligence Bureau director and now special envoy for counter-terrorism, and Ahmed Javed, once Mumbai police commissioner, who is currently ambassador to Saudi Arabia.

## Bhopal makeover

Digvijaya Singh, who once projected himself as the epitome of rationality and secularism and baited all obscurantism, has done a complete make-over in his campaign against Pragya Thakur in Bhopal parliamentary seat. When former Jawaharlal Nehru University Students' Union president and CPI leader Kanhaiya Kumar wanted to go to Madhya Pradesh to campaign for him, Singh politely declined the offer. In Bhopal, Kanhaiya's support would work as a negative factor. Instead, Singh invited Computer Baba along with hundreds of sadhus for a *yagya*, at which his wife, television anchor Amrita Rai, sat, covered her face demurely in a *ghunghat*. Similarly, in Barrackpore, Bengal, the Trinamool's Dinesh Trivedi has used fire to fight fire. He instructed his supporters to respond to the BJP's chants of '*Jai Shri Ram*' with '*Har Har Mahadev*', the battle cry of the Indian Army.

## Vahini vigilantes

Even before he took over as the head of the Gorakhpur Mutt, Yogi Adityanath had floated a youth militia, the Hindu Yuva Vahini, in 2002. The ostensible purpose was propagating Hindutva and nationalism, but there were many charges against its members of harassment, communal violence and intimidation. However, after he took over as chief minister, Adityanath distanced himself from the Vahini. Sunil Singh, a key functionary of the organisation, was infuriated when he and some others did not get Assembly tickets. He revolted and formed a rebel Vahini outfit, declaring himself president. Singh announced that he would contest against the BJP's Gorakhpur candidate, actor Ravi Kishan, on a Hindustan Nirman Dal ticket, the party floated by Narendra Modi's old bête noire Pravin Togadia. Being a Thakur, Singh might have cut into BJP votes, but his nomination was declared invalid by the Election Commission.

# Time to reboot

## Barcelona must clear deadwoods to make room for new arrivals, and prepare for life after Messi

## RINGSIDE VIEW

Shamik Chakrabarty



**AFTER THE HUMILIATION** at Anfield, Barcelona made a quick exit but left Lionel Messi behind. The skipper was summoned for a routine dope testing and the process took a little longer. So Messi's team mates and the coaching staff decided to make the gateway and the star player had to make his own way to Liverpool's John Lennon airport. Football can be very lonely at times even for its biggest global ambassador.

At the airport, Messi bumped into a group of angry Barcelona supporters who chose to be abusive. The team captain confronted them. "What did I do wrong?" Messi was quoted as saying. After the Anfield choke, the icon was picked to lay the blame on. And it was unfortunate that a section of the fans and media targeted Messi.

The 'scandal' in Merseyside will always remain as one of the darkest chapters in Barcelona's history. They let a three-goal advantage slip and got blown away 4-0 by

Liverpool in the return-leg of the Champions League semifinal. It was one choke too many. They had frozen in Rome last year also, when Roma had turned over a 4-1 first-leg deficit in the quarterfinal. Football, however, is a team sport. Messi's genius was the reason why Barcelona had won the first-leg against Liverpool 3-0 at Camp Nou. At Anfield, Messi had a couple of goal-scoring chances. But it was one of those days when he missed the target. Barcelona, though, didn't lose against Liverpool because Messi was below par by his incredibly lofty standards.

Jordi Alba defended like Ashley Young or Luke Shaw, he was that bad. In fact, the whole Barcelona defence went to sleep, especially during Liverpool's winning goal from a corner. Philippe Coutinho, the £142 million man, didn't turn up. He rarely does, when the going gets tough. Coutinho in all likelihood will end up as the most expensive flop in Barcelona's history. But the Catalans' problem is not restricted to Coutinho or Alba. The ageing side needs a bit of rebuilding. They also must gradually leave Messi's shadow.

Domestically, Barcelona still remain a powerhouse, about to complete a League and Cup double. But like their bitter rivals Real Madrid, Barcelona, too, consider



Lionel Messi celebrating winning La Liga with the trophy

REUTERS

this season a failure if they fall short of the European Cup glory. And they haven't won it after 2015. Coach Ernesto Valverde is expectedly in the line of fire following the latest capitulation. The Spanish press is now tearing him apart. "Valverde's fear leaves Barca without another Champions League in the era of Messi," Sport belted out on its front cover

after the Anfield surrender. "Valverde's conservatism took its toll," opined Marca. Yes, Valverde dithered, when he should have been proactive with his substitutions. Coutinho shouldn't have taken the pitch after half-time. The coach's decision to use Messi as a second striker also affected the team's shape and rhythm. But removing Valverde

could still be a knee-jerk reaction.

Xavi will hang up his playing boots after this season and will enter into management. But taking charge of the Barcelona first-team would be a baptism by fire for him. Xavi needs to earn his coaching badges. Pep Guardiola is happily settled in the blue half of Manchester and a return to his old club in the immediate

future borders on the absurd. Jurgen Klopp is doing great things with his Liverpool side. He is on course to become the new Bill Shankly. Unless Barcelona decide to pay a huge compensation fee to prise Mauricio Pochettino from Tottenham Hotspur, they don't have a Valverde replacement available.

On-pitch reinforcement is what Barcelona should rather concentrate on. Gerard Pique needs a partner at the heart of the defence. Matthijs de Ligt, the excellent Ajax captain, is reportedly on his way to Catalonia, which should mitigate the defensive woes. De Ligt is only 19 years old and a player for the long haul. Frenkie de Jong's impending arrival is another positive for Barcelona. The team needs some fresh legs in the midfield. Ivan Rakitic is a fine player but he is already 31 years old and should make way for de Jong. Sergio Busquets has had a great servant for the club. But he is past his prime. Barcelona must clear some deadwoods to make room for the new arrivals. Coutinho's offloading will be a loss-making business. But it has now become a necessity. Kylian Mbappe will be very expensive, but Barcelona have to be prepared for life after Messi. At 20 years of age, the Frenchman offers everything that this great club craves.

Depleted Liverpool sans Mo Salah and Roberto Firmino steamrolled Barcelona. The English side overpowered the Catalan giants, making a mockery of their passing game in the process. Barcelona have become predictable. Reboot they must.

ACROSS THE AISLE



P CHIDAMBARAM

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FIFTH COLUMN



TAVLEEN SINGH

# Tales from an older time

IF RAJIV GANDHI has become an issue in this election, his son is to blame. For months he has gleefully yelled 'Chowkidar chor ha?' without proof. It is a bad idea to charge someone with being a thief without providing evidence, and much worse if the man charged is the Prime Minister. Rahul Gandhi's reasons for believing that more than half the money of the total contract to buy Rafale fighter aircraft was 'put in the pocket of Anil Ambani' are flimsy. When reporters from this newspaper pressed him for details and proof in an interview last week, he had no answer.

Reckless charges in politics usually provoke a harsh response. And, it came. Narendra Modi said, in a campaign speech, that the 'naamdaar' should remember that his father had become prime minister as Mr Clean and ended up as Mr Corruption Number 1. A tasteless remark, but true. In 1989, Rajiv Gandhi lost the election because he was seen as corrupt by ordinary, rural Indians who made up ditties about the 'son-in-law of Italy'. The Congress party has never explained why the best friends of Rajiv and his wife, Mr and Mrs Quattrocchi, were bribed in this deal. Nor has there been a credible explanation for why Rajiv did not make public the names of those bribed in this deal, even after Bofors officials came to Delhi and offered to give them.

Having said this, it is important to remember that the BJP has its own explaining to do. When a BJP government came to power in the Nineties under Atal Bihari Vajpayee, why was the Bofors investigation not pursued with sincere determination? Why was the case against Mr and Mrs Quattrocchi made so poorly by the Indian government that extradition requests never held up in a foreign court? Ottavio Quattrocchi would have been extradited to India for trial if it had been. But, whoever advised the Congress president to continue charging Modi with corruption should have reminded him that the ghost of Bofors still lurks in the shadows of 10 Janpath.

Alas, his advisors are not wise people. His current Guru Number 1, Sam Pitroda, added to Congress problems by making one of the most thoughtless, offensive remarks I have ever heard. Accosted by TV reporters last week and asked about the 1984 pogrom against the Sikhs, he said, "OK 1984 happened, so what?" He seemed to forget that the people of Delhi vote today, and it is in the streets of this city that more than 3,000 Sikhs were burned alive by mobs incited by Congress leaders. He also forgot that Rajiv Gandhi justified this pogrom. Others did not. So clips of that shameful speech went viral on social media.

Rajiv Gandhi has become as much a player in this general election as his children. Inevitably, the Prime Minister started dishing out dirt in a way that he has hesitated to in the past five years. So came the story of the *INS Viraat* being used as a holiday cruise ship by the Gandhi family for their Christmas vacation in Lakshadweep. Retired Naval officers have tried valiantly to defend Rajiv, but if you read details of that holiday published in this newspaper last Friday, it becomes very clear that there was misuse of a warship and Navy choppers.

The *INS Viraat* story reminds voters in the last two phases of this interminable election that a poor *chaivallah* is up against an arrogant prince. It reminds them that the prince was brought up thinking of India as his personal fiefdom and that the only reason he is fighting so hard to win it back is because he wants his royal privileges restored. Modi has exploited this well in every interview he has given in recent days. But entitlement is much despised in today's India anyway.

While travelling during this election I have for the first time heard ordinary people in small villages speak of how wrong it is that the doors of politics are open only to those who come from privileged families. For the first time, I have heard people speak of how despicable it is that political parties have become private limited companies. One reason why Modi remains hugely popular in the vast hinterland of rural India is because he is seen as a man who is working for the country and not his family.

There was a time when the Gandhi could win elections on their vaunted charisma. That time has gone. So when Priyanka Gandhi describes Modi as "the most cowardly and weak prime minister I have seen in my life", as she did last week, and sneers at his supposed obsession with "my family", she seems not to know how much it helps Modi. If he becomes prime minister again, it will have a lot to do with the Congress party misjudging the national mood.

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INSIDE TRACK



COOMI KAPOOR

NUMBERS GAME

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CREDIT ONLY FOR PM

External Affairs Minister Sushma Swaraj is an avid tweeter who is quick to trumpet her ministry's achievements and name the Indian Foreign Services officers involved. But when India scored a major diplomatic coup in getting Masood Azhar

OUT OF MY MIND



MEGHNAD DESAI

HOW OLD is the Congress party? It could be 134 years since 1885, or we could begin with the breakaway party Indira Gandhi founded in 1969 — the Congress (R) — from the official party called the Congress (O). In December 1977, Indira resigned her primary membership of the Congress (R) and founded the Congress (I).

Whether 134, 50 or 42 years old, the Congress is developing serious memory

HISTORY HEADLINE

# Cyclone Fani: Why 2019 was not 1999



AMITABH SINHA

AS ODISHA stares at the devastation caused by Cyclone Fani, comparisons are being drawn with the tragedy the state suffered 20 years ago at the hands of one of the most powerful cyclones of the 20th century. The 1999 super cyclone had claimed almost 10,000 lives (unofficial accounts say this was a huge underestimate), damaged nearly 20 lakh houses, killed about two lakh livestock, and affected about 2.5 to 3 million people, leaving large tracts of agricultural land unfit for cultivation for a long time due to salinity.

India has come a long way since then, as is evident from the much lesser number of deaths caused by Fani, and some similar cyclones in other parts of the country in the recent past, but the devastation, sufferings of people, and challenges faced in relief and reconstruction are not very different from those in 1999.

The super cyclone that had hit the Odisha coast, near Paradip, on October 29 remains the most powerful ever recorded in India, and one of the strongest anywhere in the world in the 20th century. One good measure of the strength of a cyclone is the 'pressure drop' that creates and sustains it. The average atmospheric pressure at mean sea-level is 1013 millibar. When the super cyclone was at its strongest, a few hours before it made landfall, the air pressure at its centre was 912 millibar.

"A pressure drop of 100 millibars is very big, and provides tremendous strength to the cyclone. The bigger the pressure drop, the stronger the cyclone, and greater the wind speed associated with it," says U C Mohanty of IIT Bhubaneswar. The super cyclone was accompanied with winds of speeds 250-260 km per hour or more. In comparison, Cyclone Fani had a pressure drop of 63 millibars (atmospheric pressure of 950 at its strongest) and wind speeds of about 210-215 km per hour.

To put it in context, the super cyclone carried energy equivalent to 1,600 atomic bombs, similar to the ones dropped over Hiroshima. Almost the entire coastline of Odisha was affected, with the districts of Kendrapara and Jagatsinghpur worst off. Entire villages were washed off. One for-



Even as human deaths have been averted to a very large extent, there is no running away from the destruction caused by Cyclone Fani. Reuters

mer official involved in rescue and relief claims that waves as high as 40 feet were witnessed, and villages as far away as 40 km from the coast submerged. Most documented accounts talk of waves 25 to 30 feet high.

What added to the destructive capability of the super cyclone was that it stayed on for unusually long even after making landfall. Usually, cyclones dissipate in strength very fast after making contact with land. This is mainly because of the lack of moisture that feeds it over the ocean, and the friction provided by land and other structures on it. The super cyclone, however, continued to retain the strength of a cyclonic storm even 36 hours after landfall. Heavy rain continued for two days along the coastline.

What also made the 1999 super cyclone such a huge tragedy was India's ill-preparedness. The India Meteorological Department (IMD) had put up its first cyclone detection, tracking and warning system in the 1970s, thanks mainly to its then director general P Koteswaram, who got 10 cyclone detection radars installed along the coastline. But even in 1999, the IMD's ability to forecast cyclones was pretty rudimentary. The computing resources were severely limited, the models were crude and weak, Internet access was just beginning so communication with other global agencies took time, and the sort of international collaborations that we have now were sorely missing.

According to an account published by S R Kalsi in the IMD's quarterly journal *Mausam*, the IMD had detected the cyclone when it formed on October 25, near

the Andaman and Nicobar Islands. By the next day, the IMD had alerted the coastal states of Andhra Pradesh, Odisha and West Bengal. But it did not have the capability to predict the exact trajectory of the cyclone. Even a day before landfall, All India Radio bulletins were saying that the cyclone could be headed to West Bengal. The super cyclone also took meteorologists by surprise. It gained strength quite suddenly a day before landfall. In that same account, Kalsi mentions that the air pressure at the centre of the cyclone fell by 66 millibars in the 24 hours preceding landfall. "This indicates it was a case of rapid development," he says.

And of course, the state did not have the infrastructure or the resources to evacuate people, the most crucial difference between then and now. One study of the 1999 super cyclone says there were barely 75 cyclone shelters in the entire coastline of Odisha, all built by the Red Cross at that time. Barely any evacuations were made. In contrast, thanks to standard operating procedures for evacuation now, almost 1.2 million people were evacuated during Cyclone Fani.

However, even as human deaths have been averted to a very large extent, there is no running away from the destruction caused by a cyclone. Almost a week later, many areas in Odisha, including Bhubaneswar and other cities, are without power, there is a drinking water crisis, livelihoods and assets lost forever, possible outbreak of diseases and post-traumatic stress, and major reconstruction works ahead.

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# Congress's selective amnesia

loss. Take the most recent spat about surgical strikes. It took weeks into the campaign to respond to Narendra Modi's challenge. Then it came up with not one but several instances which no one could recall as having made an impact and now are quickly forgotten.

There was however a ready example of the first and glorious "surgical strike" way back in 1965 when Lal Bahadur Shastri ordered the Army to cross the Punjab border, which altered the balance of the battle. But then Shastri was an accidental prime minister and has been wiped out from history to establish a seamless succession of the Nehru Gandhi dynasty. P V Narasimha Rao suffers from the same deletion, hence the Congress cannot take pride from the

radical transformation of the economy under him after 40 years of stagnation. No doubt as time passes Manmohan Singh will be quietly given the same amnesia treatment. This is a determined effort to throw away one's best cards just to make sure that any success, if it comes, can be attributed to the family.

It is a free country and the Congress is free to write its own terminal history. But it does take considerable chutzpah to insist, as the Congress has done recently, that while it can cite the names of the family to glorify the Party — Jawaharlal Nehru, Indira Gandhi, (forget Sanjay please) Rajiv, Sonia, no one else should name Rajiv negatively.

But, for India, it is worth cherishing the memory of Shastri. Not only for the

firm response to Pakistan or even his invocation Jai Jawan Jai Kisan. He was the first political leader to ask openly in Parliament whether all the heavy duty Plans which were being implemented benefited the *aam aadmi*, using those iconic words. Had he lived beyond his brief tenure of 20 months being Prime Minister, he could have contested the 1967 election in his own right and made the Congress a normal political party and saved it from the dynastic fate. No wonder there are conspiracy theories blaming the Russians, the Pakistanis or whoever to account for his death from a heart attack. Accidents do happen by chance and in unpredictable ways. There need be no conspiracy whatever.

It is inopportune to predict the out-

come of the election. Rumour has it that Rahul Gandhi is aiming for success in the 2022 Uttar Pradesh elections and the 2024 general elections. He says he has time, given his age and the certainty of tenure as Congress president. So 2019 has been conceded.

Yet there is no guarantee that history will repeat itself. Between Rajiv Gandhi's failure to win a majority and now, 30 years have passed without a Congress-majority government. Even the UPA took 15 years to arrive. There will be a generation of voters by then for whom names of Indira, Rajiv or even Nehru will have little purchase.

If Congress wants to survive, it will have to forget its past and invent itself a future.

CAPSULE



Science of Chocolate

Researchers from New York University have decoded the science behind the best tasting chocolate. The study, published in *Proceedings of the National Academy of Sciences*, pointed out that a process known as conching gives chocolate its silky smooth texture. Conching involves mixing ingredients for several hours which breaks the ingredients into smaller grains, reduces friction and provides the great taste. The study was done by researchers from the University of Edinburgh.



In deep trouble

A study published in *Geophysical Research Letters* has pointed out that radioactive carbon from nuclear bomb testing has been detected in tissues of crustaceans living in deep ocean trenches, including the Mariana Trench. The level of Carbon-14 in the atmosphere doubled after the tests and many organisms consumed this carbon. Now scientists have shown evidence for increased levels of C-14 in marine organisms after the bomb tests began in 1950s.

# Kolkata researchers use novel compound to kill cancer cells

The synthesised derivatives have better efficacy in killing cancer cells

R. PRASAD

Researchers at Kolkata's the Indian Institute of Chemical Biology (CSIR-IICB) and the Indian Association for the Cultivation of Science (IACS) have designed and synthesised about 25 quinoline derivatives that show potent anticancer activity. The compounds were tested *in vitro* against human Topoisomerase 1 (topo1) activity and their efficacy to kill cancer cells was carried out using breast, ovarian, cervical and colon cancer cell lines. The results of topo1 inhibition activity, cellular mechanisms and the cancer cell line studies carried out at IACS and the compounds designed and synthesised by IICB researchers were published in the *Journal of Medicinal Chemistry*.

"Preliminary data based on cell line studies suggest that the compounds from IICB might be effective against breast and colon cancer," says Srijita Paul Chowdhuri from the School of Biological Sciences at IACS and one of the first authors of the paper.

"The success of the project is due to the years immaculate design by going back-and-forth with our hypothesis through computational analysis followed by synthesis and X-ray crystallography even before the biological validation began," says Biswajit Kundu from the Medicinal Chemistry Laboratory at IICB and one of the first authors of the paper.

Essential enzyme

Topoisomerase 1 is a fundamental enzyme that is essential for replication. DNA is in a supercoiled state and has to be unwound before replication can take place. For the DNA to uncoil, the topo1 enzyme has to first bind to



**Holds promise:** The compound might be effective against breast and colon cancer," say Srijita Chowdhuri (left) and Biswajit Kundu. •SPECIAL ARRANGEMENT

the DNA and form a complex. Once the complex is formed, the topo1 enzyme cleaves one strand of the DNA thus allowing the DNA to uncoil. Once uncoiling is completed, the topo1 enzyme rejoins the cleaved DNA strand for replication to take place.

Existing drugs and the quinoline derivatives synthesised by the IICB team have the ability to trap the complex thereby not freeing the topo1 to rejoin the cleaved DNA strand. As the number of trapped complexes in the DNA increases, the amount of free topo1 enzyme available to repair the cleaved DNA strand reduces. Also,

other enzymes involved in replication and transcription (where DNA is converted into RNA) come and collide with the trapped topo1 and this causes more DNA breaks. As a result, replication gets affected leading to DNA break and cancer cell death.

The mode of action of the existing drugs and the synthesised compounds is the same. The difference lies in the time the complexes remain trapped when the drugs or the synthesised compounds are used and therefore the ability to kill cancer cells.

Compared with normal cells, topo1 enzyme is produced in far excess

amount in cancer cells and so more complexes are formed. As a result, though topo1 enzyme is found even in normal cells, there is greater likelihood of the drugs specifically targeting the cancer cells.

"The existing drugs bind to the complex and trap it only transiently. This is because the drugs can be easily removed by body fluids. So within about 20 minutes, all the DNA breaks are repaired," says Dr. Benu Brata Das from the School of Biological Sciences and DBT-Wellcome India Alliance fellow at IACS and one of the corresponding authors of the paper. "So the existing drugs have less ability to kill cancer cells."

Stable complex

"The existing drugs are not metabolically stable and so become inactive very fast. So using the existing drugs, the complexes can be trapped only for a brief period," says Dr. Arindam Talukdar from IICB and the other corresponding author. "But our compound can trap the complex for as long as five hours. All the 25 quinoline derivatives we synthesised show similar efficacy towards human topo1 inhibition." The ability of the synthesised derivatives to trap the complex for a much longer time might translate into better efficacy in killing cancer cells.

"The speciality of our compound is that they do not react with or bind to topo1 or the DNA when they are in isolation. They bind only when topo1 and the DNA form a complex. Thus, our designed compounds can be seen as targeted therapies," says Dr. Talukdar. IICB jointly with IACS has already filed a patent in India for all the 25 quinoline derivatives.

## A global deal for postponing pralaya



SPEAKING OF SCIENCE

D. BALASUBRAMANIAN

The Earth and the atmosphere surrounding it receive radiation from the Sun, and get "heated". Some of the gases in the atmosphere, notably carbon dioxide (CO2) absorb this heat radiating from the earth's surface and bounce it back. This is what keeps the earth- land and seas- at a temperature range "comfortable" for us humans and the other organisms inhabiting the earth today. We thus live in a large "green house".

What happens when the level of these greenhouse gases increases? The temperature will rise. And this rise has been due to increases in the levels of CO2 and other gases, produced upon burning carbon-rich fuels (coal, wood, petroleum products). Over the last 100 years alone, the global temperature has risen by close to 2 degree. And if we do not reduce or stop these fuels and use alternate sources of energy (solar, wind and others), the global temperature will rise further.

Two degree rise has been dangerous

We already see it in the form of the melting of ice caps and glaciers, causing a rise in sea level. This can submerge small island countries such as Maldives and Mauritius. It has also led to a change in the global climate, causing erratic monsoons, cyclones, tsunamis, El Nino and so on, affecting life on earth and in the oceans (fish, algae, coral reefs).

Temperature rise and climate change affect not just some countries but the entire globe, on which all species live- humans, animals, plants, fish, microbes. And if it is left uncontrolled, disaster looms for all life across the globe. Climate change, plus relentless industrial farming and fishing are leading to the extinction of 1 million species from Mother Earth within decades.

Paris Agreement 2015

It is for acting against this catastrophe that the UNO brought countries across the world together and in 2015 came up with what is called the Paris Agreement 2015 wherein they decided to make all efforts contain the temperature rise to no more than 1.5 degrees. While 195 countries across the globe signed the Paris Agreement and promised to take steps towards it, some oil producing/importing countries such as Turkey, Syria, Iran and USA have not. President Trump says climate change is "fake".

We need to do two urgent things. One is to reduce, indeed replace carbon-based fuels, with other forms of energy generation that do not generate greenhouse gases; hence solar power, wind power and others. The second is to enhance all natural methods which absorb CO2. Forests and plants do this best. Photosynthesis is done by all varieties of plants- algae in water, mangroves on the coast, crops and forests on land. They absorb atmospheric CO2 and produce oxygen for us to breathe. Tropical forests do this best; hence, deforestation in the Amazon, tropical Africa and in India must end. These regions also house over 200 million species of plants, animals and fungi. They are thus termed as Key Biodiversity Areas (KBAs); likewise are Marine Protection Areas (MPAs). They restore and protect biodiversity, increase yields and enhance ecosystem protection and defense. They alone help us preserve over 17% of land realm and 10% of marine areas by 2020, and preserve millions of species from extinction. But we need to do more beyond next year.

Global Deal for Nature

It is with all this in mind that a diverse group of scientists and ecologists from across the world have come up with a companion pact to the Paris Agreement, called: "A Global Deal for Nature: Guiding Principles, Milestones and Targets". This policy document is published on 19 April 2019 in the journal *Science Advances*, which should be read by every concerned citizen and government. Global Deal for Nature (or GDN) has five fundamental goals: (1) representation of all native ecosystem types and stages across their natural range of variation; (2) maintain viable populations of all native species in natural pattern of abundance and distribution - or "saving species"; (3) maintain ecological functions and ecosystem services; (4) maximize carbon sequestration by natural ecosystems and (5) address environmental change to maintain evolutionary processes and adapt to the impact of climate change.

These five goals of GDN have three Priority themes. Theme 1 is on protecting biodiversity. Towards this, they have listed a total of 846 ecoregions across the world and given milestones on how to protect as much as 30% of them by the year 2030. Theme 2 is on mitigating climate changes by conserving carbon storehouses or climate stabilization areas (CSAs) and Other Effective area-based Conservation Measures (OECMs). These involve saving about 18% of existing areas across the world (e.g., tundra, rainforest) as CSAs and about 37% of the areas as OECMs (indigenous peoples' lands, such as in the Amazon Basin, Congo Basin, Northeast Asia, Continental India). Theme 3 is on reducing threats to ecosystems, and concerns reducing major threats (such as overfishing, wild life trade, laying new roads cutting across forest lands, and building major dams).

Yes, we can afford it!

And in order to do all this, the gross cost is estimated to be \$ 100 billion per year. Considering that these are over 200 nations across the world (plus the private sector, which too should also be involved), this is a sum well worth achievable if we are to leave the world livable for our children, and all the flora and fauna that have enriched our earth since the last 550 million years. And if one wishes count the pennies gained for this investment, Barbiers et al. point out that biodiversity conservation can actually offer \$ 50 billion annual profit for the sea food industry and save the insurance industry \$52 billion annually through reducing flood damage losses!

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## NBRI: Arsenic bioremediation using two soil bacteria

The bacteria increase bioavailability of metals, facilitate plant growth

ASWATHI PACHA

Using two indigenous strains of bacterium isolated from arsenic-contaminated field, researchers from CSIR-National Botanical Research Institute (CSIR-NBRI), Lucknow and the University of Lucknow have shown that arsenic can be effectively removed from contaminated soil with the help of microbes.

What adds value to these strains (*Bacillus flexus* and *Acinetobacter junii*) is the fact that they can promote plant growth too.

Different forms of arsenic

Several studies have pointed out that using arsenic-contaminated water for agricultural purposes can lead to increased concentration of arsenic in fruits and grains, proving toxic to humans.

The researchers studied the two bacteria under different concentrations of arsenate and arsenite, the toxic forms of heavy metal. Arsenic treatment did not stunt or delay the growth of both the bacterial strains.



Deformed fingers due to arsenic contamination

*B. flexus* exhibited resistance to high levels (150 mmol per litre) of arsenate and *A. junii* to about 70 mmol per litre of arsenite. This is higher than previously reported arsenic tolerant bacteria and so were regarded as hyper-tolerant strains.

Further gene detection studies pointed out that both the bacteria have a special ars C gene, which aids in arsenic detoxification.

Plant growth promoters

The bacterial strains were further scrutinised to understand if they can help in plant growth too. In studies carried

out in the lab, both the bacteria were able to solubilise phosphorus. Phosphate solubilising bacteria have been reported to increase phytoavailability of phosphate, thus facilitating plant growth.

These two bacterial strains were also found to produce siderophores and ACC deaminase enzyme. Siderophore increase the bioavailability of iron and other metal ions in polluted soil environment and ACC deaminase is a well known plant growth promoting enzyme.

These bacteria can live symbiotically in the roots of plants in arsenic-contaminated soils and help them uptake the required nutrients without causing toxicity.

The paper published in the *Journal of Applied Microbiology* notes that these indigenous strains demonstrated the "potential to accumulate arsenic within the cells and transform it into less phytotoxic forms, making the strains more proficient candidate for bioremediation".

More studies in the field are needed to validate the results.

## CCMB scientists sequence Asiatic lion genome

Y. MALLIKARJUN

For the first time, the entire genome of Asiatic lion, an endangered species, has been sequenced by scientists from CSIR-Centre for Cellular and Molecular Biology, Hyderabad.

De novo sequencing and annotation have resulted in a draft assembly of the entire genome of a male Asiatic lion. "This firsthand information would help us to better understand the evolution of Asiatic lions and also make possible comparative analysis with other big cats," says Dr. Ajay Gaur, the lead author of the study, which was recently published online in *BioRxiv*, the pre-print website.

Comparative study

With the complete genome of royal Bengal tiger, African Cheetah and Jaguar available, comparative studies of all these big cats would be possible. He said only partial genomic information of the African lion was available now. Comparative genomics between African and Asiatic lions could be



undertaken once the complete genome of the African lion is sequenced.

The population of the endangered Asiatic lion is very low - only 523 animals are present in the Gir forests. The genome sequencing would enable scientists to study population genetics (the differences at the gene level within a population) and get newer insights into its population status and subsequent management.

Comparative analysis with other felids and mammalian genomes unravelled the evolutionary history of the Asiatic lion and its position among other felids. The study noted that the evaluation of genetic diversity placed the Asiatic lion in the lowest bracket of

genomic diversity index highlighting the gravity of its conservation status.

The genome is estimated to be 2.3 Gb (Gigabase) long and is found to have 20,543 protein-coding genes.

Multi-pronged approach

Dr. Gaur says that they found several candidate genes which are up-regulated in Asiatic lion and a few of them were specific to males.

As regards the crucial aspect of conservation of Asiatic lions, he says there is a need to adopt a multi-pronged approach and the study will enable better disease and population management of the endangered big cat by identifying characteristics which are specific to Asiatic lions.

CCMB Director, Dr. Rakesh Mishra says candidate genes which are specific to Asiatic lion can be identified by comparing with other big cats. The final objective is to understand the species at DNA level and study if there are any specific problems with regard to adaptability to environment or behaviour vis-à-vis other big cats.

## Obesity rising faster in rural areas

PTI

Obesity is increasing more rapidly in the world's rural areas than in cities, according to a study of global trends in BMI.

The study, published in the *Nature*, analysed the height and weight data of over 112 million adults across urban and rural areas of 200 countries.

The study found that from 1985 to 2017, BMI rose by an average of 2 kg/m2 in women and 2.2 kg/m2 in men globally, equivalent to each person becoming five to six kg heavier.

"The results of this study overturn commonly held perceptions that more people living in cities is the main cause of the global rise in obesity," said Professor Majid Ezzati of Imperial's School of Public Health. "This means that we need to rethink how we tackle this global health problem."

## Fast neutrino oscillations may hold key to supernovae formation

The oscillation is proportional to the density of neutrinos and not their masses

SHUBASHREE DESIKAN

Neutrinos could be the driving force behind supernova explosions, a new theoretical study from Tata Institute of Fundamental Research finds. The study which makes a fundamental advance in modelling neutrinos inside stars puts forth the idea that "fast neutrino oscillations" could hold the key to why some stars explode forming supernovae at the end of their lives.

Neutrinos come in three flavours: electron neutrino, muon neutrino and tau neutrino, so named because of the corresponding leptons they are associated with (electron, muon and tau). There are several puzzles they have posed, including how they are ordered according to mass and this puzzle still remains to be solved.

Earlier when measuring the number of neutrinos coming from the sun, experimentalists found that only a third of the number of solar neutrinos that was expected was being intercepted on earth. This was later explained by the understanding that they have a small mass and they can change from one flavour to another - a phenomenon named neutrino oscillations.

Fast neutrino oscillations are another phenomenon - When the same neutrinos are in the presence of many other neutrinos and when the different flavours are emitted slightly differently in various directions (anisotropy) the oscillations from one flavour to another happen at a higher frequency. This is called fast oscillation and is proportional to the density of neutrinos in the medium, and not the



**Massive explosion:** A NASA Hubble Space Telescope composite image shows star cluster NGC 2060. •REUTERS

masses of the neutrinos. "Any star that collapses under its own gravity after having run out of its fusion fuel is called a supernova. Usually stars more massive than eight times the Sun's mass enter this phase of explosive death," explains Basudeb Das-

gupta of Tata Institute of Fundamental Research, Mumbai, one of the authors of the paper published in *Physical Review Letters*, in an email to *The Hindu*.

He further explains that this has not been observed as it requires a large neutrino

density and anisotropy, conditions that can be met only in the hearts of massive stars, neutron star collisions etc.

"Our key advance is to treat neutrino collisions and oscillations self-consistently in a single calculation," says Dr Dasgupta. In earlier work, it was assumed that high density and anisotropy conditions were put in by hand, while the neutrinos were assumed to travel in straight lines without colliding. In the present work the authors include collisions that lead to the high anisotropy conditions. They show how in the presence of collisions the fast oscillations take place. "This was technically very challenging and the first calculation of its kind. Our computer-based calculation took several days on a cluster of high performance computers," he adds.

## A hen as grandmother

On a predecessor's fowl deed

SIMRAN SIDHU

There may be many reasons why some people don't have chicken. In my family, we don't have it because as a matter of fact, we consider hens relatives. It was my great grandfather, who first started a relationship with a beautiful hen.

My great grandfather was happily married to his wife, my great grandmother, when she fell ill and passed away. He married again, but his second wife too suffered the same tragic fate. He had children from his previous two weddings to look after and he wanted to marry



GETTY IMAGES/ISTOCK

again. But he was scared his next wife too would die after their wedding. So, before

nervously proceeding with the third wedding, the astrologer asked my anxious great grandfather to first marry a hen, to ward off any threat to life to his would-be wife. He dutifully married a beautiful, healthy hen and made her his third religiously wedded wife, my third great grandmother.

Then his fourth wedding was solemnised with a woman, who thankfully survived and recently even marked her eightieth birthday with her smiling centenarian husband, all courtes-

sy that beautiful hen. And the members of our family can't have chicken all their lives, thanks to that hen.

While sitting on the mantap with the hen for the wedding, my great grandfather didn't even think of how his future generations will never be able to feast on chicken all their lives.

He didn't consider how his great grandchildren will have to think of different excuses at different parties to refuse chicken, while inhaling the irresistible, yummy non-vegetarian aromas. And he didn't even think of how his progeny will have to look at all the hens with respect, because once upon a time, a beautiful, healthy hen was their relative.

I often wonder that if instead of marrying a hen and thereby making all hens our relatives, my great grandfather would have pityingly spared a thought for the gut pleasures of his lineage, and would have married some non-edible bird, namely a sparrow, or maybe a pigeon.

Then, just like the rest of the world, his family too, would be savouring delicacies such as chicken tikka, kebab rolls and butter chicken, instead of wondering how they taste. Cheers to healthy hens that we can dine with, but can never dine upon! The only non-vegetarian thing his family can relish, thinking and hoping it tastes almost like chicken, is fish.

And I hope no one in the family ever has to marry a beautiful fish.

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## Blessings of WHITE HAIR

Hair colour gets you the right of way, but not always perhaps

SUDHANSU MOHANTY

Most people hesitate to let the world know their true age while their thinning white head of hair is fluffing about at the slightest whoosh of air. Possibly they aren't aware of the unasked blessings conferred on senior citizens. Artificially coloured hair can make them look younger and more radiant, but they're missing the blessings that their mop of white hair could confer on them.

My first dalliance with this benediction was at the Kuala Lumpur airport. We were tired and deadbeat after a long flight from Auckland. The transit time was short and we walked straight to board the connecting flight back home. The queue was long - the securitymen rummaged through the handbaggage and frisked passengers. A middle-aged lady sat on a solitary chair placed alongside the queue.

My wife pulled ahead. The lady saw her but sat unmoved. Then her eyes fell on me as I inched closer. She got up instantly and offered me her chair. I thanked her profusely for her gracious concern. "I'm absolutely fine standing. Please be seated." But she wouldn't. My shock

of white hair and beard was too much of an affront to let her sit!

But this wasn't a one-off. On numerous occasions while checking-in, the girls at the counter would softly ask my wife edgewise if I needed a wheelchair! Sometimes when our checked baggage weighed a tad more, they would ask to lighten it and put the items in our cabin baggage. Once when I was unzipping the suitcase, the girl looked at my sciatic back as I crookedly bent on my knees, and said not to bother any more, and just checked me in!

Recently I dropped a book on my way. Before I could bend, a youngster had picked it up and handed it over to me with a smile. My experiences are well-rounded. In our building society of office the man offered his lone chair to wait: How can I sit when you're standing, you're so much the elder! While pushing my nonagenarian mother around in a hospital wheelchair, the chowkidar stopped me. "You'd be in your eighties,

could I help?" In shops, gracious souls often make way for me amid the crowded rows of merchandise. White has the right of way!

The ECI too couldn't play deaf, and offered old souls a way forward amid the mill-

**How can I sit when you're standing, you're so much the elder!**

ing crowd. To avoid the long queues we had decided to go early and reached the booth around 8 a.m. From a distance, the cacophony of voices, the cars corralled on empty grounds beside the road, conveyed we'll have to wait under the hot sun, getting hotter by the minute. In front of the polling centre

serpentine queues snaked; voters sought shelter under tree canopies to escape the fiery sun.

Exasperatingly we sought our polling room. "You can go straightaway and vote, uncle," a young voice chimed. "You're senior citizens!" He would've espied me up close - the ruffle of white hair and my white beard magnifying my seniority was unmistakable! As we edged closer, the policemen too waved us in without a whimper. Within minutes we're in and out of the booth. I was chuffed. How good and easy life is on this heaven on earth!

But I was over-living my senior moments: it was exhilarating! Within days I was down on Mother Earth with a thud!

The niggling pain in my knees and elbow had refused to ebb. Priyanka, my daughter, too had an issue with her back. I requested a friend in the hospital to fix appointments with the physiotherapist. On arrival, Priyanka went in first.

It was my turn next. The physio looked at me and said, "I was told only of one patient. I can't see you!" His words were sharp. My mental breeze still eddying his surreal words, I entreated, "Could I wait till you're through with your patients?" "You can, but I can't guarantee I can see you!" His words were brisk, his face wore no pity.

The physio had taken a good look at me during Priyanka's consultation, even

asked my age to emphasise a point he was making. He couldn't have missed my pate's offerings: a shock of bristly white hair.

I bit down my white-headed pride. The Mickey's taken out of me! A new experience in the hospital that was a second home for me for the last dozen years to repair my sundry body parts!

Glacially slow now, my knees emitting elevated psychosomatic pains, I hobbled back home, medical and X-ray reports in hand. I knew I was (sinisterly) living in my self-constructed utopia. Little wonder the fuzzy whiteness on my fluffy hair-beard combo hadn't worked its magic this time around!

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## The probability of not being what you are today

Just consider the whole panoply of career options that you could have exercised in life — what you could have been

PRIYA KEDIA

What is it that I am headed for? What is the meaning of my life, or is there any meaning at all? Am I here to do a breakthrough scientific discovery or bring about a social upheaval or live the life of a common man stuck between earning money and spending it? What really am I supposed to do to make my life meaningful? Meaningful to me, my family, my country, my planet, I have no idea. These questions populate my mind each fortnight.

If I do a bit of introspection, I realise that I have never asked myself if I can be a paragliding coach or a naval doctor or a musician.

I believe it's not just me; many of us do not know the potential that we have. We don't bother to calculate the probability of not being what we are today. Why don't we do that right now?

The question we need to pose is, "What is it that we should or could have been?" Let's consider some professions: Teacher, Adminis-

trator, Doctor, Engineer, Chef, Journalist, Pilot, Sportsperson, Painter, Writer, Astronaut, Musician, Dancer, Director, Politician.

A person can be most suited for any one (or maybe more than one) of these professions. There is an equal chance for all of them. One can definitely argue that a person has a higher chance of excelling in some professions and a lower chance for others. For example, someone who can efficiently utilise resources and is good with money management might have a better future as a businessman than as a politician. But who will confidently deny that the same person cannot be an excellent singer? Or if he/she had gone to a private school in the city, he/she would have been a top-class swimmer.

Or maybe if his/her mother were a politician, he/she could have become the leader of a ruling party.

What we can or cannot become is governed by our childhood, parenting, education, opportunities, and so on, purely based on luck.



ILLUSTRATION: SATWIK GADE

There are so many intricate factors at play that we can't say for sure that 'X' profession will fully exploit the potential of a person.

It is said that people are born with certain capabilities. It might so happen that they never come to know about those. Apart from inherited talent, we acquire some skills at home, school, college, and so on.

We develop habits, host

emotions, frame ideologies and in a way create a personality which becomes our identifier. Now, if we randomly pick a profession and do a profiling of some top people in that profession, we will be able to generate a basic set of attributes that a person requires to excel at it.

There is a high probability that two or three professions might have certain overlapping attributes. This implies

that no set is unique and that one "personality" can be mapped to more than one profession. You see, there is no one answer to the question, "What is it that we should or could have been?"

So why not assume that a person has an equal probability of excelling at all the above-mentioned professions, given adequate learning and training. Still, if you are not convinced with this opinion, you can do what researchers do whenever something seems too unbelievable. Assume that as so-called "ideal conditions".

I will make a wild assumption that I knew the basic concepts of probability when I was one year old and that only 15 professions existed. That one-year-old innocent kid must have thought she can become anything in future if she meets a good teacher. Back then, if I had calculated the probability of my becoming an engineer, I would have got in 15, or 6.67%, as my answer. That's not a very big number. But I did end up becoming an engineer. I went to a govern-

ment college in my State. I met a lot of people there, made friends, enjoyed life. We were 10 people in my friends' group. They came from varied backgrounds, with their fathers being a businessman, air force officer, farmer, lawyer, management consultant, doctor, teacher, engineer, and so on. But we all ended up being engineers. Some of us better forget about engineering and go and explore life.

**To rise above the crowd** There are doors waiting to be opened, opportunities waiting to be grabbed. What's stopping us from becoming a Stephen Hawkins or a Lionel Messi or an A.R. Rahman? Hold on, are we even aspiring to be like them or someone who rises above the crowd? Clearly, these people walked the extra mile, challenged their abilities a bit more, got stuck in the usual course of life a bit less and strayed away from what they were told to do, and did something more profound.

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## Leave the child alone

SUBHA DILIP

Remember certain encounters at functions? "Beta, you aren't yet married? Why are you giving your parents a hard time? Find a guy soon, beta."

The encounters continue. No matter if you have graduated, married and has a kid, it doesn't stop. I have a four-year-old and recently I took her to a family function. One relative came to us and started talking to my kid. "Hi baby, how are you? (no response from my daughter) What's your name? (no reaction) You like your mom the most or your dad? (no sound) The aunty looked at me as if I'm a failure. "She has to be more social, she knows English na?" I said, "No aunty, we speak the mother tongue at home."

By this time aunty had finished writing the unasked-for progress report for my kid in her mind. Of course my mind too had completed the counter-argument and questions. Why should my kid speak so socially to a person whom she doesn't recognise? English is a language that is anyway taught, familiarised and improved



GETTY IMAGES/ISTOCK

upon in schools. Then why should I miss out on the joy of speaking freely to my kid in my mother tongue?

The most frightful words today for parents are "summer camps". Before the schools release the final exam timetable, camp schedules are released. I saw an advertisement for summer classes, for age 1-14. It's good to start early, but isn't it better to understand the definition of starting early? Martial arts, swimming, tailoring, handwriting, pot-drawing, cooking, machine-making, rolling, compressing...

Next time before you enroll your kid in a competition or an extra-curricular activity, ask yourself if you're doing this because you truly believe it helps your kid, or is it just to answer questions from an aunty or uncle? If it's the former, go ahead.

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## There is positivity everywhere, we only have to touch it

How goodness can bring forth goodness in return, and spread the smell of humanity all around

R.D. SINGH

I am returning home on my bicycle after visiting a school in Ambala Cantonment for a heritage event. As I reach Top Khana bazaar, I stop near a familiar *rehriwala* for a glass of sugarcane juice. He knows my requirement - a big glass of chilled 'ganne ka juice' with lemon and some salt.

As he is preparing it, I see a small shop behind him which appeared to me like a cycle repair shop. As my cycle pedal was a bit loose, I ask the shop man if he could attend to it. He replied in the negative and indicated another shop in the bazaar. I decided to leave it for later as it was a minor problem.

Then I looked in front on the road. There were two to three Cantonment Board boys collecting garbage. I al-

so noticed a rag-picker who was sitting quietly by their side with his gunny bag. He looked tired and desolate, maybe due to the heat, and hunger. I decided to offer him a glass of juice, similar to what I was having. So I told Om Prakash, the *rehriwala*, to first give me a glass of juice for him. I took the glass of 'ganne ka juice' to the rag-picker and said 'please have it'. He looked up as if something extraordinary had happened. He gave me a sweet smile and took it.

**Change of heart**

As I returned to the juice *rehri*, what do I see? The shopkeeper who a short while back had declined to attend to my cycle, was busy fixing the pedal. I wondered what made him change his heart all of a sudden. Perhaps he



ILLUSTRATION: SREEJITH R KUMAR

saw me offering that glass of juice to that poor boy, and it touched him. If *sahab* can do a good deed, why not me, he must have said to himself. It just needed some hammer-

ing on the pedal and tightening of a screw, and the job was done.

I knew he would not take money for this. So with a bit of persuasion I gave him two

chocolates for his children.

There was another experience awaiting me. I paid Om Prakash for the juice and started cycling back to our house in Defence Colony.

I suddenly realised that I had paid only for my glass of juice, and forgotten to pay for the juice I gave the rag-picker. I felt bad. Though it was hot and at 65, I was tired after cycling for over 15 km, I decided to turn back and pay him the money. I did not want the trust to be lost.

I reached back, apologised to Om Prakash, and gave him the remaining money. He was touched, and others around noticed a sweet bonhomie. The atmosphere in that small area had turned positive. One sensed a smell of humanity around.

Something similar had

happened the previous evening as I was watering flowerbeds in front of the house. I called the small children playing cricket outside, mostly of domestic help in the neighbourhood. I gave them cold water to drink, and then offered toffees, which they loved. As they returned to play, I saw that they had thrown the toffee wrappers on the road. I picked up the wrappers, and showing these to them, put them in a refuse bin nearby. The children felt sheepish, and called out from a distance, "sorry uncle!"

As I share all this with you, one is feeling nice. There is goodness in all. We have to just touch it, without any selfish interest. Good begets good, indeed.

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## जान देना हल नहीं

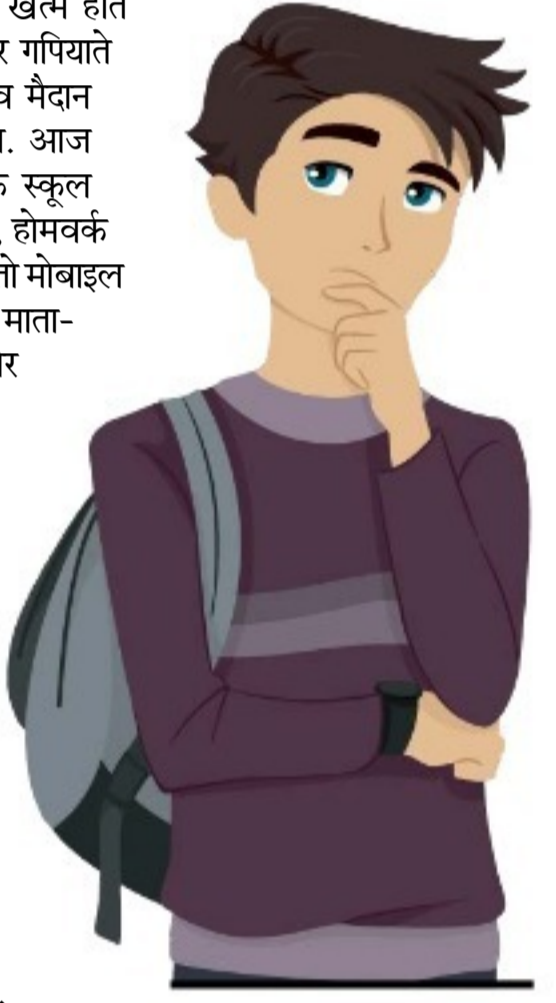
अनुज कुमार सिन्हा

रांची में 12वीं की परीक्षा में एक छात्रा को गणित में कम अंक आये (हालांकि वह परीक्षा पास कर गयी थी), पिता ने डांटा तो उस छात्रा ने ऊंचे भवन से कूद कर जान दे दी. घटना बेचैन करनेवाली है. आज हालात ऐसे हो गये हैं, जहां किसी छोटी सी घटना पर भी कौन, कहां और कब जान दे दे, कोई नहीं कह सकता. कारण धैर्य, संयम और हार को स्वीकारने की क्षमता का अभाव. बहुत कहना मुश्किल है कि दोषी कौन? छात्र-छात्रा, माता-पिता या पूरी व्यवस्था. बच्चे अगर परेशान हैं, तो माता-पिता बगर्बीत. डांटे तो जान देने को तैयार, न डांटे, तो बियगडने का खतरा. इसलिए इस समस्या का हल आसान नहीं. हालात ऐसे हो गये हैं कि हर कोई जीतना चाहता है, अगर हार गये, तो बर्दाश्त नहीं कर पाते. बच्चों पर इतना भार कि वह संभाल नहीं पाता. सोचिए, जिंदगी से बड़ी भी कोई चीज है, शायद नहीं.

आत्महत्या वाली घटना के पहले कुछ पुरानी घटनाओं को याद कीजिए. जो आज की पीढ़ी के हैं, वे अपने माता-पिता, दादा-दादी से ऐसी घटनाएं शायद सुन चुके होंगे. 30-40 साल पहले प्राइवेट और आज जैसे बड़े-बड़े स्कूल नहीं होते थे. सरकारी स्कूलों में बच्चे ज्यादा पढ़ते थे. तब भी रिजल्ट निकलता था और बच्चे फेल करते थे. रिजल्ट लेकर आते वक्त रास्ते में कोई पूछा कि पास किया कि नहीं. फेल करनेवाले बच्चे सीधा जवाब देते-नहीं किये, लटक गये. रिजल्ट न तो छिपाते थे और न ही उस पर बात करने से हिचकते थे. यह था माहौल. घर में खराब रिजल्ट करने पर बहुत डांटे-बोलते भी नहीं थे. कुछ घरों में धुनाई होती थी, लेकिन बच्चे महसूस करते थे कि फेल किये हैं तो पितायें ही. माता-पिता को इतना ही कहते थे कि आगे से ध्यान से पढ़ेंगे. उन दिनों रिजल्ट खराब होने पर जान देने की घटना कम घटती थी. मानसिक तौर पर बच्चे मजबूत होते थे. लोग उसे चिढ़ाते भी नहीं थे. संयुक्त परिवार में होने के कारण दादा-दादी, नाना-नानी का उन बच्चों पर हाथ होता था. प्रेरक कहानियां सुना-सुना कर बच्चों को वे कब मजबूत बना देते थे, पता नहीं चलता था. गुजर गया वह जमाना. मैदान में बच्चे खेलने जाते, आपस में लड़ते. एक-दूसरे का कॉलर पकड़ते. कभी-कभी आपस में गाली भी बकते, लेकिन खेल खत्म होते ही गले में हाथ डाल कर गपियां हूए घर चले जाते. तनाव मैदान में खत्म, यह था माहौल. आज जैसी स्थिति नहीं थी कि स्कूल से आओ, ट्यूशन जाओ, होमवर्क करो. थोड़ा मौका मिला, तो मोबाइल में मस्त हो जाओ. न तो माता-पिता के पास समय है और न ही बच्चों के पास. ऐसे में हालात कैसे बदलेंगे?

सच यह है कि हर मां-बाप अपने बच्चों को डॉक्टर-इंजीनियर ही बनाना चाहता है. कुछ अपवाद होंगे. बच्चे को साइंस ही पढ़ायेंगे. उस बच्चे की क्षमता क्या है, उसकी रुचि क्या है, इस पर माता-पिता गौर नहीं करते. सोचते हैं कि पैसा खर्च करेंगे, बड़े स्कूल में भेजेंगे, बड़े कॉचिंग में भेजेंगे, कैसे नहीं बनेगा इंजीनियर-डॉक्टर? वे भूल जाते हैं कि सिर्फ पैसा खर्च कर दबाव बनाने से बच्चों का जीवन नहीं बन जाता. बच्चों की क्षमता को पहचानिए. सब के लिए दुनिया में स्थान है. अब जिस तरीके से नंबर आ रहे हैं (अभी दो को पांच सौ में पांच सौ अंक मिले हैं), 95 प्रतिशत से ज्यादा अंक लाना मामूली बात हो गयी है, वह बता रहा है कि आनेवाला दिन और कठिन होगा. सच कड़वा होता है. ऐसी बात नहीं है कि जो बच्चे कम अंक लाते हैं, वे सभी बेकार ही हैं और जीवन में कुछ नहीं करेंगे. या जो फेल हो गये हैं, उनका जीवन ही बर्बाद हो गया. या जो बच्चे 95-99 प्रतिशत अंक ला रहे हैं, सब स्कूल-आइंटरेड ही बनेंगे. ठीक है टैलेंट का सम्मान होना चाहिए, लेकिन कम अंक लानेवालों की भी उपेक्षा नहीं होनी चाहिए. ईश्वर ने हर किसी को अलग-अलग क्षमता दी है. कोई अगर पढ़ने में अच्छा है, तो कोई खेल-कूद, संगीत, नृत्य या अन्य क्षेत्र में. उसकी नैसर्गिक प्रतिभा को आगे बढ़ाए. आइआइटी और मेडिकल के लिए दबाव मत दीजिए. धीनी और विराट ने तो आइआइटी या मेडिकल नहीं किया, तो किस मामले में वे पीछे हैं. देश के सबसे सफल व्यक्ति में शामिल. खेल के बल पर पूरी दुनिया में लोकप्रिय. पैसा-प्रतिष्ठा का अभाव नहीं. लता मंगेशकर को देखिए. संगीत के क्षेत्र में देश में दूसरी लता नहीं निकल पायी.

और बच्चों. सीधा फार्मूला है-जीवन सबसे कीमती. जीवन है, जिंदा रहोगे, तो जीवन में बहुत अवसर मिलेंगे. माता-पिता चिंतित रहेंगे ही, क्योंकि वे आपके माता-पिता हैं. वे आपका भला ही चाहते हैं. इसलिए कभी अगर आपने गलती की या आपसे गलती हो गयी, तो वे आपको डांटेंगे ही. उन्हें आपको डांटने का अधिकार है. इसे आशीर्वाद समझ कर स्वीकार कीजिए. आवेश-जल्दबाजी में कोई ऐसा कदम न उठा लें, जिससे आप को पछताना पड़े. कायर मत बनिए. समस्या आये, तो भागिए मत, उसका सामना कीजिए और उसे मात दीजिए. अंदर से मजबूत बनिए. मानसिक मजबूती सबसे जरूरी है. क्या हुआ, कम अंक आया तो आया. देश-दुनिया में लाखों-करोड़ों को कम अंक आये होंगे. यह टान लें कि फिर से तैयारी करेंगे और बेहतर करेंगे. असफलता के बाद ही सफलता की राह खुलती है. दुनिया में ऐसे महान लोगों की भरमार है, जो अपने आरंभिक जीवन में फेल होते रहे हैं. उसके बाद उनका रास्ता खुला और उन्होंने इतिहास रचा. इस तथ्य को समझिए कि रात के बाद दिन आता ही है, यही प्रकृति का नियम है. अगर आप असफल हो रहे हैं, तो आपको सफल होने का मौका मिलेगा ही. यह समय है सोच समझ कर निर्णय करने का. दोनों के लिए, छात्र-छात्राओं के लिए और अभिभावकों के लिए भी. अभिभावक अनावश्यक दबाव नहीं बनायें, उतनी ही उपेक्षा करें, जितनी क्षमता उसे ईश्वर ने दी है. वह पहले से इस प्रतियोगी युग में परेशान है, दबाव में है, उस पर और दबाव न बनायें. और बच्चों, कभी-कभी हारने के लिए भी तैयार रहें. हर बार आप ही जीतेंगे, ऐसा नहीं होगा. ठीक है सफल हुए तो खुश रहिए और अगर असफल हुए तो यह सोचिए कि ईश्वर ने आपको फेल करने कोई इससे अच्छा मौका क्या कर रखा है. निराश न हों, हार न मनें और चुनौती को स्वीकारें. जीत आपकी होगी ही, भले ही समय लगेगा.



# मावर्स नहीं जिंदगी से कसो प्यार

रांची के लोग सकते में हैं. उनके बीच की एक छात्रा ने ठीक एक दिन पहले बहु मंजिली इमारत से कूद कर जान दे दी. जिंदगी को अलविदा कह दिया. बात सिर्फ इतनी ही थी कि उसके मावर्स कम आये थे. ऐसे में पिता द्वारा नाराजगी जताने पर उसने खतरनाक कदम उठा लिया, जिसकी किसी को उम्मीद नहीं थी. मावर्स सिस्टम को लेकर हम इतने जुनूनी हो गये हैं कि अपने नौनिहालों पर कल्पना से परे दबाव बना रहे हैं. उनकी प्रतिभा को मावर्स के आधार पर तौल रहे हैं. इसमें न हमारी भावना काम कर रही है और न ही दिलोदिमाग. हम खुद अपने नौनिहालों की जान लेने पर तुले हैं. ऐसे में जिंदगी से प्यार करने के संदेश को सबके जेहन में डालना होगा.

## अच्छे अंक लाओगे तो घड़ी, वरना मिलेगी छड़ी

हरमू निवासी सुरज ठाकुर ने इस साल 10वीं की परीक्षा दी. बोर्ड परीक्षा में सुरज को 58 फीसदी अंक मिले.

बोर्ड परीक्षा से पहले ही सुरज के पिता ने कहा था कि परीक्षा में बेहतर अंक आयेगे तो मोबाइल गिफ्ट करेंगे, पर मोबाइल तो दूर, अब हर बात पर ताना मिल रहा है. इस परिस्थिति में सुरज अपने कमरे से निकलना कम कर चुका है. शाम को केवल घर के बाहर निकलता है.

किशोरगंज के छात्र आशीष साहू ने 10वीं की परीक्षा में 60 फीसदी अंक हासिल किये, जबकि पिता ने साइंस में आगे बढ़ाने की इच्छा जतायी थी. इसके लिए कोसिंग भी भेजा, बावजूद इसके कम अंक मिलने पर आशीष की जमकर पिटाई हुई. साथ ही पिता ने बात करना बंद कर दिया है. आशीष का कहना है कि पापा के डांटने से ज्यादा बुरा उनका बात नहीं करना है. इससे उसके मन में कई दफा बुरे ख्याल भी आते हैं.

सीबीएसइ बोर्ड की छात्रा राधिका भडानी ने विज्ञान संकाय से 12वीं की परीक्षा पास की. राधिका का पास प्रतिशत 59 फीसदी रहा. वह आगे मेडिकल की पढ़ाई करना चाहती है, पर कम अंक मिलने से उसका सपना टूट गया. घर पर माता-पिता भी उसे समय-समय पर फटकार लगा रहे हैं. इससे परेशान होकर राधिका ने रिजल्ट के बाद से खाना कम कर दिया है.

आइसीएसइ बोर्ड की कॉमर्स संकाय की छात्र श्रेया को 62 प्रतिशत अंक मिले हैं. उसने इस साल सेंट जेवियर्स कॉलेज से एकाउंट्स ऑनर्स की पढ़ाई करने की तैयारी भी की. इसके लिए परीक्षा के बाद से ही जुटी हुई थी. श्रेया ने बताया कि उसके सपने को रिजल्ट ने तोड़ कर रख दिया है, पर वह इससे हार नहीं मान रही है. एक साल ड्रॉप करने का फैसला लिया है. परीक्षा देकर बेहतर अंक हासिल करेगी.

### अभिषेक राय

हर व्यक्ति प्रतिभावान होता है. रचनात्मकता कूट-कूटकर भरी होती है. उसकी पहचान करने की जरूरत होती है. लेकिन हमारा समाज और व्यवस्था परीक्षाओं में आनेवाले अंकों को लेकर इस हद तक जुनूनी हो चुका है कि अपने नौनिहालों के प्रति कठोर रवैया अपना लेता है. न स्नेह के दो बोल मिलते हैं और न कठिनाई के वक्त किसी प्रकार की कोई सात्वना. भले ही स्कूलों में काउंसिलिंग का दौर चलता हो, लेकिन वह बस औपचारिकता मात्र साबित हो रही है. काउंसिलिंग के दौरान बच्चों को परीक्षा के डर से दूर रहने और अंक जाल में नहीं फंसने की हिदायत दी जाती है. दूसरी ओर हालात इतने खराब हो चुके हैं कि जो विद्यार्थी 80 फीसद से कम अंक ला रहे हैं, उन्हें रैस में माना ही नहीं जा रहा. न उनकी चर्चा होती है और न उनका मनोबल बनाये रखने को कोई प्रयास होता है.

आइसीएसइ 10वीं में 1800 बच्चों को 60% अंक

### नहीं चुनें आत्महत्या का रास्ता

आज के दौर में माता-पिता, शिक्षक और समाज का कठोर व्यवहार असफल रह रहे विद्यार्थियों को हताश और अवसाद का शिकार बना देता है. उन्हें आगे कोई रास्ता नजर नहीं आता है. उनका अपनी जिंदगी से प्यार और लगाव खत्म हो जाता है और वह आत्महत्या जैसा रास्ता चुन लेते हैं. शुक्रवार को डीएवी गांधीनगर की छात्रा अदिति राज के द्वारा 12वीं मंजिल से कूद कर अपनी जान देने की घटना के बाद से शहर के लोग सकते में हैं. 12वीं के रिजल्ट में कम अंक मिलने और अभिभावकों की फटकार के बाद अदिति हताश हो चुकी थी और उसका मनोबल टूट चुका था. ऐसे में जरूरी है कि अंकों की रैस में पिछड़ रहे विद्यार्थियों का ख्याल रखा जाये, जिससे वह अपनी जिंदगी से प्यार कर सकें. वह असफलता से हारे बगैर कोशिश जारी रखें और जीवन से प्यार करें.

### ग्रेस मार्किंग से बढ़ गया प्रतिशत

सीबीएसइ और आइसीएसइ बोर्ड ने जब से ग्रेस मार्किंग पद्धति शुरू की है, तब से बच्चों का प्रदर्शन बेहतर होता जा रहा है. बोर्ड के परिणाम 99 से 100 प्रतिशत तक पहुंच गये हैं. इसके अलावा 90 फीसदी से अधिक अंक या इसके करीब के प्रतिशत वाले विद्यार्थियों की संख्या में भी इजाफा हुआ है. इस साल सीबीएसइ बोर्ड परीक्षा में दो लाख 25 हजार विद्यार्थियों को 90 फीसदी से अधिक अंक मिले हैं. वहीं साल 2018 में एक लाख 35 हजार विद्यार्थियों को 90 फीसदी अंक मिले थे. ऐसे में प्रत्येक साल विद्यार्थियों को बेहतर करता देख प्रत्येक अभिभावक अपने बच्चे भी अंकों का दबाव बनाने लगे हैं.

### नहीं नजर आता है कोई रास्ता

सामान्यतः लोग अवसाद में आकर तभी आत्महत्या करते हैं, जब उनके पास खुद को बचाए रखने का कोई विकल्प नहीं होता. लोगों की आर्थिक स्थिति, मानसिक स्थिति, अकादमिक परेशानियां, प्रोफेशनल दबाव, रिलेशनशिप की उलझनें, पारिवारिक झगड़े, विवाहसंबंध आदि ठीक न होना जैसे कारण डिप्रेशन सुसाइड के लिए जिम्मेदार हैं. इन कारणों का सही तरीके से निवारण न हो, तो व्यक्ति आत्महत्या कर बैठता है. गहरी निराशा से इंसान खुद को होपलेस समझने लगता है.

## सीबीएसइ 12वीं में 18 हजार को 60% अंक

इस साल सीबीएसइ 12वीं में पटना रिजन से 66% विद्यार्थी परीक्षा में पास हुए. पास होने वाले विद्यार्थियों में से 42 हजार विद्यार्थी को 80 फीसदी श्रेणी में अंक मिले हैं, जबकि 18 हजार विद्यार्थियों को 60 फीसदी अंक मिले हैं. वहीं सीबीएसइ 10वीं में पटना रिजन का पास प्रतिशत 91.86 रहा. वहीं 8.14 प्रतिशत विद्यार्थी सफल नहीं हो सके. इसके अलावा करीब 37 प्रतिशत विद्यार्थी को 60 फीसदी से कम अंक मिले. आइसीएसइ बोर्ड में 10वीं के 11968 विद्यार्थी परीक्षा में सफल हुए हैं. इनमें से 5000 विद्यार्थियों को 80 फीसदी से कम अंक मिले हैं. इनमें से करीब 1800 बच्चों को 60 प्रतिशत से कम अंक मिला है. वहीं आइएससी (12वीं) में 4824 में से 4634 विद्यार्थी बोर्ड परीक्षा में सफल हुए हैं. इनमें से करीब 3500 विद्यार्थी को 80 फीसदी या इससे कम अंक मिले हैं. वहीं 1100 विद्यार्थी को 60 फीसदी अंक मिले हैं.

### सोशल मीडिया में शुरू हो चुका है बहस का दौर

हाल में वंदना सूफ़ी कटोक नामक महिला ने अपने बेटे के 60 फीसद अंक लाने पर प्रशंसा करते हुए फेसबुक पर एक पोस्ट डाली थी. जिसमें उन्होंने उसकी काबिलियत पर भरोसा जताया था. अपनी पोस्ट में बताया था कि उन्होंने उसे विधियों को लेकर संघर्ष करते और जुझते देखा. ऐसे में वह खुश है कि उनका बेटा 60 फीसद अंक से पास हुआ है. इसकी पूरे देश स्तर पर सराहना हुई है. लोग लगातार मार्किंग सिस्टम और इसके पड़ रहे प्रभाव पर सवाल उठा रहे हैं.

### आवेग और गहरे अवसाद में करते हैं आत्महत्या

आत्महत्या अक्सर तनाव या अवसाद (डिप्रेशन) में रहने वाले लोग करते हैं. अवसाद के दौर में इंसान खुद को शक्तिहीन महसूस करने लगता है. ऐसे में मौत का रास्ता अपनाकर खुद को दूसरों की नजर से दूर कर देना चाहता है. मूल रूप से लोग आत्महत्या दो कारणों से करते हैं, पहला आवेग में आकर (इंपल्सिव सुसाइड) और दूसरा में अलग होने, बिजनेस में बड़ा नुकसान होने, भारी मात्रा में कर्ज की वजह से कर लेते हैं. वहीं अवसाद से ग्रस्त व्यक्ति समय के साथ गहरी निराशा और नकारात्मक भावनाओं में जकड़ जाते हैं. ऐसे में जीवन समाप्त करना आसान लगता है.

## इस आइएसएस ने 10वीं पास की थी थर्ड डिवीजन से... पर हार नहीं मानी, पास कर दिखाया देश का सबसे बड़ा इम्तिहान

सत्येंद्र कुमार सिंह

10वीं के रिजल्ट से जो बच्चे मायूस हैं, जो मां-बाप अपने बेटों से निराश हैं, उन्हें कम से कम एक बार छत्तीसगढ़ के आइएसएस अवनीश शरण की दसवीं की मार्कशीट जरूर देखनी चाहिये. अगर स्कूल और कालेज के नंबर बच्चे का भविष्य तय करते तो बिहार का एक बेटा आइएसएस नहीं बनता. छत्तीसगढ़ को एक कामयाब कलेक्टर नहीं मिलता. छत्तीसगढ़ के कबीरधाम जिले के कलेक्टर अवनीश शरण ने अपने अकादमिक करियर का मार्क्स बायोडाटा के साथ खुद ही सोशल मीडिया पर शेयर किया है. 10वीं की परीक्षा तृतीय श्रेणी (44.5%) से और ग्रेजुएशन की परीक्षा किसी तरह खींचकर फर्स्ट डिवीजन पास करने वाले अवनीश आज के बच्चों के लिए एक उदाहरण भी हैं, एक सीख भी



हैं और एक मोटिवेटेड भी. बिहार के समस्तीपुर के रहने वाले अवनीश शरण 2009 बैच के छत्तीसगढ़ केन्द्र के आइएसएस अफसर हैं. फेसबुक पर अपने स्कूल-कॉलेज के अंकों को शेयर करते हुए उन्होंने मायूस बच्चों से अपील की है कि वह निराश होकर कोई भी आत्मघाती कदम नहीं उठाएँ, क्योंकि भविष्य में उन्हें खुद को साबित करने के कई और भी मौके मिलेंगे. ये पोस्ट उस वक्त में आया है, जब बिहार-झारखंड व छत्तीसगढ़ कई हिस्सों से परीक्षा परिणाम से निराश बच्चों की खुदकुशी की खबरें आ रही हैं. बिहार के समस्तीपुर के केवटा गांव के रहने वाले अवनीश बेहद साधारण परिवार से हैं. पिता शिक्षक और मांग गृहणी थी. घर पर बिजली नहीं थी, सो लालटेन के सहारे अपनी पढ़ाई पूरी की. 2002 में ग्रेजुएशन के बाद 7 साल की कड़ी मेहनत के बाद 2009 में जनरल कोटे से अवनीश आइएसएस में सेलेक्ट हुए.

## पढ़ाई में कम अंक मिले, पर जीती जिंदगी की जंग

शुरू से ही खेल में रुचि थी. अभिभावक खेलने और नियमित अभ्यास करने की सूरत तो देते थे, बावजूद इसके पढ़ाई करने का भी प्रेशर समय-समय पर बनाते थे. उनके इसी प्रेशर की वजह से 12वीं की परीक्षा के दौरान तीरंदाजी की प्रैक्टिस छोड़ कर एक महीने तक पढ़ाई की. इसके बाद भी इंटर में अच्छे अंक नहीं मिले. लेकिन पास हो गयी. अभिभावकों ने इसमें भी मेरा सपोर्ट किया. इंसान हमेशा अपना 100 परसेंट नहीं दे सकता. सलारनात्मक सोच और निरंतर प्रयास से आगे बढ़ने के उसाह को कम नहीं होने देना चाहिए. हार से सीख लेकर आगे बढ़ना चाहिए.

- मधुमिता, अंतरराष्ट्रीय तीरंदाज



मैंने मारवाड़ी स्कूल से मैट्रिक की परीक्षा पास की, हालांकि तीन अंक से पिछड़ने पर सेकेंड डिविजन मिला. इसके लिए काफी रोषी, लेकिन अगली बार अच्छा करुंगी, यह सोचकर आगे बढ़ती गई. मेरा मानना है कि पढ़ाई हो या कोई भी क्षेत्र हार नहीं माननी चाहिए. असफलता मन में टान लेने से सफलता से दूरी बन जाती है. असफलता भी जीवन के कई पहलुओं को नजदीक से देखा. मेरे अभिभावकों ने डांस को बढ़ावा दिया. ऐसे ही अन्य अभिभावक भी बच्चों में सकारात्मक सोच जगायें और उन्हें सपोर्ट करें. प्रतियोगिता वर्तमान समय में प्रत्येक क्षेत्र में है. ऐसी परिस्थिति में अभिभावक को मोरल सपोर्ट देना चाहिए.

- अलिशा सिंह, बॉलीवुड कॉरियोग्राफर



बोर्ड परीक्षा में 60 फीसदी अंक मिले थे. इससे कुछ दिनों तक निराशा हुई थी. इसके बाद खुद को संभाला. खुद से और दोस्तों के साथ मिलकर अन्य विकल्पों की तलाश की. इस बीच किसी ने होटल मैनेजमेंट करने की सलाह दी. इस विषय की जानकारी नहीं थी, तो विषय के प्रति जानकारी हासिल करने में जुट गया. जितनी जानकारी मिली, वह करियर बनाने के लिए उपयोगी लगे. परिवार के सदस्यों से साझा किया तो उन्होंने भी मदद की. कम अंक से अफसोस करने से अच्छा है आगे के लिए मेहनत करते रहें. लगातार खुद को सफल बनाने की इच्छा भी सफल बनाती है.

- सम्राट सरकार, ऑपरेशन मैनेजर

10वीं की परीक्षा में मुझे अच्छे अंक मिले थे. दो साल बाद 12वीं की बोर्ड परीक्षा में प्रदर्शन उतना अच्छा नहीं रहा. नतीजा यह हुआ कि द्वितीय श्रेणी से सफलता मिली. इसके बाद दो सालों तक प्रदर्शन को प्रेरणा स्वरूप लिया और खुद को भी बेहतर साबित करने का प्रयास जारी रखा. बाद में सरकारी नौकरी के लिए प्रयास किया. बैंक की परीक्षा दी, उसमें सफल होकर वलकंठ के रूप में चयन हुआ, फिर बैंक पीओ की परीक्षा को भी क्लियर किया. इसमें भी मन नहीं भरा, तो 2012 में जेएसएससी की परीक्षा दी और सफल रहा

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