

AI in agriculture

Given the impressive track record, the future of this field seems promising



FARM VIEW

SURINDER SUD

Artificial intelligence (AI) is making rapid inroads into the Indian farm sector. The ease with which farmers are adopting it indicates that it would soon become a major professional guide for the farmers. A key reason for the farmers' growing interest in AI is the grad-

ual transformation of traditional farming into smart agriculture which requires knowhow and information that goes beyond their conventional knowledge and wisdom. They now need reliable, forward-looking and problem-solving advice which they can get from the AI. Moreover, the rural youth, especially the educated ones, feel more comfortable with mechanised, technology-driven high-value agriculture than the tedious traditional knowledge-based routine farming practiced by their forefathers. Mobile phones have penetrated deep into the rural areas. About 30 million farmers are estimated to own such phones already. Their count is projected to swell rapidly. The way has, thus, been paved for the AI service providers, such as public sector farm research

organisations, information technology companies and startups in this field, to generate and pass on situation-specific and need-based contents to the farmers. Microsoft is said to be working with Indian farmers in Andhra Pradesh to dispense advisory services in areas like crop sowing, land management, fertiliser application and similar others. The local arm of another multinational company, IBM India, last week signed a "statement of intent" with the agriculture ministry to take up a pilot project on the utilisation of AI and weather technology-driven solutions in agriculture. This project would operate in one district each of Madhya Pradesh, Gujarat and Maharashtra. This apart, a large number

of startups have come up to disseminate the next generation technologies in several critical fields of agriculture. Some of these enterprises are deploying sensors and information technology tools to monitor crop and soil health for the benefit of the farmers. Some others are engaged in generating data-based advisories on the time of sowing, besides issuing alerts against potential risks. Yet another category is of startups collecting, analysing and providing information on input supplies and output marketing chains. Significantly, the agriculture ministry, as also the Indian Council of Agricultural Research (ICAR) and the state farm universities, are putting in special efforts to popularise AI to improve productivity, production and profitability of farming. An inter-ministerial committee, set up by the agriculture ministry to suggest ways and means to double farmers' income, has underscored the role the digital technology can play in making

Indian agriculture lucrative. The technologies identified by this panel for this purpose include AI, big data analytics, block chain technology and internet-of-things (IoT). The ICAR recently brought out a special edition of its popular publication "Indian Farming" (March 2019 issue) devoted exclusively to AI. This apex farm research body has been instrumental in developing over 100 easy-to-use and farmers-friendly mobile apps covering different areas of agriculture and its allied activities. Of these apps, 42 deal with mainstream agriculture, 27 with horticulture, 10 animal husbandry and veterinary sciences, six dairying, one poultry, three fisheries, 17 natural resource management and 11 integrated farming systems. They carry valuable information on agronomic practices, prices of different farm commodities, weather forecasts and warnings and other kinds of advisory information. The "Kisan Suvidha" mobile app is a comprehensive portal

carrying useful information on most aspects of modern farming. Its contents comprise weather-related information, including extreme weather alerts; market prices; plant protection methods; dealers of inputs like seeds, pesticides, fertilisers and farm machinery; soil health cards; cold stores and warehouses; and veterinary centres and diagnostic laboratories. The market intelligence available through this app contains vital information on the prevailing price and demand trends to let the farmers take informed decisions on selling their produce at the right time and at the right price. Another app, called "mKisan", conveys agriculture-related counsel to the registered farmers through the short message service (SMS) and voice messages in local languages. However, these are still early days of the application of AI in agriculture. But given the impressive track record, the future of this field seems quite promising.

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Why there is no rush for Jewar

The alternative to Delhi airport will be ready for operations by 2024, but it may still be long before the National Capital Region needs another airport

SURAJEET DAS GUPTA

On July 15, prospective bidders for the new greenfield airport in Jewar, in Uttar Pradesh, have been called for a pre-bid meeting to clarify their doubts. The airport, to be built in public-private partnership mode, is being positioned as an alternative for citizens in the National Capital Territory, including the neighbouring cities of Mathura, Meerut, Ghaziabad, Gautam Budh Nagar, among others, which have till now had just one choice for an airport — the Delhi airport with its three terminals, around 80 km from Jewar.

But with burgeoning traffic in Delhi and just three runways, it is already facing capacity constraints — especially during peak hours. In FY19, the airport handled around 70 million passengers.

The Noida International Airport Ltd (NIAL), which is overseeing the project, had initially pitched for completion of the airport by April 2023, based on the deadline suggested by Price Waterhouse Coopers (PwC), which conducted the techno-economic survey for the project. But most government officials now believe this deadline will have to be pushed to 2024 as acquisition of land is still a work in progress. Besides, the earlier deadline of having a financial closure of the project by 31 March 2019 is long gone. NIAL, however, is moving quickly. It wants to close the bids by November and award the project by January 2020.

The question which potential infrastructure players who are interested in bid-

ding are grappling with is whether Jewar would be a viable business proposal in 2024. Many say that the airport should be built only after the large capacity increase being undertaken at the Delhi airport is absorbed. A top executive of an airport infrastructure company says: "There is no second guessing whether Delhi needs a second airport or not. But the issue is whether it should be operational by 2024 or at least three to five years later, when there is sufficient demand due to Delhi airport exhausting its expanded capacity too. Otherwise, the substantial

investment made will remain idle. So what is the hurry?"

He has a point. The Delhi International Airport Limited (DIAL) has embarked upon a massive expansion to increase its capacity from 70 million passengers per annum to 130 million (both arrivals and departures together). And based on their submissions to the government, they say that this is enough to take care of the passenger traffic from Delhi and the adjoining areas till 2034. That is based on the fact that the annual passenger growth in the last five years in Delhi has been 10-11 per cent per annum, and it is expected to slow down as the passenger base increases.

So what is DIAL offering? According to sources, DIAL, which has started implementing the first phase of expansion, will see passenger capacity rise from 70 million to 100 million per annum by March 2021. The airport is putting up a fourth runway and expanding terminal ID, besides building a cross taxiway. This will increase the number of slots available for departure and arrival at peak times.



In the next phase, a fourth terminal will be built, taking the capacity to 116 million passengers, and further to 130 million per annum after a few tweaks in operating procedures.

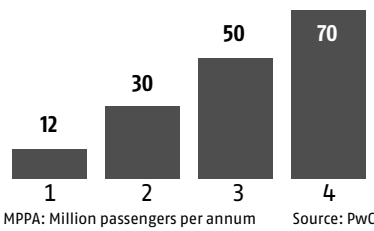
If this plan holds good then who does Jewar serve? Based on the Request for Proposal (RFP), the first phase of the Jewar airport would have a capacity of 12 million passengers per annum, going up to 70 million by 2039. The cost for the first phase, according to NIAL, is ₹4,588 crore.

PwC, which prepared the feasibility report on behalf of the authority, clearly thinks Jewar airport is viable. It expects that in the initial period the spillover traffic at peak hours in Delhi (because slots will not be available) will shift to Jewar and it will be able to garner 4.9 million passengers in the first year, going up to 14 million by 2029. It estimates that by 2029-30 the spillover traffic will pick up significantly as Delhi reaches capacity.

For a substantial number of passengers coming from the hinterland, PwC says, Jewar will be the closest airport. Based on their research of passenger

PASSENGER FLOW

Jewar airport's passenger handling capacity (MPPA in phases)



profiles at the Delhi airport, currently 57 per cent of the passengers come from NCT of Delhi and 11 to 12 per cent are from the districts in Uttar Pradesh like Gautam Budh Nagar, Ghaziabad and Agra. Also, 18 per cent of the international travellers to Delhi visit Agra and 60 per cent of them want an international airport near to the destination. It also says that by 2029-30, the demand for air travel from the hinterland will hit 15 million per annum, and a large number of these passengers will go via Jewar. Even airlines, especially the budget

ones, see an opportunity in offering differential pricing to customers taking a flight from Jewar compared to Delhi during peak hours. But they admit they will require enough customers from the catchment area to provide them with a decent passenger load factor before they can decide to fly on specific routes.

What makes the debate interesting is that the airport is less than 150 kilometres away from Delhi. So DIAL, according to the rules, would get a limited first right of refusal to build the airport. In simple terms, it means that if the number that it quotes for revenue per passenger (bidding is based now on this formula rather than the older system of revenue share) is within 10 per cent of the highest bidder, it will be given a chance to match that bid.

If it wins, the question to ask is: How will it fit in with its expansion of Delhi, which is going full-on? If it doesn't win, what would be interesting to see is the strategy of a new player to make Jewar a worthwhile business model. Or, will both prefer to see the project take off commercially much later on?

ON THE JOB

Devil in the data



MAHESH VYAS

The first two major economic documents of the new government — the Economic Survey and the Union Budget — did not contain any significant new measures on jobs.

The Economic Survey made suggestions on restricting size-based benefits to infant micro, small and medium enterprises (MSMEs) and denying these to those MSMEs that do not grow even after years of such benefits. The suggestion is sensible but, it does not directly address the problem of jobs. Will infant MSMEs generate sufficient jobs to more than offset the loss of jobs caused by the possible shutting down of the dwarf MSMEs post benefits?

The Economic Survey is right in effectively saying that it does not make sense to perpetually subsidise small firms that fail to grow — the dwarfs. But, this is not a solution to the jobs problem we face. Possibly, this is not even proposed as a solution to the jobs problem. But, then there are no solutions from the government on the jobs front. There weren't any direct suggestions in the Bharatiya Janata Party's (BJP's) election manifesto. There were none in the Budget presentations on February 1 and there are none in the most recent Economic Survey and the Budget presented on July 5.

The finance minister's speech talks about preparing the youth of the country

to meet demand for skilled workers in a world that is likely to face labour shortages. But, it does not talk about jobs, directly.

The government has released the Periodic Labour Force Survey results for 2017-18 and also for urban India in the first three quarters of 2018-19. Yet, there is no discussion about these in any of the economic documents since their release.

This stoic silence is intriguing. The monetary stance has turned accommodative. Implicitly, the greater preference for growth compared to inflation control is a positive for employment generation. Monetary policy is not known to take unemployment rates explicitly into consideration. Perhaps, it's time it did so.

What do the fiscal numbers tell us? An acceleration in the rate of increase in government spending would be a positive for employment generation. The finance minister's speech did not betray any strategic position in the matter. Besides, the speech was almost bereft of any quantitative data. It did not state what the government would spend or what would the fiscal deficit be. This was a first.

Beyond the speech are the detailed Budget papers where the data can be found. But, calculating the growth in central government spending has become more confounding than it usually is. This is because the budget papers do not recognise the fiscal statistics for 2018-19 released by Comptroller and Auditor General of India (CAG). The CAG released these estimates in May 2019, more than three months after the Interim Budget had presented data for 2018-19 on February 1, 2019. Yet, the Budget presented in July does not recognise these. It continues to use the data it presented on February 1 although it did have more up-to-date numbers from the CAG which were even used in the Economic Survey.

This is important because the difference between the numbers presented in the budget and those provided by the CAG is very big. The udget estimate of total central government expenditure in 2018-19 was ₹24.42 trillion. The revised estimates presented by the then finance minister, Piyush Goyal, was higher, at ₹24.57 trillion. But, on May 31, 2019, the CAG released the fiscal estimates for the year ended earlier in March 2019. This placed the central government expenditure much lower at ₹23.11 trillion. The difference between the estimates given by the government in February and those released by its official agency in May is a significant ₹1.5 trillion. However, the Finance Minister, Nirmala Sitharaman, does not recognise this fall in central government spending in 2018-19 compared to its revised estimates. The Budget papers presented by her stick to the earlier revised estimate of ₹24.57 trillion.

This matters because we need to interpret the ₹27.86 trillion that the government says it will spend in 2019-20. Should we compare these to the ₹24.57 trillion that the finance minister says were spent in 2018-19 or should we compare these to the ₹23.11 trillion that the CAG says were spent in the same year.

The former implies a growth of 13.4 per cent. But, the latter implies a growth of 20.6 per cent. The former would be close to business as usual. But, the latter implies a big increase in government spending of a scale not seen since 2008-09. This was when the government responded to a global financial crisis with a 24 per cent increase in central government spending. Does the government see such a big crisis today? Unlikely. But, the devil in the data must be exorcised

The author is the MD & CEO of CMIE

LETTERS

Karnataka crisis



The fast-paced political developments in Karnataka are not quite unexpected. They are a fallout, if not a corollary, of the Bharatiya Janata Party's (BJP's) return to power at the Centre and its better-than-expected performance in the Lok Sabha election in the state. At a deeper level, they bear out the fact that little divides political leaders in our country. Self-interest is the driving factor and the name of the game. Opportunism is a "virtue" if it serves their self-interest. Deserting a party on whose symbol one won an election or defecting to (or playing into the hands of) another party is not considered something unethical or shameful.

The BJP denies any hand in the resignation of nine Congress and three Janata Dal (Secular) [JD(S)] MLAs from the Assembly to avoid the charge of horse-trading. But it is unbelievable that these MLAs would have decided to resign without inducements from the party. Speculation is now rife that more from the Congress and JD(S) are likely to resign to pave the way for the formation of a BJP government.

G.David Milton Maruthancode

No vision, no theme

The Budget 2019 makes us look askance at a government which has been voted in for the second time with an even bigger mandate. The presen-

tation, instead, was of a hesitant coalition government. There was no overarching theme for Modi 2.0 nor was there a delineation of persisting core concerns of the economy. A virtue had been made of modesty. At the least, long-running problems of indifferent growth and fresh job creation ought to have had mention. Perhaps, the government has given up on both.

Consumption is no longer fuelled by the lower income segment which is losing its purchasing power. The middle one keeps away from white goods due to uncertainties about the



future and the upper strata is awaiting better times. Spending does not create wealth, production does.

Here was an opportunity to set direction towards these by promoting a healthy pool of savings to add wealth and jobs. An astute mix in policy approach that channels funds to the lower strata, enables the next to save and calibrates tax incentives for the job-creating capital is important. Tax sops for an ailing housing sector may help reduce inventory but not scale

up accretion of jobs. The Budget was one of listing administrative orders for ease of compliance and was nowhere near laying out a long-range vision or even a contemporary theme.

R Narayanan Navi Mumbai

Name-changing spree

On July 26, 2018, the West Bengal Assembly had passed a resolution unanimously to change the name of the state as Bangla. In 2011, a suggestion had come to change the name of the state as Paschimbanga. But the suggestion was turned down by the UPA government. In 2016, it was reportedly proposed to rename the state as Bengal in English, Bangla in Bengali and Bangal in Hindi. Finally, the state insisted to change the name as Bangla which was turned down by the Centre recently.

The NDA government is justified in rejecting the proposal as the name is "part and parcel" of Bangladesh. There have been many changes of names of Indian cities. But no government in India has thought of changing the name of India as Bharat. It will be nice to rename India as Bharat.

K V Seetharamiah Hassan

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CHINESE WHISPERS

No more Vyapam in MP



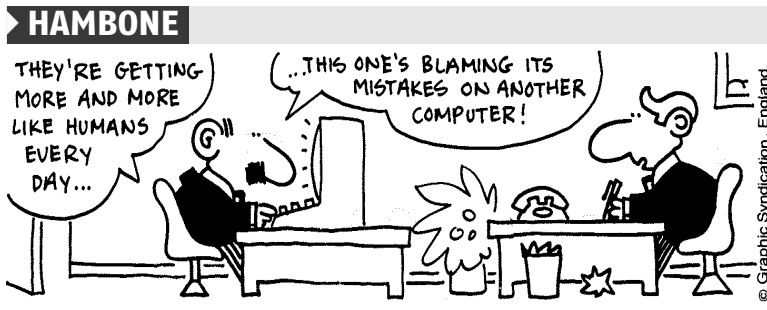
The Congress government of Madhya Pradesh has decided to wind up Vyapam or the Vyawasayik Pariksha Mandal, which was later renamed as Professional Examination Board (PEB). The government is going to replace it with Rajya Karmchari Chayan Ayog (State Staff Selection Commission). According to Chief Minister Kamal Nath (pictured), Vyapam is a symbol of "the Bharatiya Janata Party's scams in the state" and that's why the government has decided to close it down. This is not the first time that the state government is trying to disown Vyapam. In a previous attempt in 2015, the then BJP government had changed its name to Professional Examination Board. Shivraj Singh Chouhan, who was chief minister, had said that the name Vyapam was disgraceful and was bringing dishonour to the state.

Extended quarantine

Journalists were in for a surprise on Monday when they reached North Block to meet officials. They wanted to seek clarity on the fine print of the Union Budget 2019-20 presented by Finance Minister Nirmala Sitharaman on July 5. However, none of them — not even those with a Press Information Bureau (PIB) card — was allowed to enter despite there being no intimation from the PIB. The finance ministry is usually out of bounds for visitors during the "quarantine" period, which begins a month before the presentation of the Budget. It seems now the "ban" has been extended for an unspecified period.

Unhelpful helpline

With the July-end deadline to file tax returns approaching, the tax department helpline has been getting frantic calls from taxpayers. But the Aayakar Sampark Kendra (a single-window system registering all taxpayer application/return) number seems to be stuck in a time warp and keeps asking callers to choose between Hindi and English to proceed further. No matter which language the caller chooses, the helpline refuses to "help". And if by mistake, a taxpayer calls the number late in the night or early in the morning, the automated voice response asks him or her to call between 8 am and 10 pm. The tax department might consider answering queries over email like they do in the US, where this facility is available throughout the year.



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Taxing the super-rich

India needs a predictable, stable, and moderate rate of taxation

Finance Minister Nirmala Sitharaman struck the right chord in the very beginning of her Budget speech when she stated that the government does not look down upon legitimate profit earning. This was a welcome remark. Businesses in India have been marred by licence raj for far too long and making money has not always been appreciated. To her credit, Ms Sitharaman extended the benefit of the lower corporate tax to all but 0.7 per cent of companies, though the expectation was that the benefit will flow to all.

But the feel-good effect of the announcement did not last long, because the minister proposed an increase in the surcharge for taxpayers earning more than ₹2 crore. According to the proposal, the effective tax rate for individuals with a taxable income of ₹2-5 crore and above ₹5 crore will go up by about 3 and 7 percentage points, respectively. While the proposal will affect only a small minority of taxpayers, the idea is flawed at multiple levels and should have been avoided. It is estimated to improve income tax collection by less than ₹3,000 crore.

At a broader level, this goes against the basic idea of simplifying the tax structure. Although various kinds of cess and surcharge have been imposed in the past, this Budget has taken it to another level. Clearly, a reversal will be difficult for political reasons. It is not clear as to why the government intends to undo a system that has worked well. Experience shows that collection tends to increase when rates are lower.

It is well accepted that the government needs more revenue to increase capital expenditure and fulfil its social obligations. Therefore, in order to increase collection, the focus should be on compliance and broadening the tax base. The idea should be to encourage people to pay taxes and improve the tax administration to detect noncompliance. While there has been some progress on the compliance and administration part, regular revisions in exemptions and rebates limit the possibility of meaningfully increasing the base. For instance, the Interim Budget gave a full tax rebate to individuals with a taxable income up to ₹5 lakh. The revenue impact of this was more than ₹18,000 crore.

What is desirable is that instead of depending on large payouts from a small number of taxpayers, India should move to a system where a large number of people pay a moderate rate of tax. Again, history shows that a higher rate of taxation results in evasion. It is possible that the super-rich section of taxpayers with resources at their command would look for ways to reduce their tax liability. It would be interesting to see the actual resource mobilisation on account of the new surcharge.

Further, if the government believes that the rich should be contributing more, it should work on revising tax slabs. This will keep the structure simple and transparent, and the states will also get their fair share. In fact, the government has made the job of the panel working on a new direct tax code more difficult. Hopefully, the panel will recommend simplifying direct taxes, and the government will find it convincing. In order to grow at higher rates, it is imperative that India has a predictable, stable, and moderate rate of taxation.

A push too hard

Digital payment mandates should be avoided

Budget 2019-20 continued the government's push towards digitising the Indian economy, particularly digital payments. To further corral the remaining cash-based sections of the economy, Finance Minister Nirmala Sitharaman said withdrawals from a particular bank account totalling more than ₹1 crore in a year would require tax to be deducted at source. There can be few objections to this notion — certainly, it is far less draconian than other measures that were being proposed at the time of demonetisation.

However, other aspects of the Budget's policy outline for digital payments should be re-examined. The finance minister pointed out that "low-cost digital modes of payment such as BHIM UPI, UPI-QR Code, Aadhaar Pay, certain Debit cards, NEFT, RTGS" could be used to "promote a less-cash economy" and, therefore, proposed that "business establishments with [an] annual turnover [of] more than ₹50 crore shall offer such low-cost digital modes of payment to their customers and no charges or Merchant Discount Rate (MDR) shall be imposed on customers as well as merchants".

This essentially forces medium-sized shops to offer this set of digital payment mechanisms to their customers. First of all, the lobbying potential under such mandates is enormous and should as a matter of principle be avoided. But more importantly, it should be left to the shopkeepers, the payment companies, and the financial structure — particularly banks — to make decisions based on their commercial interest. Only then will a sustainable digital payments architecture evolve in India. A payments architecture that is based on government mandates and regulations will be inefficient and unremunerative. The only sustainable digital financial architecture will be one in which each step of the chain — from customers and merchants to banks and companies — will share in monetary gains from greater efficiency. This requires voluntary rather than forced switching to digital modes at every step.

It could be argued that there are significant external benefits to the government stepping in to speed up the transition to a less-cash economy, and that once such a transition is completed, it will pay for itself. Such arguments, particularly after the demonetisation experiment, should be viewed with caution. At the very least, the costs of any such mandates should also be scrutinised.

Essentially, if the government perceives that there are broader benefits to a move towards a less-cash economy, then economic logic dictates that it should bear the costs itself. The elimination of the MDR, a major source of revenue from some digital payments, flies in the face of this logic. In this case, the finance minister said that the Reserve Bank of India and the banks would "absorb these costs from the savings that will accrue to them on account of handling less cash as people move to these digital modes of payment". If those savings existed, then banks could surely come to their own decisions on the move and should be allowed to do so. Therefore, the chances are that the savings are, in fact, too far in the future or accrue to the economy more generally. In that case, it is the government that should find some way of bearing the cost of its policy priorities, rather than pushing them on to banks or merchants.

ILLUSTRATION: BINAY SINHA



The illusion of size

Thinking India can induce enough private investment just because of the size of its market is a big mistake

The Economic Survey, which is by tradition presented the day before the Union Budget, is frequently more forward-looking and economically sensible than the actual Budget. Naturally: The former is written by economists and the latter by bureaucrats, even if both want to please the same politicians. There's also the small matter of the Budget having to live in the real world, while Surveys can live — as many economists do — in the world of the ideal.

Even so, the differences between this Budget and the Survey in their broad approach are startling. And worrying, because they throw into sharp relief the false assumptions that have taken hold within the corridors of power in New Delhi. Both the Survey and the Budget sought to revive investment as a major

history demonstrates the difficulties of reviving investment when domestic consumption demand is the only justification for new investment. Even a consumption boom — driven in part by low fuel prices — has not solved the over-capacity problem faced by much of the private sector, which in turn has retarded investment growth. Exports were static in real terms since 2014, and growth recently has been halting, tentative, and easily reversed. As a consequence, sustainable growth has remained elusive. It will remain so as long as we seek a consumption-driven growth strategy.

The Budget has taken a different approach from the Survey. It has certainly attempted to fix the supply side when it comes to investment — for example, it includes measures intended to reduce the appropriation of household savings by the government for its own revenue expenditure. But there is no change in strategy on the demand side. India is to remain focused on creating and protecting domestic demand as an inducement for investors. This is an error of historic magnitude.

What would draw investment to India? The possibility that it is a good place to produce not just for a not-yet-mature domestic market, but also for the world. Global supply chains are in flux, thanks to tensions between the United States and the People's Republic of China, and India currently has less than two per cent of world trade: This is the moment to cash in. Even if the world trade is growing slowly, a labour-surplus country with such a small proportion of world trade compared to its population and resources should be easily able to grow its exports by cutting into the share of other economies — notably China's.

Yet, if such investment is to take off, it needs a stable policy environment and a sense that it can effectively be part of global supply chains. From the current



POLICY RULES

MIHIR S SHARMA

Devaluing Budgets

While transiting resplendently from the passé briefcase to the bright, trendy *bahi khata* for carrying her Budget papers, the new Finance Minister Nirmala Sitharaman decided to give the short shrift to what must be at the heart of the Budget. Neither the two parts of her speech nor the explanatory memorandum contain statements of government income and expenditure by major heads; there is only a passing reference to the deficit. Some learned commentators have hailed this as a welcome change, but I must concur with the observation of the former finance minister P Chidambaram (with whom I often disagree): "Has there ever been a Budget speech that does not disclose total revenue, total expenditure, fiscal deficit, revenue deficit?" I do so not because I am an "accounting economist," but because Article 112 of the Constitution expressly mandates the government of the day to lay "before both the Houses of Parliament a statement of the estimated receipts and expenditure of the Government of India." The expenditures include all those charged to the Consolidated Fund of India, both constitutionally required and others.

The Budget document has these figures, but one has to trawl through it to find them. That gives rise to the suspicion that this is a deliberate exercise, because only the patient few would bother to do so and talk about the devil in these details. The rest will be content with ooh and aah and call the Budget a vision thing, not an accounting exercise. This has already happened, but we must ask whether it bodes well for a functioning, accountable democratic system of governance. More on this later, but first some salient critiques of what is presented as the Budget.



ET CETERA

SHREEKANT SAMBRANI

The Budget and the Economic Survey that precedes it are logically and correctly supposed to be conjoined twins. The latter is expected to lay out strategies in a what-if manner and the former is an action plan based on it. In the present instance, that connection is blurred and several mismatches are visible. The Survey takes 2024-25 as the target year for the \$5 trillion economy, while Ms Sitharaman restricts herself to saying "it is well within our capacity to reach \$5 trillion in the next few years" (para 6). That is a statement of a possibility, not a target. Her projections are based on a real growth rate of 8 per cent, while the Survey uses 7 per cent.

That single percentage point could make a world of difference to the projected figures of revenues and deficits, but then discrepancies could always be rationalised ex post! The Survey mentions private investment and exports as growth engines, but the Budget does not provide any kick-start for investments and emphasises import reduction through customs barriers.

The measures the Budget highlights — the Reserve Bank of India (RBI) to control housing finance institutions, guarantees for financially sound non-banking finance companies, interchangeable use of Aadhaar and PAN for tax returns, diluting the definition of public sector enterprises and government borrowing abroad, among others — are touted as reforms, but these administrative steps could have been taken any time. Their impact on reviving the stalled economy would be at best marginal. More seriously, the Budget revises the revenue estimate downward by a whopping ₹1.6 trillion from that of the Interim Budget before the election and yet manages to project a deficit of 3.3 per cent, down from 3.4 per cent earlier. The lowering of revenue

government's point of view, the main constraint was India's problematic infrastructure. This is only partially correct. As the Survey also argues, policy stability is equally important. And so is competitiveness. How does the Budget address these two constraints?

It does not address them at all. It continues to hand out step-motherly treatment to large companies, which are excluded from the 25 per cent base rate of corporate income tax. These are the companies that are most competitive, productive, and which create the world-class jobs we need. If we need large-scale job creation, we need large-scale investment from the largest companies. A disproportionately high rate of tax targeted at precisely these companies renders locating in India for exports uncompetitive. What would help is labour law reform — as the Survey points out, it has helped states such as Rajasthan. But although the Budget mentions once again the rationalisation of labour law into four codes, a commitment to flexible labour markets at the national level continues to be elusive.

When it comes to policy certainty, the Budget makes things worse. In global supply chains, tariff stability is crucial — you don't want to invest somewhere which has the reputation of fiddling around with tariffs that might at any moment make it difficult for you to manage your margins or to meet your deadlines. A simple, competitive rate of taxation and tariffing is what is needed. But this Budget continues the trend, visible in previous Budgets under the Modi government, of arbitrary changes to import duties. Worse, it specifies that the purpose of these changes is the protection of the domestic market. As a signal to greenfield investors, this could not be worse. It is clear that India is interested only in its own consumers, and not in producing for the world. This fits into an entire set of recent policies, which target foreign investors across the board — whether in e-commerce, like Amazon, or in payments, like the credit card majors. Given this aggressive and protectionist attitude, it is odd that the Budget speech also included an invitation to "global companies through transparent competitive bidding to set up mega-manufacturing plants in sunrise and advanced technology areas". The wording is puzzling in the extreme. Bidding over which asset? Over subsidies? Free land? This is typical. First make the economy so uncompetitive that nobody wants to come without inducements. Then come up with inducements, so that power rests with politicians and bureaucrats.

India needs an investment revival not just in the short term but in the long term. It needs to render its over-capacity problem irrelevant. For that, it needs to look beyond its own shores. Don't be blinded by the number of our consumers — that is an illusion, because each consumer is also someone who needs employment. A big country trying to develop has the same constraints as a small country: Its own demand is rarely enough to induce the private investment needed. Just like anywhere else, India needs to export. The economists, and the Survey, remember that. The politicians, and the Budget, don't seem to care.

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Fighting in the shadows



BOOK REVIEW

AJAI SHUKLA

Several authors have analysed the shifting templates of modern warfare, but few have the credentials that Sean McFate brings to his writing. He has served as a paratrooper in the United States army's elite 82nd Airborne Division. He then went on to become a mercenary soldier in Africa, with one of the shadowy "private contractors" that rent out armed forces, no questions asked. Adding academic rigour to that battlefield perspective, he is currently professor of strategy at the National Defense University and Georgetown University, both in Washington DC, USA. This is his second non-fiction book on war, after his

2017 work, *The Modern Mercenary*.

In this book, McFate takes a cold-eyed look at the changing face of conflict over the last half century. He argues that war and force engagements have changed form dramatically, as the world has entered an age of "durable disorder" characterised by China's rise, Russia's resurgence, America's retreat, the advance of global terrorism, the emergence of international criminal syndicates, wealthy and influential multinational corporations with resources larger than many countries and well-armed mercenary organisations that provide the wherewithal for countries, organisations and individuals to meddle deniably in hotspots anywhere. Instead of declared wars with tanks rolling across international borders, we have "shadow wars" such as Russia's annexation of Ukraine's Crimea. McFate recounts how, with President Vladimir Putin feigning innocence, Moscow occupied parts of Ukraine, such as Donetsk, with its so-called "little green men" (military troops without uniform),

elite Spetsnaz Special Forces, mercenaries and proxy militias that Russian leaders passed off as Ukrainian "self defence groups". Russia's denial of any links with this ghost occupation force made Western powers chary of intervening in a situation where even the basic facts remained contested. By the time Russia's involvement became clear, the occupation was a *fait accompli*. McFate tellingly points out that, in the 1950s and 1960s, Russia crushed anti-Moscow protests in Hungary and Czechoslovakia under their tank treads. It could have done the same in Ukraine, but chose a "shadow war" instead, given that even implausible deniability was better than the opprobrium that would attend an old-style blitzkrieg invasion.

None of this is actually new, says McFate. The world is merely returning to the pre-Westphalian era when, in conflicts like the "30 Years War", mercenary armies, owing shifting allegiances to whichever monarch, aristocrat or religious leader was paying them, laid waste to much of Europe, pillaging

and raping indiscriminately. In 1648, the Treaty of Westphalia ended this carnage by recognising the monopoly of states on armed force, a consensus that largely held through the 20th century. But now force is again being wielded by non-state entities — such as religious groups, local militias, mercenary forces and corporations — even as the forms of force change and evolve.

In 10 successive chapters, the book describes 10 rules that govern modern warfare. "Rule 1: Conventional War is Dead", postulates the demise of the Westphalian order and World War II style conventional war, even as contemporary generals prepare, as generals have through the ages, to fight the last war. McFate points out that, of 50 armed conflicts worldwide in 2015, only one was a conventional war. Yet orthodox prevails in planners' minds. "Rule 2: Technology Will Not Save Us", points out that nuclear submarines, aircraft carriers and the F-35 stealth fighter ("the most expensive weapon in history") are practically unusable against contemporary threats such as terrorist strikes, cyber attacks, Russia's aggression in Crimea or China's creeping acquisition of the South China Sea. Yet, most of America's enormous

defence budget goes on those, with relatively few resources spent on usable forces, such as Special Force units, which remain underfunded and in insufficient numbers.

One of the book's most provocative arguments is in "Chapter 7: New Types of World Powers Will Rule". While the concentration of wealth in the hands of the top one per cent is well known, McFate argues that hyper-wealthy corporations like Walmart (which he wrongly says has a larger economy than India) now have the option of hiring mercenary forces to protect their interests. Why would companies like ExxonMobil and Shell remain tethered to corrupt governments such as Nigeria's, when they can better protect their interests through hiring mercenary groups? Similarly, organised crime syndicates, and even terrorist groups, can today boost their lethality by hiring mercenaries for strong-arm operations. An Uzbekistan-based mercenary group, Malhama Tactical, already specialises in providing armed fighters to Islamist jihadi groups. Fascinatingly, McFate returns to history to demonstrate that none of this is new. In the 17th and 18th centuries, the British East India Company set up its own private army to

conquer, subjugate and plunder an entire sub-continent. One of the first Indian words to enter spoken English was "loot".

McFate concludes by urging thinkers to shake off their "strategic atrophy", since "conventional war thinking is killing us." In the current information age, warfare will move further into the shadows, he predicts, where the arbiter of victory will be strategic subversion, not battlefield victory. Future wars will not begin and end, but will hibernate and smoulder, occasionally bursting into active fighting. This trend is already evident from the number of "neither war, nor peace" situations around the world. McFate has clearly written for a western readership, but the Indian reader can hardly miss how much of this applies directly to our own security challenges. This book should find a place on the bookshelves of all our strategists.

THE NEW RULES OF WAR: Victory in the Age of Durable Disorder

Sean McFate

HarperCollins, 2019

318 pages; ₹1,699 (on Amazon)

The writer is an economist

Govt borrowing abroad is too risky, drop the idea

A better way to keep local interest rates low is to raise FPI-limits in India, attract more FDI, or for the govt to simply spend less

GIVEN HOW RESOURCE-CONSTRAINED the government is, and the fact that higher government borrowing tends to raise interest rates—and, therefore, crowd out private sector borrowers—it is not surprising it is contemplating borrowing abroad; the fact that India’s foreign debt is low makes the move seem relatively risk-free. Last Thursday, the chief economic advisor had suggested India should tap the global markets because money was abundant and, therefore, cheap; and on Friday, the finance minister announced this in the Budget. However, former RBI deputy governor Rakesh Mohan was quick to denounce the suggestion, saying it would be an imprudent and dangerous move. Forex markets are choppy, especially now, with US-China trade tensions so high, so any adverse movement can throw off all calculations and make overseas borrowing even more costly than that from local markets. To be sure, there will be good appetite for India bonds listed in London or even Luxembourg; after all, investors would be spared the exchange risk unlike in an investment made in India via the foreign portfolio investment (FPI) route. That is why, JPMorgan’s chief India economist Sajjid Chinoy said it could even cannibalise rupee-denominated FPI investments.

More important, a sovereign India bond means foreign investors will be in a position to influence interest rates in India in a manner similar to the offshore speculative rupee-dollar trading affecting onshore volatility. The volatility in interest rates can be worse than it is in currency trading, and the last thing we need is for investors to be indulging in arbitrage.

It is true that large levels of local borrowings could drive up interest rates and crowd out the private sector. But a market-determined price of government borrowing helps maintain some discipline; once the government has the option of borrowing abroad, this snaps the discipline and encourages the government to borrow more. Also, while the government may feel it is borrowing cheaper in New York, that may not necessarily be true once you factor in exchange rates. In which case, it may be better to simply raise the limit for FPI investments in the local bond market, both for gilts and corporate bonds. RBI could make the terms of investing somewhat more liberal; in the past, for instance, it has often insisted on residual maturities of, say, two years or three years—it could relax these if the forex situation is more comfortable. Attracting more FPIs in the corporate bond segment, in particular, would help take care of the additional demand expected this year. It is not clear whether RBI has been sounded out and what it feels. The government may be hoping RBI would enter into some kind of forward transaction to ensure supply of dollars five or seven years down the line. The better way to tap foreign resources, if at all these are needed, is to attract NRI deposits without overpaying for them. The best option, of course, would be to ease FDI norms—for defence and other big sectors—and have an industry-friendly policy that will pull in sticky FDI, so that it is not vulnerable to fickle FPI flows.

You have to woo investors

Difficult to see them bidding for right to set up fabs, etc, here

GIVEN RISING US-CHINA trade tensions, and the chance of them boiling over even if they get resolved for now, it is not surprising that several top US manufacturers located out of China should be looking to diversify their export bases. After all, if US president Donald Trump is to slap large tariffs on China, their exports to service the US market will be badly hit versus exports that come out of production bases in Vietnam, for instance. And, given the size of their export operations—Apple exports around \$180 billion out of China as compared to India’s total exports of \$330 billion—it is not surprising that several countries are trying to woo these firms, to get them to set up manufacturing units. With so many countries wooing these firms, it is obvious that the country with the best offer will win. The best offer comprises all manner of tax breaks, free land, low-cost electricity, zero import duties, etc. Indeed, in areas like semiconductor fabrication units, the quality of electricity supply can even be the determining factor in whether or not a unit moves operations to India; in one Japanese technology park in Haryana, even power generation was to be done by a Japanese company. Apart from these tax and other sops, other factors that make a difference are the size of the domestic market, the availability of top-class engineering and other such talent.

What is odd is that while India is trying to woo several US firms that have significant operations out of China, the latest budget has a different spin on it. According to the Budget, “in order to boost economic growth and Make in India, the government will launch a scheme to invite global companies through a transparent competitive bidding to set up mega-manufacturing plants in sunrise and advanced technology areas such as semiconductor fabrication (FAB), solar photo voltaic cells, lithium storage batteries, solar electric charging infrastructure, etc”; India’s imports of just phones and electronic components was \$33.7 billion in FY19, so boosting local production is a big policy imperative. Does the government actually think that global players that are being wooed by various countries will participate in a bid where, presumably, the one that wants the least tax incentives or offers to invest the largest amount, will be allowed to set up operations here?

It is true that several corruption scandals dogged the UPA and the NDA has been reluctant to give concessions to various firms—or even sectors—for fear of being labeled *suit-boot-ki-sarkaar*, but wanting firms to bid to set up operations in India is ridiculous. It is high time the government realised that capital is mobile and will move to whichever country offers it the best deal. The government is free not to want to offer incentives to a firm that are different from those offered to others. This may not be a great idea since one firm may offer better exports/employment than others, but if this is what the government wants, it can fashion a uniform policy for all investors; but expecting global firms to bid to set up manufacturing facilities here is deluding ourselves.

Research FOCUS

NRF a good idea, but govt must ensure that a “basic science focus” doesn’t come at the cost of tech, social sciences, etc, R&D

THE BUDGET PROPOSAL to consolidate the various research funding currently under ministries under a National Research Foundation (NRF) should seem a good idea. Indeed, for a R&D-deficient nation like India—R&D expenditure has dropped from 0.84% of GDP in 2008 to 0.69% over the last few years, compared to the US’s 2.8%, China’s 2.1%, Israel’s 4.3% and South Korea’s 4.2%—any bid to avoid “duplication of effort and expenditure”, as FM Nirmala Sitharaman pointed out in her Budget speech, will only be a gain for R&D. The pittance that India gives to R&D is reflected in the fact that there were only 15 researchers in India per 100,000 population compared to 111 in China, 423 in the US and 825 in Israel in FY17. No wonder, thus, while China made over 1.3 lakh patent application with just 10% of this being filed by non-resident Chinese researchers, India made a mere 45,057, of which >70% were by non-resident Indians.

While there is reason to cheer the NRF, the government needs to make clear what it means by its announcement that the NRF will have a focus on “national priorities” and “basic science”. There is, no doubt, a case for a step up in funding of basic science (physics, chemistry, biology) research, but does the government mean to say that this will come at the cost of, say, technological research or social sciences/humanities or arts research? Also, “national priorities” need to be clearly defined, lest, with the mandate it has received, the ruling party or its ideological fount conflate their research priorities with the national priorities. On both concerns, the government will do well to stick to the NRF vision outlined in the National Education Policy (NEP). NEP, which says the NRF must fund research across the academic landscape, talks about the need to foster interdisciplinary research. Even when research must contend with challenges such as access to drinking water, healthcare, energy, pollution and infrastructure, the NEP sagely notes that it will need approaches backed by technology and “in a deep understanding of the social sciences and humanities”. It makes clear that while the NRF may periodically identify areas of research important to the country and prioritise funding to these, “all proposals” have to be considered.

FROM PLATE TO PLOUGH

LACK OF EFFECTIVE REGULATION AND POLICY OF CHEAP OR FREE POWER SUPPLY FOR IRRIGATION HAVE INTENSIFIED FRESHWATER CRISIS BEYOND TECHNOLOGICAL REDEMPTION

Harvesting water: Technology vs policy

A ONE-WEEK DELAY in Indian monsoon showed how precarious our situation is on the water front. The images that BBC and CNN telecasted across the world showed thousands of Chennai residents running after water tankers to get a bucket of water for drinking. In parched lands, several people had to walk for miles to get drinking water. If this was the condition of humans, one can only imagine in what condition cattle and crops would have been. These images clearly expose that the Indian Lion, symbol of Make in India, has feet of clay.

No wonder prime minister Narendra Modi, in his first ‘Mann ki Baat’ in the Modi 2.0 innings, gave a clarion call to save every drop of water, and take water as a mass movement on the lines of Swachh Bharat Abhiyan. This is commendable. But he has already given commitment to deliver tap water, hopefully safe for drinking, to every household by 2024 under ‘Nal se Jal’ programme. These are commendable programmes and one hopes they can deliver results in time, and of good quality.

But, the issue that we want to dwell on here is how did we reach this situation? And, how best and how fast, we can get out of it for sustainable water use in the country.

First, let us note a few facts about water availability and use in India. India has only 4% of global freshwater resources while it has to quench the thirst of about 18% of global population. Of the total freshwater resources available in the country, as per Central Water Commission, 78% was being used for irrigation in 2010, which is likely to be reduced to 68% by 2050. For domestic use, it was just 6% in 2010, likely to go up to 9.5% by 2050 (see graphic). So, by far, agriculture will remain the biggest user of water to produce enough food, feed and fibre in the foreseeable future. And, unless this sector is geared to improve in terms of water supplies and efficiency in water use, the situation on the water front is



not going to improve much.

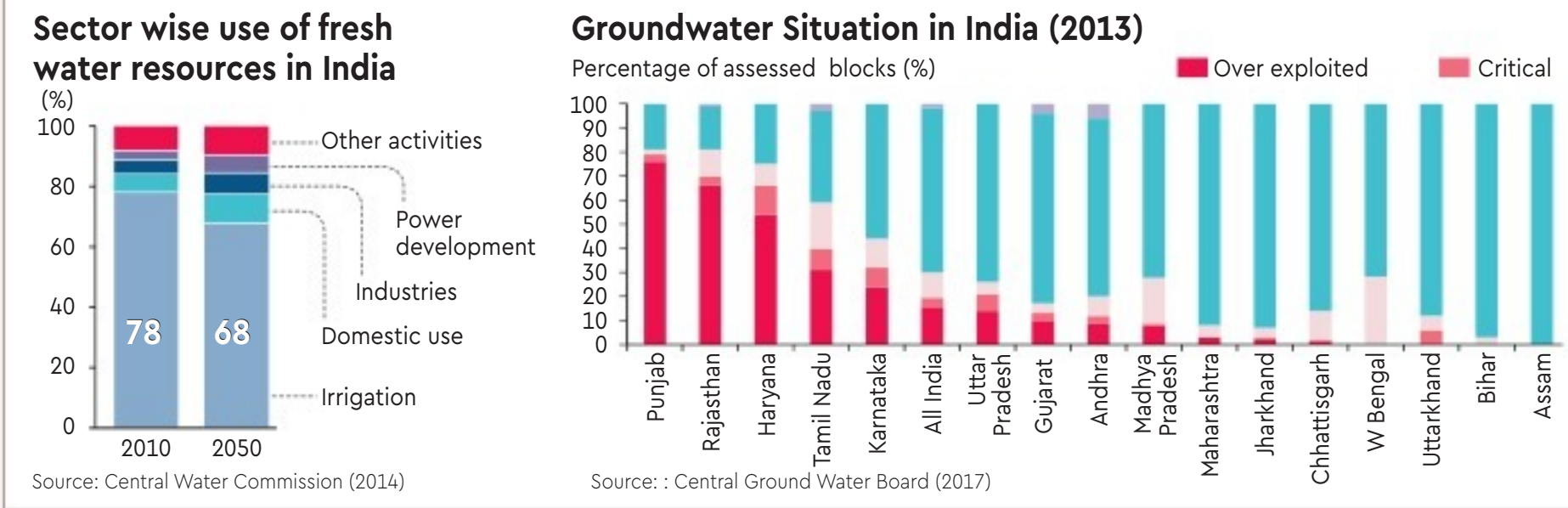
Second, of the total of about 198 million hectares of India’s gross cropped area, roughly half is irrigated. The major source of this irrigation is groundwater (63%); canals account for 24%, tanks 2%, and all other sources for about 11%. So, groundwater bears the real burden of irrigating Indian agriculture, driven by private investments from farmers.

There is hardly any effective regulation of groundwater. The policy of cheap or free power supplies for irrigation has led to an almost anarchic situation in the use of groundwater. Power subsidies to agriculture cost the exchequer roughly ₹70,000 crores each year while depleting groundwater in an alarming manner. Overall, about 1,592 blocks in 256 districts are either critical or overexploited. In places like Punjab, water table has been going down by almost a metre a year for almost two decades. Almost 80% of the blocks in Punjab are overexploited or critical (see graphic). It only shows how indifferent and short-sighted we are while taking away the rights of our

own future generations.

Paddy and sugarcane, both water-guzzling crops, take away almost 60% of India’s irrigation water. One kilo of rice produced in Punjab requires almost 5,000 litres of water for irrigation, and one kilo of sugar in, say Maharashtra, requires about 2,300 litres of water. Estimates vary on how much water the plant really consumes, how much evaporates, and how much percolates back into groundwater. But traditionally, say a hundred years back, eastern Uttar Pradesh and Bihar used to be the sugarcane hub while rice was grown largely in eastern and southern India, where rainfall was high and water plentiful. All that changed with new technology and populist policies like free power.

No political party wants to touch rationalisation of power pricing for agriculture. Technological solutions, like drip, sprinklers, etc, cannot make much headway unless policies are put on the right track. Israel has perhaps the best water technologies and management systems, ranging from drips to desalination to recycling (87%) of



A Budget for *vikas*

In her maiden budget, FM Nirmala Sitharaman’s focus was on long-run developmental goals, not short-run political gains

IN MY VIEW, Budgets are unnecessarily hyped up. Newspapers want to display family pictures illustrating how much taxes were cut or prices raised. They create a human interest in a dry-as-dust document. Budgets, in fact, should be technical documents for specialists. Instead, in India it has become like the second speech after the President, laying down the government’s vision.

Nirmala Sitharaman had a hard Act to follow. Arun Jaitley is a finance minister who will go down in history as one of the best. He came with a sharp lawyer’s brain, a big position in the party and the government, and the prime minister’s trust which meant that his budgets launched some new policy initiatives, such as Aayushman Bharat in his last budget.

This year’s budget is remarkable for not giving in to shrill demands in the past few weeks about reviving the economy as consumer spending was slowing down. Tax cuts is the only thing newspapers want out of a budget. My view is that the slowdown of only 50 basis points in GDP growth rate was a temporary cyclical dip rather than a secular trend. Uncertainty in pre-election days plus the crisis in the NBFC sphere had tightened credit. Car sales were down but no surprise. The FM refused to panic and fixed her sights firmly on the long run rather than the short run. The only concession to short term pressures was not to reduce the deficit below what Jaitley had set in his 2018 Budget. But, the income tax rate on top incomes was raised making this a rare redistributive budget.

That apart, the Budget was for the long term and concerned with growth. Issues of water, energy, and environment (e-vehicles) were put in the front. Investment, raising labour productivity, rationalising the R&D infrastructure, and attracting FDI were the themes. This was a way of declaring that the BJP is now getting used to being the governing party. Even if there are state elections later in the year, the FM’s focus was not short-run political but long-run developmental. Modi 2.0 is continuous with Modi 1.0.

Modi has focused on human development since the beginning. Cleanliness, toilets, electrification, solar energy, rural housing, transport infrastructure, and cooking gas have all been his concerns. He is the first Human Development Prime Minister of India. The focus of the economy has shifted from the visible headline concerns—labours and land market reform, entitlement proliferation as happened during UPA, and the India/Bharat Debate. From the outset, Modi has accepted the economic governance machinery as it is and sought to make it work better. He is not a radical reformer but a determined implementer of programmes—his own and those which he has inherited incomplete from the preceding UPA-II. Bharat has been as central to his focus as India has been.



Prominent economist and labour peer. Views are personal

The Budget was for the long term and concerned with growth. Issues of water, energy, and environment (e-vehicles) were put in the front.

The India/Bharat cliché is now outdated. Much has been done with rural electrification, housing, toilets and connectivity to bring rural India closer to the urban one.

This is why the themes in the Budget harked back to the themes previously discussed—Make in India, attracting FDI, making business easier, advancement of next-generation technology, and environmental concerns. There is an ambition to make India a hub for a number of new products, especially electric cars. Here is where the goal of a \$5 trillion economy comes in. It is not just the present economy enlarged; it will have to be a different economy altogether. Words like Artificial Intelligence, robotics are not shunned.

The one specific policy move which will be criticised is the tax on petrol/diesel. In my view, this is distinctly progressive and crucial, if India is to meet the challenge of clean air. Some of the most polluted cities of the world are in India. Though people will complain about the hardship this move causes to middle class and its likely impact on inflation, it is right that the real social cost of individual transport should be forwarded.

Another complaint is that the deficit target has remained where it was last year. Last year the deficit was not achieved, albeit by 0.01%. The sooner the deficit is brought down the better.

BENGAL POLITICAL VIOLENCE

Chief minister of West Bengal, Mamata Banerjee

Anti-socials are anti-socials, they should not be related with any religion. A thief is a thief. If an incident happens, the government will take action. The BJP is trying to politicise everything.



urban waste water for agriculture. PM Modi also visited Israel to find solutions to our water woes. But, my interactions and visits to Israel revealed one thing very clearly: technologies can not go far enough unless pricing is put on track.

One way out is to give farmers monetary rewards for saving water and power. The existing situation can be taken as a sort of current entitlement, and if those who agree to get power supplies metered save on power consumption compared to current levels, they can be monetarily rewarded. Along with that, there could be income support on per hectare basis (say, ₹15,000/ha) for less water-guzzling crops, say maize or soyabean in Punjab during kharif season. This would save power subsidy and, more importantly, precious groundwater. At least one million hectares of paddy cultivation needs to shift away from the Punjab-Haryana belt to eastern India. Eastern India can develop better procurement facilities for PDS system for paddy, and procurement from Punjab-Haryana needs to be discouraged/curtailed.

Similarly, sugarcane needs to be contained in Maharashtra and Karnataka belt and expanded in UP/Bihar belt. With new Co238 varieties that give recovery rates of more than 10.5%, there is a good case that cane can be developed for ethanol from this belt. Will Modi Government 2.0 move in this direction to save water? Only time will show.

LETTERS TO THE EDITOR

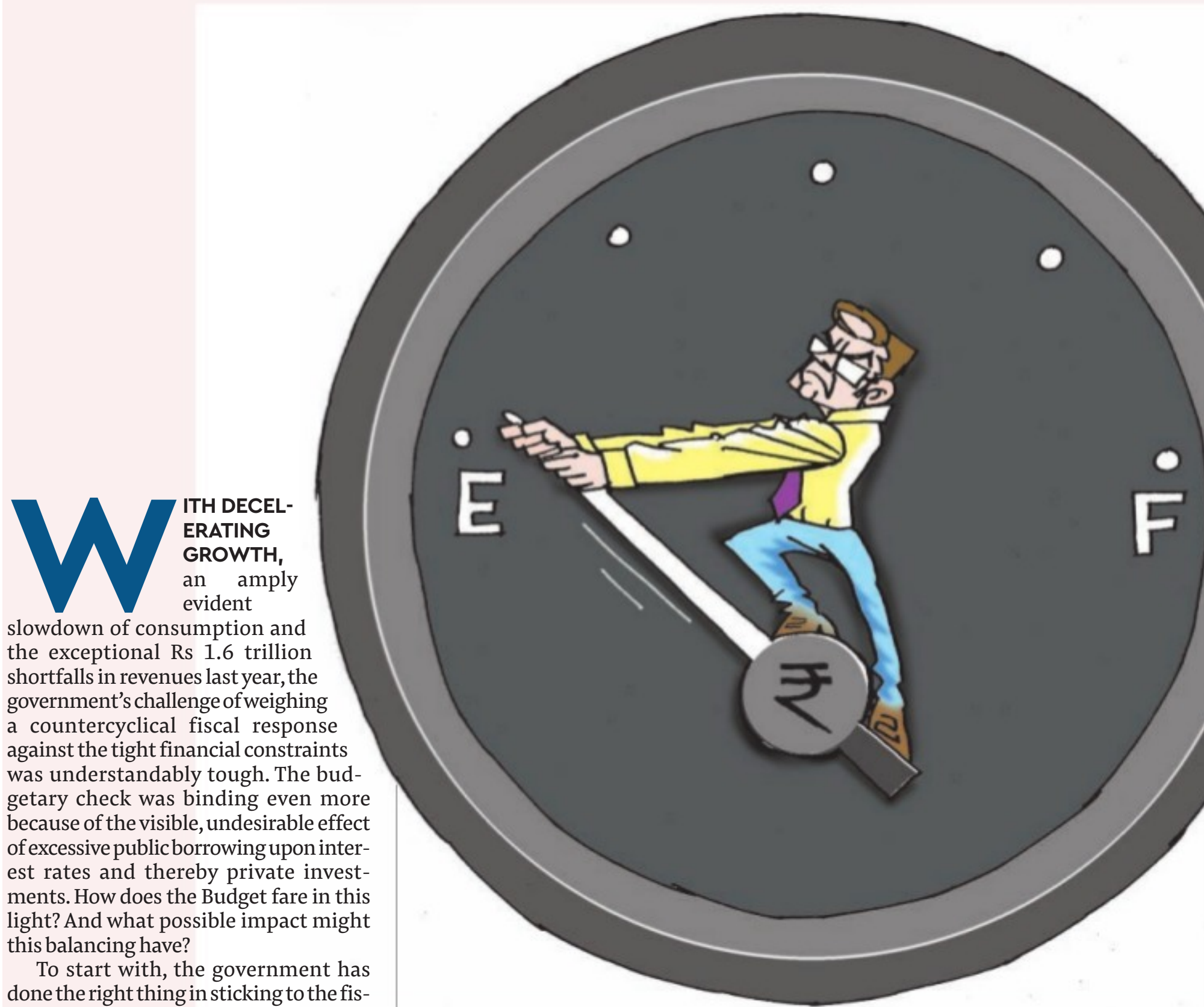
Sunset for the Nehru-Gandhi family

All speculation on whether Rahul Gandhi would continue as Congress President has finally been laid to rest with the scion of the Indian political dynasty putting in his papers. Training his guns on senior leaders for the party’s debacle in the Lok Sabha polls, Rahul made it clear that accountability is critical for the future growth of the party. Mr. Gandhi also changed his Twitter handle status from ‘party president’ to ‘Congress member’. The development brings the curtains down on the sway the Gandhi family had on post-independent India and it will be interesting to see the baton change hands to a non-Nehru-Gandhi family member. — NJ Ravi Chander, Bengaluru

Lacklustre budget

While much was expected from a budget, particularly after BJP’s massive electoral victory, people have been disappointed with such a lacklustre budget. Sitharaman scripted a sizeable portion of her budget speech notes to eulogise the BJP government, but she failed to enthuse listeners with any concrete proposals to boost the economy of the country, either on the macro level or on the micro level. The budget disappointed the agricultural sector, SMEs and even the heavy industries, but seemed to indicate the government’s support of privatisation. An incisive analysis would prove that this is not a pro-*Aam Aadmi* budget but that of the affluent and the rich. The fiscal deficit percentage quoted is highly debatable and the trillion-dollar economic growth envisaged, highly utopian. — Anna Mary Yvonne, Chennai

Write to us at feletters@expressindia.com



WITH DECELERATING GROWTH, an amply evident slowdown of consumption and the exceptional Rs 1.6 trillion shortfalls in revenues last year, the government's challenge of weighing a countercyclical fiscal response against the tight financial constraints was understandably tough. The budgetary check was binding even more because of the visible, undesirable effect of excessive public borrowing upon interest rates and thereby private investments. How does the Budget fare in this light? And what possible impact might this balancing have?

To start with, the government has done the right thing in sticking to the fiscal consolidation path. Not only has it stuck to the fiscal deficit target of 3.3% of GDP, it has gone one step ahead and included the extra-budgetary resources it has been raising into the stock of central government public debt—at 0.7% of GDP last year, the addition of extra-budgetary liabilities show the debt-GDP ratio at 48% of GDP in FY20 against an estimated 47.3% in FY20. The Centre's public debt-GDP ratio is seen declining 40 basis points from 48.4 last year. Equally laudable is the medium-term target outlined by the government to reduce accretions to the EBR stock to zero in five years' time.

So, if a government adopts a fiscal consolidation strategy at a time of no fiscal space but with pressures of reviving growth, how does it set its fiscal policy? How does it stimulate growth and stick to fiscal consolidation at the same time? With such a macroeconomic configuration, a government should not raise taxes (procyclical) and more specifically, focus on revenue expenditure reform to move scarce resources to public capex to encourage growth. On this measure, the Budget scores very poorly. There should have been dramatic revenue expenditure reforms to release resources for spurring growth. Unlike structural reforms, expenditure reforms are very much a part of the Budget, which makes such an effort. There is no cut in subsidies, where their respective shares in GDP remain constant. Even the food subsidy, which could have constituted a great start for reforming expenditure, at an optimal time of low food prices, increases by Rs 129 billion. It is most unfortunate that there not even a single reform step in this direction to carve out space for scaling up public expenditure.

This aside, many commentators have noted the discord in growth assumptions underlying the budgeted revenues. Specifically, these are predicated upon the older, revised estimates of FY19 (RE) instead of the most recent, provisional estimates (PE) that have been published by the government accounts controller. The problem is the vast gap in tax revenue growth between these two sets of estimates: Substitute PE in place of RE to see the incredibly overoptimistic projections: in reality, net tax revenues would have to grow nearly double the more sober growth rates shown in the Budget, personal income taxes would have to grow more than three times and GST revenues would have to increase four-fold! The government is not oblivious to these factors, but is hoping to turn the tide.



RENU KOHLI
The author is a New Delhi-based macroeconomist

UNION BUDGET

Hope is not a strategy

The government is yet to come to terms with low revenue realisations. A return of fiscal dominance could close the window for further easing of monetary policy; it would also disincentivise global capital the Narendra Modi government plans to attract

To be fair, the government has not departed from tradition—in FY15 too, the full Budget rested upon revised estimates for FY14. But then the Interim Budget was presented in March, when a reasonably credible idea of tax collections is obtained. The problem is that since then, the Budget presentation has advanced to February 1, when there is lit-

tle or no information available about the last quarter's outturn. This is leading to larger gaps between revised and provisional tax revenues. In turn, this is becoming an issue of credibility and a source of uncertainty. The government must re-look this pattern in the context of advancing its Budget presentation time.

Consider last year's (FY19) revenue performance in this context: Overall net tax revenues grew a mere 6% on comparable base against the 21% budgeted growth; income taxes grew 13% against a projected 20%. The revenue deficit as per CGA's provisional estimates is actually 2.3% of GDP even as the FY20 Budget based upon revised estimates continues with 2.2% of GDP!

So, while markets may have responded positively to fiscal discipline of the 3.3% line, as also the prospects opened by the sovereign borrowing abroad in foreign currencies, reality is bound to sink in sooner than later once agents have seen through the numbers. All stakeholders go by the latest information on revenue outturns no matter what the FY20 Budget may show.

The real consequences of such overoptimism on the revenue side could be serious and negative for growth should actual performance not match projected outcomes. GST revenues have grown a measly 7.2% in April-June so far, while corporate revenue growth was -51% in April-May. These facts are neither unknown nor gone unnoticed. A replay of last year's interaction between overoptimistic revenues and sharp expenditure compression with dire growth consequences cannot be ruled out therefore. In the second half of last year (FY19), as tax revenue collections lagged severely behind, the government was forced to cut spending, pulling down growth into a vicious spiral compounded by the negative shock of the NBFC crisis. While total expenditure cut was 6% against revised expenditure estimate, the pressure to retain spending in an election year spilled over upon off-budget borrowings and subsidy rollovers with disturbing consequences for long bond yields and monetary policy transmission.

There is some hope that RBI may decide to transfer a good sum of past reserves to the government. We don't know yet its quantum and if this comes free of conditions attached. Once agents have seen through the actual revenue performance and factor that in, bond yields could respond adversely. Uncertainty could increase as agents speculate on how the government could possibly meet its targets—through off-budget borrowings, even more subsidy rollovers, and so on. On its part, the government could once again be compelled to cut expenditure, extracting a cost from growth and causing uncertainty on this front as well. Producers would bear the brunt of higher interest rates and the refusal of monetary easing to transmit. Consumers would suffer from reduced spending as expenditures are squeezed. The promise of sustained welfare spending in the first Budget of the second tenure of the government may not materialise.

The government selling an aspirational goal of a \$5-trillion economy by 2024-25 must remember the old adage 'hope is not a strategy.' It must come to terms with prospects of low tax revenues, focus upfront upon divestment proceeds and other non-tax revenue sources. A return of fiscal dominance could close the window for further easing of monetary policy; it would also disincentivise global capital the Narendra Modi government plans to attract.

Do or dry

Thirsty Indian cities have a management problem, not a water problem

BETWEEN DECEMBER AND June, the largest reservoir supplying Chennai shrivelled and then vanished. From the window of a plane, darker patches suggest Puzhal Lake still holds some water. Close up, the "water" turns out to be just a different shade of mud.

Puzhal is indeed "bone dry," says T Prabhushankar, the head of Chennai's water board, and so are three more lakes that are the other main sources of water for the city's 8 million people. In his AC office, a computer screen indicates that the city's reservoirs, which have a total capacity of 11 billion cubic feet, contain a minuscule 25 million cubic feet. "There is nothing to hide about it," he shrugs. "There has been no rain for 190 days, so there is no water." Yet Mr Prabhushankar is not worried. Not only does he expect to get through the current dry spell—Chennai's worst since 2004—he also insists that, for the city, water scarcity will soon be a thing of the past.

As with India as a whole, the growing city's demand for water has placed huge stress on traditional sources such as groundwater, rivers and lakes. And, like all of India's 1.3 billion people, Chennai's thirsty inhabitants may very well face long-term dangers from climate change, one effect of which is more erratic rainfall. But while it is easy to blame both the city's and India's water woes on nature, a closer look reveals a legacy of poor management, lax laws and underinvestment. Most of the time, the two annual monsoons suffice to top up lakes and groundwater. The trouble comes when leaks spring in the system.

To allay Chennai's acute scarcity, which is likely to last until the winter monsoon in November (for India's east coast this is heavier than summer rains), the water board has contracted an impressive 1,000 GPS-tagged water tankers, each making up to a dozen daily runs. Free deliveries of drinking water reach every street in the city once every two days. Local volunteers ensure it is rationed fairly—typically 30 litres a day for each household.

As neighbours in the middle-class Mylapore district line up brightly coloured pots for the scheduled tanker to fill, there

If the govt stopped promoting greedy crops such as rice and sugarcane, did more to curb pollution, and regulate water consumption, India would not have to worry about going thirsty

is more good humour than annoyance. It was worse in the 2004 drought, recalls the tanker driver: there were so many fights he needed police protection. Kamala Kanan, a local businesswoman, says it is a bore having to wait for and haul water, and it is barely enough for the 13 people in his house. But the distribution is reliable, free and fair. And luckily his family has access to groundwater. This has grown saltier but they use it for washing and sanitation. Residents of two different slum districts say they get piped water for a few minutes a day. It is also enough, but sometimes stinks of sewage, so for drinking they buy 20-litre drums for about \$0.5 each.

Mr Prabhushankar explains that the city has been able to sustain about two-thirds of normal supply because it planned ahead. Two recently built desalination plants, new borewells, expanded facilities to recycle sewage and a new 220km pipeline from a distant reservoir all add to supply. Both desalination and recycling capacity are set to triple within five years. Faced with complaints of dwindling groundwater, the government promises to enforce long-standing laws mandating that all buildings should be equipped to harvest rainwater. It has also pledged to maintain not only its big reservoirs, but hundreds of smaller bodies of water that could help insure against drought.

The promise is welcome, but not convincing. Now, he says, ordinary citizens are demanding action, or acting themselves. He has another new ally, too. Spooked by rapidly depleting groundwater, the central government plans a vast nationwide campaign to revamp local reservoirs. Perhaps if the government also stopped promoting greedy crops such as rice and sugarcane, did more to curb rampant pollution, and considered installing meters and applying realistic prices to regulate water consumption, India really would not have to worry about going thirsty. As Mr Raghavan says, "You cannot complain about nature. It's we that have to adapt to nature."

Still, Mr Raghavan is optimistic. When he started out decades ago, his was a lonely voice. Now, he says, ordinary citizens are demanding action, or acting themselves. He has another new ally, too. Spooked by rapidly depleting groundwater, the central government plans a vast nationwide campaign to revamp local reservoirs. Perhaps if the government also stopped promoting greedy crops such as rice and sugarcane, did more to curb rampant pollution, and considered installing meters and applying realistic prices to regulate water consumption, India really would not have to worry about going thirsty. As Mr Raghavan says, "You cannot complain about nature. It's we that have to adapt to nature."

THE ECONOMIST

INDIRECT TAXES

FINANCE MINISTER NIRMALA Sitharaman presented her maiden Budget with encouraging remarks that the Indian economy had reached from \$1.85 trillion in FY14 to \$2.7 trillion by FY19. The government has set the aspirational target of taking it to \$5 trillion by FY25 with considerable focus on three main growth pillars: investments in infrastructure, digital economy and job creation.

From an indirect tax standpoint, the FM indicated that indirect tax landscape has significantly changed with the implementation of GST, which subsumed 17 taxes and 13 cesses into one single tax. The teething problems with regard to GST implementation have more or less settled and there is a considerable reduction in tax rates on majority of goods and services in the last two years. Now there has been buoyancy in revenue collections.

The GST Council is further aiming towards simplifying GST processes. In this regard, the proposal for a single monthly return has been rolled out. Furthermore, taxpayers with annual turnover of less than Rs 5 crore are required to file GST returns on a quarterly basis. The FM also highlighted its recent proposal to move towards electronic invoicing from January 2020, which is expected to reduce the compliance burden and will eventually phase out the e-way bill system. Other GST

Effort towards stable economic growth

The government has laid the foundation for India's growth and development for the times to come

GAUTAM KHATTAR

The author is partner, Indirect Tax, PwC India



proposals such as facility to transfer the cash balances available in the electronic cash register from one head to another head for discharge of tax liability, payment of interest on net cash tax liability, constitution and other administrative aspects relating to setting up and functioning of National Appellate Authority Ruling, etc, are welcome provisions to boost the confidence of India Inc in the new tax regime.

Other indirect tax proposals are largely focused on promoting 'Make in India', reducing import dependence, protection to MSMEs and promoting clean energy.

Defence being the priority sector, the government has proposed to exempt the

import of defence equipment that are not manufactured in India, from the levy of the Basic Customs Duty (BCD). This exemption has a sunset clause of June 30, 2024.

In order to provide the domestic industry a level-playing field, BCD is being increased on certain items such as cashew kernels, PVC, auto parts, CCTV camera, IP camera, digital and network video recorder, etc. Also, BCD exemptions on certain electronic items such as microphones, receivers, SIM sockets and connectors for use in cellular mobile phones, etc, which are now being manufactured in India, are being withdrawn.



To further promote domestic manufacturing, customs duty reduction is being proposed on certain categories of raw materials and capital goods such as inputs for manufacture of artificial kidneys and disposable sterilised dialyser and fuels for nuclear power plants. At the same time, special additional excise duty and road and infrastructure cess has been proposed to be increased on petrol and diesel by Rs 1 a litre. Customs duty on gold and other pre-

cious metals has been increased from 10% to 12.5%.

The Budget proposals has specific mention towards the use of cleaner energy and providing affordable and environment-friendly public transportation options for the common man. The government has sent a proposal to the GST Council for reduction in GST rate on EVs from the current 12% to 5%. Also, an income tax rebate scheme has been proposed pro-

viding a rebate of Rs 1.5 lakh on interest on loan to the buyer to boost the sector.

In order to curb bogus transactions and unfair trade practices relating to misuse of duty free scrips and drawback of value more than Rs 50 lakh, prosecution provisions have been made more stringent by making such unfair practices cognisable and non-bailable. The government is mindful of the fact that the GST regime is two-year old. Despite this, India Inc is grappling with large pending litigations pertaining to the erstwhile tax regime. Realising the need for minimisation of tax-related disputes and focus on restructuring of tax administration, the FM has proposed to roll-out a Legacy Dispute Resolution Scheme to facilitate trade and industry in quick closure of pending disputes.

The government has laid the foundation for India's growth and development for the times to come. With a special impetus on digital economy and start-ups, the government is likely to transform the current assessment model to faceless e-assessments involving no human intervention. To begin with, such faceless assessment shall be carried out in the sphere of direct taxation and will eventually be rolled out under indirect taxes as well.

(With inputs from Kishore Kumar, director, Indirect Tax.)



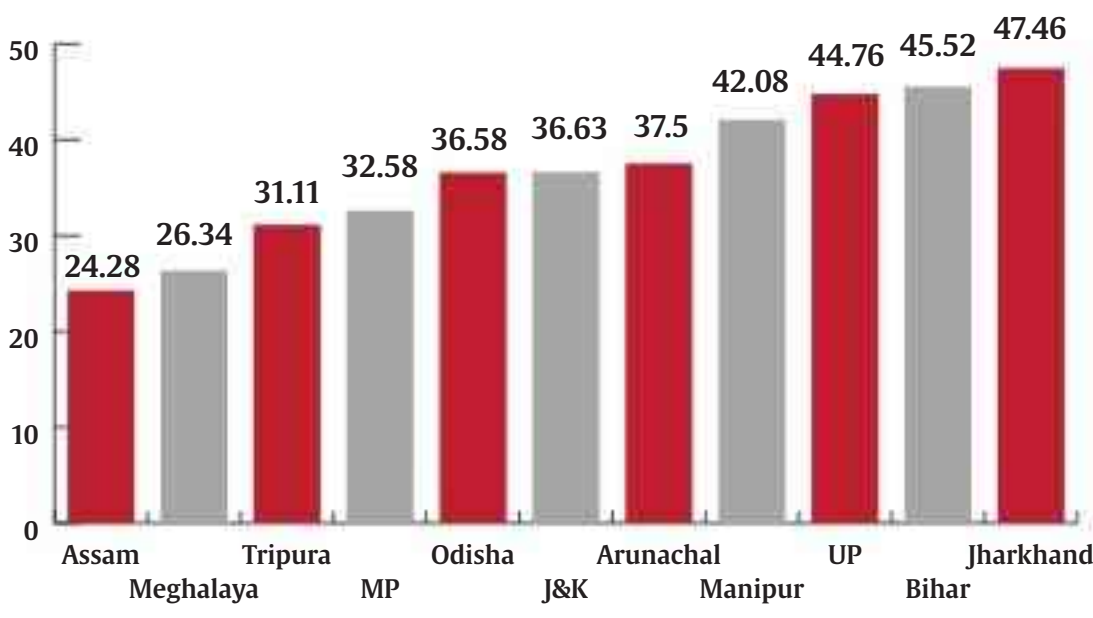
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If there are questions of current or contemporary relevance that you would like explained, please write to explained@indianexpress.com

TELLING NUMBERS

2 in 3 schools have electricity;
5 Northeast states in bottom 10

STATES WHERE LESS THAN HALF THE SCHOOLS HAVE ELECTRICITY



Source: Unified District Information System for Education, 2017-18 (provisional), via Ministry of Human Resource Development

Less than two-thirds (63.14%) of the country's schools have electricity connections, according to data from the Unified District Information System for Education (UDISE) for 2017-18 (provisional) tabled in Lok Sabha on Monday.

All schools in three Union Territories — Chandigarh, Dadra & Nagar Haveli and Lakshadweep — have a connection, followed by the states and UTs of Delhi (99.93%), Gujarat (99.91%), Puducherry, Tamil Nadu (99.55%), Punjab (99.55%), Goa (99.54%) and Daman & Diu (98.6%). At the other extreme are three

Northeastern states — Assam (24.28%), Meghalaya (26.34%) and Tripura (31.11%). Two other Northeastern states — Arunachal Pradesh (37.5%) and Manipur (42.08%) — are in the bottom 10 (see bar graph).

The ministry reply said that under the erstwhile Sarva Shiksha Abhiyan (SSA) until 2017-18 and the present Samagra Shiksha (effective from 2018-19), 1,95,519 government elementary schools have been provided internal electrification until March 2019. The ministry provided state-wise figures for the last three years (see table).

GOVERNMENT ELEMENTARY SCHOOLS ELECTRIFIED, LAST 3 YEARS			
STATE	2016-17	2017-18	2018-19
Andhra	1,168	2,595	0
Maharashtra	112	519	0
Kerala	0	0	613
Chhattisgarh	105	19	281
Uttarakhand	0	50	170
Himachal	68	39	10
TOTAL	1,453	3,222	1,074

Source: Quarterly progress reports furnished by states, via Ministry of HRD

THIS WORD MEANS

PROVENANCE

Ownership record of works of art, at the centre of controversy around auctioned Tutankhamen head

ON THURSDAY, Christie's auctioned a stone head of pharaoh Tutankhamen, amid protests by Egyptian authorities and activists (*The Indian Express*, July 8). At the heart of the controversy around the sale, which fetched £4.7 million (\$6 million), is the question of 'provenance'. In matters of antiques, the word means "the record of the ownership of a movable work of art".

When provenance is unclear, museums and institutions of repute do not usually deal with such works of art. Over 100 countries are signatories to the UNESCO 1970 Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transport of Ownership of Cultural Property. For evidence of provenance, UNESCO relies on an Interpol database of stolen objects and national inventories.

When an object is not listed, establishing its provenance becomes problematic.

In this case, Egyptian officials have alleged that the pharaoh's head was stolen, while Christie's has asserted that it can date its provenance to a time before the UNESCO Convention came into effect. *The Guardian* quoted Zahi Hawass, a former Egyptian minister of antiquities, as saying that he believed the head had been illegally exported in 1970 — the year UNESCO instituted the Convention. On the other hand, Christie's said in a statement: "The present lot was acquired from Heinz Herzger, a Munich-based dealer in 1985. Prior to this, Joseph Messina, an Austrian dealer, acquired it in 1973-74 from Prinz Wilhelm von Thurn und Taxis who reputedly had it in his collection by the 1960s."

Declared ‘foreigners’ in absence

In 33 years, 64,000 in Assam have been declared foreigners by *ex parte* orders. Under what circumstances do Foreigners' Tribunals deliver such orders? Ahead of publication of final NRC, a look at a complex process

ABHISHEK SAHA
GUWAHATI, JULY 8

LAST WEEK, Minister of State for Home G K Reddy told Parliament that between 1985 and February 28, 2019, Foreigners' Tribunals in Assam have declared 63,959 persons foreigners in *ex parte* proceedings — or, in the absence of these persons. According to state government data presented in an affidavit to the Supreme Court and in the Assembly this year, FTs declared 1,03,764 persons foreigners between 1985 and August 2018. These would include many of the 63,959 whose cases were decided by *ex parte* orders until February 2019.

How do Foreigners' Tribunals work?

These are a key player in the exercise to identify illegal immigrants in Assam, and in focus now ahead of the July 15 publication of the final National Register of Citizens (NRC). The Foreigners' Tribunals — 100 existing and 200 more to be functional by September 1 — are quasi-judicial bodies meant to "furnish opinion on the question as to whether a person is or is not a foreigner within the meaning of Foreigners Act, 1946". In 1964, the Centre passed the Foreigners' (Tribunals) Order under provisions of Section 3 of the Act. The FTs get two kinds of cases: those against whom a "reference" has been made by border police, and those whose names in the electoral rolls have a D (Doubtful) against them.

Under what provision do Foreigners' Tribunals pass *ex parte* orders?

Section 9 of the Foreigners Act says that "the onus of proving that such person is not a foreigner or is not a foreigner of such particular class or description, as the case may be, shall, not withstanding anything contained in the Indian Evidence Act, 1872, lie upon such person".

Thus, the accused has to prove he or she is an Indian. "Since the onus is on the person, if he or she is absconding and doesn't appear before the tribunal, the member can pass an *ex parte* order," a former member of a Foreigners' Tribunal, who did not want to be named, told *The Indian Express*.

Previously, under the Illegal Migrants (Determination by Tribunals) Act, 1983, the onus of proving one's nationality or otherwise lay on the complainant. In 2005 (*Sarbananda*



A Foreigners' Tribunal in Barpeta, one of the 100 in Assam. *Abhishek Saha*

Sonowal vs Union Of India), the Supreme Court struck down the IMDT Act and held that it "has created the biggest hurdle and is the main impediment or barrier in the identification and deportation of illegal migrants".

What are the circumstances under which *ex parte* orders are passed?

In an affidavit in the Supreme Court in April this year, the Assam government said, "In foreigners' cases, it is seen that when one comes to know that an investigation is being made regarding his citizenship status or that a reference has been made against him, he shifts to other unknown places and there remains no option before the Foreigners' Tribunals but to decide the cases *ex parte*." The affidavit adds that in some cases, the suspected foreigner "appears before the Foreigners' Tribunals on receipt of the notice and even files written statements along with few copies of documents" but eventually stops appearing on later dates.

"However, it is seen that he remains absent for quite a long period and the cases are disposed of *ex parte* on the basis of the copies of documents and written statements filed by him. These are the few reasons for which large number of reference cases are disposed of *ex parte* by the Foreigners' Tribunals," the

Assam government told the Supreme Court.

But why do the accused stop appearing?

Families of persons who have faced Foreigners' Tribunals and their lawyers cited various reasons, a key one being that the notice often fails to reach the accused. "A notice is served, say, at the rented house of a construction labourer where has was staying when the border wing of the Assam Police had investigated him months earlier. The person does not stay there anymore and has moved to work at another construction site in another district, and he won't get the notice and won't know that he has to appear at the Tribunal," said lawyer Aman Wadud, who has represented many alleged foreigners at Gauhati High Court and Foreigners' Tribunals.

"In a vast majority of cases, police don't serve the notice of the Tribunal upon the accused — as a result, these persons are declared foreigners without their knowledge," Wadud alleged. "In some cases, despite receiving the notice, many don't appear or stop after a few appearances because of poverty, illiteracy and complexity of the procedure. There are also cases where the accused didn't appear because of wrong advice by lawyers."

The government affidavit mentioned the issue of the way notices are served. It said that in many cases, the "proceedees evade and re-

What the change of power in Greece signals

UDIT MISRA
NEW DELHI, JULY 8

SUNDAY'S NATIONAL elections have ended Alexis Tsipras' tenure as the prime minister of Greece. The firebrand leader of the left-wing Syriza (an acronym for The Coalition of the Radical Left) party conceded defeat after Kyriakos Mitsotakis' centre-right New Democracy party won a resounding mandate, cornering nearly 40 per cent of the vote and reaching a comfortable majority of 158 seats in the 300-seat strong house. Tsipras, who came to power in 2015, half expected electoral losses after the setback in the European Parliament elections in May, and advanced the national elections due in October in a bid to minimise damage. However, his successor has a tough road ahead as the problems plaguing Greece have no easy solutions.

Why did Syriza lose?

In many ways, the party's performance was intrinsically linked to the declining appeal of its charismatic leader, Tsipras. Although it is true that under his leadership, Greece has slowly stepped back from the brink of a grave financial crisis, yet, over the years, Tsipras

steadily moved away from his radical beginnings — including holding a referendum to ask whether Greeks wanted to move out of the eurozone. During his tenure, he moved closer to the political centre inside the country and became closely aligned to the same eurozone countries and institutions such as the International Monetary Fund that he opposed during his mercurial rise four years ago. In the end, it was his core constituency of voters that seem to have abandoned him as they grew disenchanted and impatient with his rule.

What were the key issues in the election?

The first major issue is the poor health of the Greek economy. The onerous demands placed by the bailout provided by the IMF and eurozone countries has had a crippling effect on government spending. Each year there have been cuts in government spending adversely affecting pensions and healthcare benefits etc. On top of that, the government has also slapped high taxes — both on income and property. By itself, an economic growth rate of 2 per cent has not been enough to generate enough jobs and income and alleviate the misery even as taxation has broken the back of the middle class and businesses. Predictably, unemployment has soared to 18 per cent — an unusually



Outgoing Greek PM Tsipras (*right*) congratulates new PM Mitsotakis. *Reuters*

high figure for a eurozone economy.

What has exacerbated the discontent among Greeks already reeling under a decade-long economic distress has been the issue of hundreds of thousands of migrants coming into the country from Syria and other bordering nations. The country has been increasingly divided over how to treat the immigrants es-

pecially when Greeks themselves do not have access to basic healthcare and living conditions.

Does the new PM have the answers?

Not really. Mitsotakis, who is the son of a former Greek PM, and has been educated in Harvard and Stanford, seems to have benefited from the voter's anger against Tsipras. As a personality, the understated and soft-spoken Mitsotakis is quite different from his predecessor. However, much like his predecessor who moved towards the political centre from the left, Mitsotakis has been steadily moving towards the centre from the right. Many of views do not exactly mirror those of other right-wing leaders. For instance, he reportedly supports LGBT rights and a less harsh approach on migration. Retaining the support of those who have moved towards him, either away from the far-right Golden Dawn party or from the centre-left Syriza, would be a key challenge.

Similarly, on the economy, although Mitsotakis has come to power promising lower taxes and more prosperity, yet given the fact that Greece is obligated to stringent fiscal limits, which, in turn, requires the government to limit its spending and boost its revenues, there is very little that Mitsotakis can do to turn things around in a hurry.

Where to plant a trillion trees to save planet: study maps all land available

KABIR FIRAQUE
NEW DELHI, JULY 8

RESTORATION OF forests has long been seen as a potential measure to combat climate change. The latest special report by the Intergovernmental Panel on Climate Change suggests that an increase of 1 billion hectares of forest will be necessary to limit global warming to 1.5°C by 2050. What has so far been unclear, however, is how much of this tree cover might be actually possible in the existing conditions on the planet.

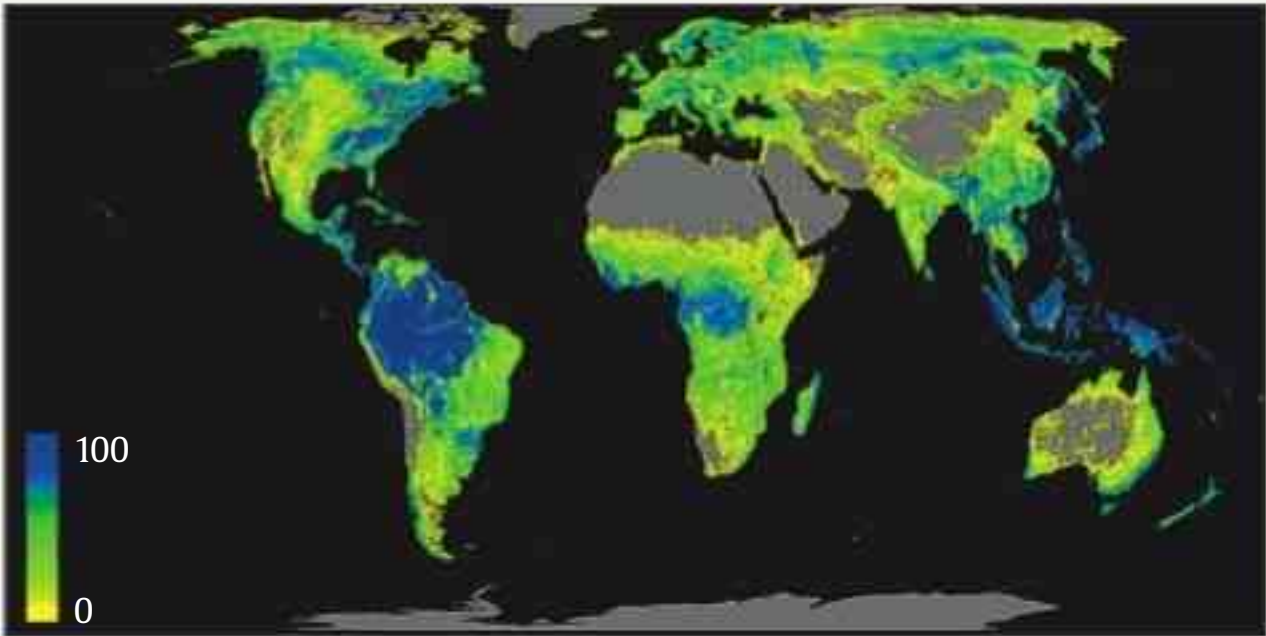
Now, researchers have quantified how much land around the world is available for reforestation, as well as the extent of carbon emissions these would prevent from being released into the atmosphere. Trees, which absorb carbon dioxide, are a natural sink for the gas emitted into the atmosphere. According to the US National Oceanic and Atmospheric Administration, trees absorb about 25% of the carbon dioxide released into the atmosphere by the burning

of fossil fuels, while the oceans absorb another 25%. The half that remains in the atmosphere contributes to global warming.

How they worked it out

The study, by researchers with the Crowther Lab of ETH Zurich university, has been published in the journal *Science*. On the basis of nearly 80,000 images from around the world, they calculated that around 0.9 billion hectares of land would be suitable for reforestation. "We are trying to restore a trillion trees," Thomas Crowther, co-author of the paper and founder of the Crowther Lab, told *The Indian Express* by email. If an area of 0.9 billion hectares is indeed reforested, the researchers calculated, it could ultimately capture two-thirds of human-made carbon emissions.

"One aspect was of particular importance to us as we did the calculations: we excluded cities or agricultural areas from the total restoration potential as these areas are needed for human life," lead author Jean-François Bastin said in a statement.



Land that can support trees (total of current forested areas and forest cover potential available for restoration). *Crowther Lab / ETH Zurich*

Earth's continuous tree cover is currently 2.8 billion hectares, and the researchers calculated that the land available could support 4.4 billion hectares, or an ad-

ditional 1.6 billion hectares. Out of this, 0.9 billion hectares — an area the size of the US — fulfil the criterion of not being used by humans, according to the paper.

In India, there is room for an estimated 9.93 million extra hectares of forest, Crowther told *The Indian Express*. India's existing forest cover makes up 7,08,273 sq km (about 70.83 million hectares) and tree cover another 93,815 sq km (9.38 million hectares), according to the Environment and Forest Ministry's State of Forest Report 2017.

The study found that the six countries with the greatest reforestation potential are Russia (151 million hectares); the US (103 million hectares); Canada (78.4 million



The Indian EXPRESS

FOUNDED BY

RAMNATH GOENKA

BECAUSE THE TRUTH INVOLVES US ALL

CLASSROOM AND EYE

Saturation surveillance in schools would encourage compliant learning — the opposite of education

THE AAM AADMI Party government in Delhi is on its way to becoming a role model for other state governments with its commitment to school education. It has diligently diagnosed and addressed maladies of the government school system, from poor infrastructure to the lack of support for students preparing for examinations. But its obsession with digital technology has now done it a disservice, for it is headed towards turning schools into panopticons, and students into compliant inmates. Classroom cameras will be made directly accessible to parents through a smartphone app, allowing them to track behaviour and milestones in real time. Chief Minister Arvind Kejriwal has brushed aside concerns about the privacy of children while inaugurating saturation CCTV coverage in the first of over 1,000 Delhi schools, arguing that they are sent to school to gain an education, learn discipline and become good citizens, and not for private goals.

It is a matter of concern that a chief minister heading a “progressive” government seems to have so little idea of the value of privacy and the objectives of education. People are not educated in order to become well-programmed automata, fungible drones who can be plugged and played anywhere with equal facility. That was true only of the colonial era, when the three Rs were taught to children destined to become administrators and clerks, who could be sent anywhere in the world, from Bombay to Boston, and function equally well. Apart from this colonial interregnum, the objective of education has always been to nurture creative, sceptical minds which add to the sum of human knowledge by questioning received wisdom. The identification of discipline with education is therefore counter-productive, and it would be impossible for children to be creative and individualistic in a classroom where they are constantly aware of the eye of the camera, through which a parent may be watching. Besides, classrooms do not only contain students. Teachers are, unsurprisingly, essential components of the teaching environment, and no one appears to have sought their consent to pervasive surveillance. The camera would discourage their creativity, too, and turn the classroom into a process-driven workshop.

Much of what is learned in school is off the curriculum. Values are not picked up only from textbooks, but from role models like teachers, and classroom friendships teach the child how to navigate the world. How to be a good citizen, or to use the scientific method, are not curricular subjects, but are learned by usage, which calls for experimentation in a reasonably free atmosphere. Surveillance for security is useful in monitoring access, but to let it dominate the classroom is to open the door to a dystopia of compliance.

DILUTING THE CODE

In insolvency proceedings, distinction between secured financial and operational creditors must be maintained

LAST WEEK, THE National Company Law Appellate Tribunal (NCLAT) approved the resolution plan filed by ArcelorMittal for Essar Steel. But the two-member bench of the appellate tribunal modified the manner in which the proceeds from the sale would be distributed. Earlier, the resolution plan had proposed to pay financial creditors 92.5 per cent of their dues. But as per the order, both financial and operational creditors will recover 60.7 per cent each of their admitted claims. The judgement, which, in effect, places operational creditors at par with secured financial creditors at the time of settling claims, is likely to have far reaching consequences.

Under the Insolvency and Bankruptcy Code (IBC), Section 53 deals with the distribution of proceeds from the liquidation of assets. It lists the hierarchy in which various claims against the firm would be settled. Under this waterfall mechanism, after the costs associated with the insolvency resolution process and liquidation are settled, dues owed to secured creditors and workmen have to be settled first. This is followed by discharging dues of employees, unsecured creditors and governments, in this particular order. After these claims have been settled, the balance is to be distributed among preference and equity shareholders, in that order. Thus the structure draws a clear distinction between the claims of secured creditors and operational creditors in the liquidation process, with the former having the first right. However, the judgement draws a distinction between claim settlement in the resolution and liquidation process. It notes that as the case is not about “distribution of assets from the proceeds of sale of liquidation... the resolution applicant cannot take advantage of Section 53 for the purpose of determination of the manner in which distribution of the proposed upfront amount is to be made in favour of one or other stakeholders”. Creating this distinction is problematic.

The consequences of this order stretch beyond this particular case. To argue that claims of financial creditors can be treated at par with operational creditors would muddy the waters as it loses sight of the basic distinction between secured and unsecured creditors. In fact, in its judgement on the constitutionality of the IBC earlier this year, the Supreme Court had justified the difference between financial and operational creditors, making a critical distinction between financial debts which are secured and operational debts which are unsecured. Reportedly, lenders in the ArcelorMittal/Essar Steel case plan to move the Supreme Court to appeal against the NCLAT decision. The Supreme Court would do well to clarify this issue.

HER OWN SCRIPT

Playing to win need not mean playing safe.
Megan Rapinoe offers a reminder

MANY MONTHS AGO, Megan Rapinoe, star of the freshly-crowned American World Cup winning football team, had told *Eight by Eight* magazine she wasn't going to the White House (most winning teams are known to stop by), and added she doubted if she'd get an invite. When the video resurfaced, it attracted the typically incoherent wrath of US President Donald Trump. He chided Rapinoe about learning to respect the country, White House, flag, etc. This, he said, was “especially since so much has been done for her and the team”. Rapinoe, of course, got the job done in the World Cup final against Holland at Paris with penalty kicks. But she left no room for doubt about her choice to not be “co-opted”.

Being co-opted is one of sport's oldest phenomena. Not just the Roman emperors or the Nazi regime, every ruling dispensation loves casual control over winning athletes, parading them around as the nation's success stories. But in the US, there's no dearth of Tommie Smiths and John Carloses with their Black Power salutes and Muhammad Ali with his ability to defy and the conviction to strike the dissenting note. Rapinoe, a champion in the same mould, has similarly become a global darling for refusing to back down after Trump's harangues.

In India, never is co-option as evident as in the lead-up to national sports awards, when athletes are forced to angle for the Arjuna through political lobbying, and ahead of Republic Day, for the Padma awards. There is mindless parroting of scripts handed down, with little thought given to independent opinions. Not the most politically attuned nor astute, most Indian athletes have never spoken their mind unless it aligns with predictable jingoism. Playing safe equals playing to win here, there's no Megan Rapinoe in sight.



SANJAYA BARU

AN UNEXPECTED ANNOUNCEMENT in Finance Minister Nirmala Sitharaman's Union budget speech was the proposal for the government to raise funds globally by borrowing abroad to bridge the deficit at home. It is not an idea one readily associates with a nationalistic political party like the Bharatiya Janata Party. The reason why since 1991 successive governments chose not to seek fueling growth through external borrowing was because of the terrible memory of what excessive and short-term borrowing in the 1980s did to India's global standing.

While the PV Narasimha Rao government entered into a fiscal stabilisation and structural adjustment programme with the International Monetary Fund and the World Bank in 1991 to manage the balance of payments consequences of the fiscal and external economic policies of the 1980s, no government has since been willing to tap funds through external borrowing. Sitharaman's proposal to launch sovereign bonds draws attention to the binding constraint on growth imposed by inadequate government finances and domestic savings. Resisting the temptation to print money and spend one's way to growth, the finance minister has opted for incentivising private investment and borrowing abroad.

Taken along with the currency swap agreements signed last year with Japan and the United Arab Emirates, the Indian economy's dependence on external finance is once again growing. With merchandise exports remaining sluggish, the finance minister has turned to import substitution in the name of Make in India. Partly to ward off criticism of protectionist trade policies from developed economies, the government has opened doors more widely to foreign direct investment.

If the government is able to stimulate new economic activity and thereby ease the domestic fiscal constraint, it will have more leg room to spur growth. However, this will have to be done with care, given increased exposure to global sentiments that comes with increased dependence on external finance and markets. In days to come, India will have to engage its global economic partners and financial markets to enable the fi-

Coordination between managers of economic and foreign policies is necessary — more so today

Taken along with the currency swap agreements signed last year with Japan and the United Arab Emirates, the Indian economy's dependence on external finance is once again growing. With merchandise exports remaining sluggish, the finance minister has turned to import substitution in the name of Make in India. Partly to ward off criticism of protectionist trade policies from developed economies, the government has opened doors more widely to foreign direct investment.



SANJAY SRIVASTAVA

OVER THE PAST few years, the AAP government in Delhi has made commendable efforts in tackling one of the most persistent causes of social and economic inequality. Since 2015, it has paid special attention to improving the manner in which education is imparted in Delhi's government schools in order that students not only receive a better standard of education but also that this is reflected in success in examinations. While the latter should not be regarded as a reliable index of intelligence or thoughtfulness, failure in examinations has catastrophic personal and professional consequences in a society as unforgiving as ours.

Emboldened by its success, the AAP government now seeks to install CCTV cameras in each classroom and providing parents with an app that will, apparently, allow them to observe and monitor their child's behaviour. Chief Minister Arvind Kejriwal has suggested that this will further improve academic results, is “true” democracy through transparency and that “privacy” is not a relevant issue as far as school children are concerned. With this, we are now firmly in a realm of action that has no evidence. We are also indisputably in the world of political gimmickry that derives from wilfully ignoring or misunderstanding the relationship between technology and society.

The first set of questions we must ask is: Would such a scheme of complete surveillance be allowed in elite private schools? Would parents in such schools believe that the most effective manner of improving academic

BIG BROTHER IN SCHOOL

Delhi government's move to install CCTVs in classrooms is an ill-thought out idea

The AAP's move is mostly the result of ill thought-out ideas regarding the relationship between technology and social change. In effect, it will only serve to reinforce the retrograde notion that ‘good’ education exclusively results from ‘discipline’ in the classroom, rather than imparting creative learning and a critical attitude towards given knowledge. CCTVs in classrooms may, in fact, further the aims of spoon-fed knowledge to acquiescent children who may fear censure if they come across as anything but entirely attentive at all times.

results is through pervasive surveillance? Would the teachers agree to it? It would be instructive to carry out a survey of the schools where the well-off send their children and gauge their reaction to a such a scheme.

The sad fact is that when governments resort to gimmicks as public policy, it is those with the least power to influence it that are forced to be guinea pigs. Parents with limited means are naturally anxious to achieve the best schooling results for their children and may well support the CCTV scheme. However, do governments not have responsibility to base their policies on empirical research? Is there any study that suggests that it is saturation-level surveillance of students and teachers that improves educational outcomes? Poor parents will agree because of their desperation, but should private desperation be the basis of good public policy?

We may be hard put to find serious research that suggest CCTV surveillance improves academic results and children's behaviour. However, there is plenty that points to the measures that AAP has so far been undertaking as contributing factors to a better school environment. These include special classes for academically-weak students, exams-practice, home counselling to improve attendance, better training for teachers and administrators and improved physical infrastructure. Though the results of such measures are likely to be uneven, they demonstrate serious intent in reducing educational inequality.

The AAP's move is mostly the result of ill thought-out ideas regarding the relationship

come a US\$5 trillion economy requires greater coordination between the managers of foreign policy and diplomacy, on the one hand, and financial and trade policies on the other. This, in essence, is the geo-economics of the budget.

Prime Minister Modi has an effective team of four persons in place, including Finance Minister Sitharaman, External Affairs Minister S Jaishankar and the ministers for industries and trade, Piyush Goyal and Hardeep Puri, to coordinate economic and foreign policy aimed at raising the rates of investment and growth and India's share in world trade and capital flows. While Sitharaman and Goyal have a good grasp of the domestic economy and politics, Jaishankar and Puri are able diplomats with experience in economic diplomacy.

Such coordination between the managers of economic policy and of foreign policy has always been necessary but today it is more so both because of the many structural changes in global power and economic relations and the fact that this year's budgetary strategy has increased the importance of external economic management to domestic economic performance. Of course, government spokespersons have quoted Deng Xiaoping to say that India will only “cross the river by feeling the stones.” That would be wise. But the stones to feel would be both economic and geopolitical.

It has been a long time since Indian macro-economic policy has exposed itself as much as it has this year to external judgments. Western rating agencies have lost some of their professional reputation but they have not gone away and sovereign borrowing will bring them back into play. Their considerations are never purely economic nor entirely professional. External debt brings with it exposure to external judgment. India's nationalist leadership must learn to live with it. All the more reason why economic policy managers and foreign policy managers have to work in tandem to manage the geo-economics of fiscal policy.

The writer is Distinguished Fellow, Institute of Defence Studies & Analysis, India



JULY 9, 1979, FORTY YEARS AGO

LALDENG ARRESTED THE MIZO NATIONAL Front President, Laldenga, was arrested from his South Delhi residence and remanded to police custody for three days. The government, through a notification issued last night in the gazette extraordinary has meanwhile declared the Mizo National Front and its allied organisations — including the Mizo National Army — unlawful associations under the Unlawful Activities (Prevention) Act, 1967. The deputy commissioner of police, South Delhi, K K Paul, told ENS that Laldenga was arrested on charges of conspiracy, sedition and insurgency under Sections 120 B, 124 and 126 of the Indian Penal Code.

UNREST IN SHANGHAI SIXTEEN AFRICANS AND Arabs were injured, four of them seriously, in violent scuffles between students of third world countries and Chinese students at the Textile Institute in Shanghai, from July 3 to 5, according to BBC. Following the incidents, the foreign student community has decided to go on a strike, and the atmosphere is tense in Shanghai. The incident started when some African students playing loud music on the night of July 3, were called “Black devils” by the Chinese, according to the students. It was the second time this year that quarrels broke out between Chinese and foreign students.

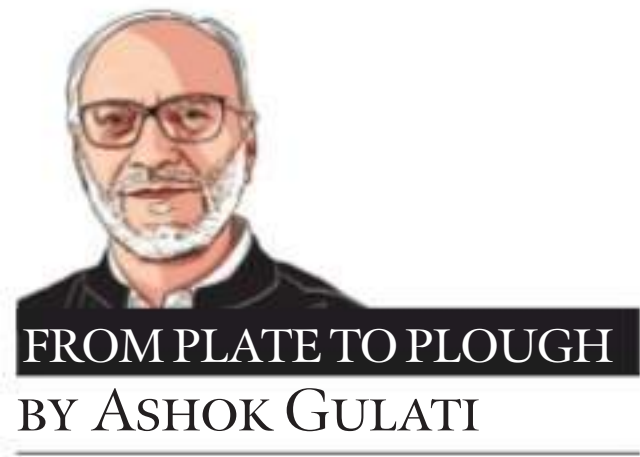
SKYLAB FALL

AT 160 KM UP, Skylab will begin to glow, the first sign that it has begun its fiery death dive into earth's thickening atmosphere. At 110 km it will begin to break apart. NASA says the space station's much-heralded and discussed return to our planet will happen this week, probably on Wednesday. First to rip away will be four windmill-shaped solar wings atop a telescope mount, followed by a single large solar panel on the side of the craft. Then, streaming flames like a meteor, Skylab will lose its telescope mount at 96 km. Next to fall away will be a section containing a control centre and a spaceship docking port.



On the water front

Farmers can be given monetary rewards for saving electricity and water.
Water-guzzling crops need to shift to geographically sustainable areas



FROM PLATE TO PLOUGH
BY ASHOK GULATI

A ONE-WEEK DELAY in the monsoon's arrival has laid bare the precariousness of India's water situation. The images of thousands of Chennai residents running after water tankers were telecast by BBC and CNN. Several people had to walk for miles to get drinking water in parched lands. If this was the condition of humans, one can imagine the condition of cattle. These images clearly exposed that the Indian lion, the symbol of Make in India, has feet of clay.

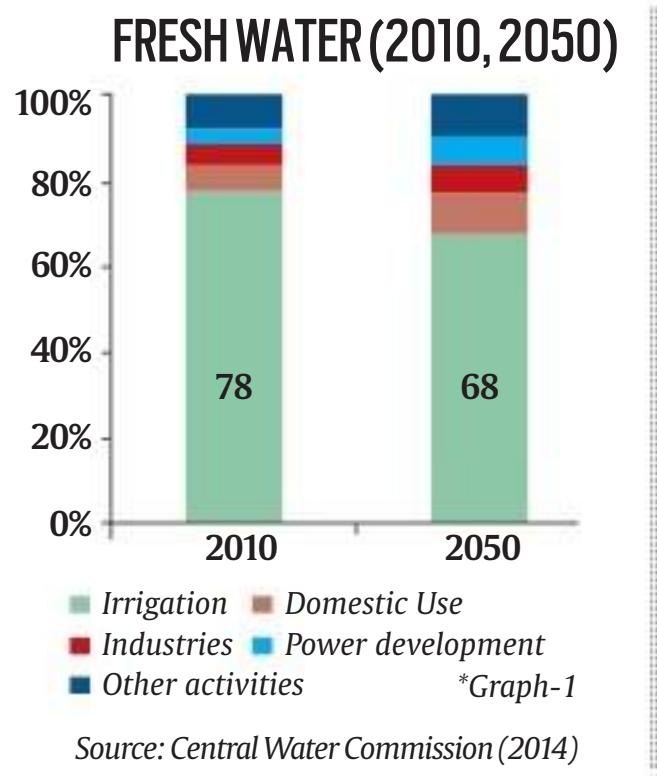
It is no wonder that Prime Minister Narendra Modi, in the first 'Mann ki Baat' of his second term, gave a clarion call to save every drop of water, and to make water conservation a mass movement on the lines of the Swachh Bharat Abhiyan. He already has given a commitment to deliver tap water, hopefully safe for drinking, to every household by 2024 under the "Nal se Jal" programme. These are commendable measures and one hopes they can deliver quality results in time.

But the issue that we want to dwell on here is: How did we reach the current situation? And how best, and how fast, can we get out of it for sustainable water-use in the country?

First, let us note a few facts about water availability and use in India. India has only 4 per cent of the global fresh water resources while it has to quench the thirst of about 18 per cent of the world population. Of the total fresh water resources available in the country, as per the Central Water Commission, 78 per cent was being used for irrigation in 2010, which is likely to be reduced to 68 per cent by 2050. For domestic use, it was just 6 per cent in 2010, likely to go up to 9.5 per cent by 2050 (graph 1). So, by far, agriculture will remain the biggest user of water to produce enough food, feed and fibre for the foreseeable future. And unless this sector is geared to improve in terms of the supplies of and efficiency in water use, the situation is not going to improve significantly.

Second, of the total of about 198 million hectares of India's gross cropped area, roughly half is irrigated. And the major source of this irrigation is groundwater (63 per cent), canals accounting for 24 per cent, tanks 2 per cent and all other sources accounting for about 11 per cent. So, the real burden of irrigating Indian agriculture lies with groundwater, driven by private investments from farmers.

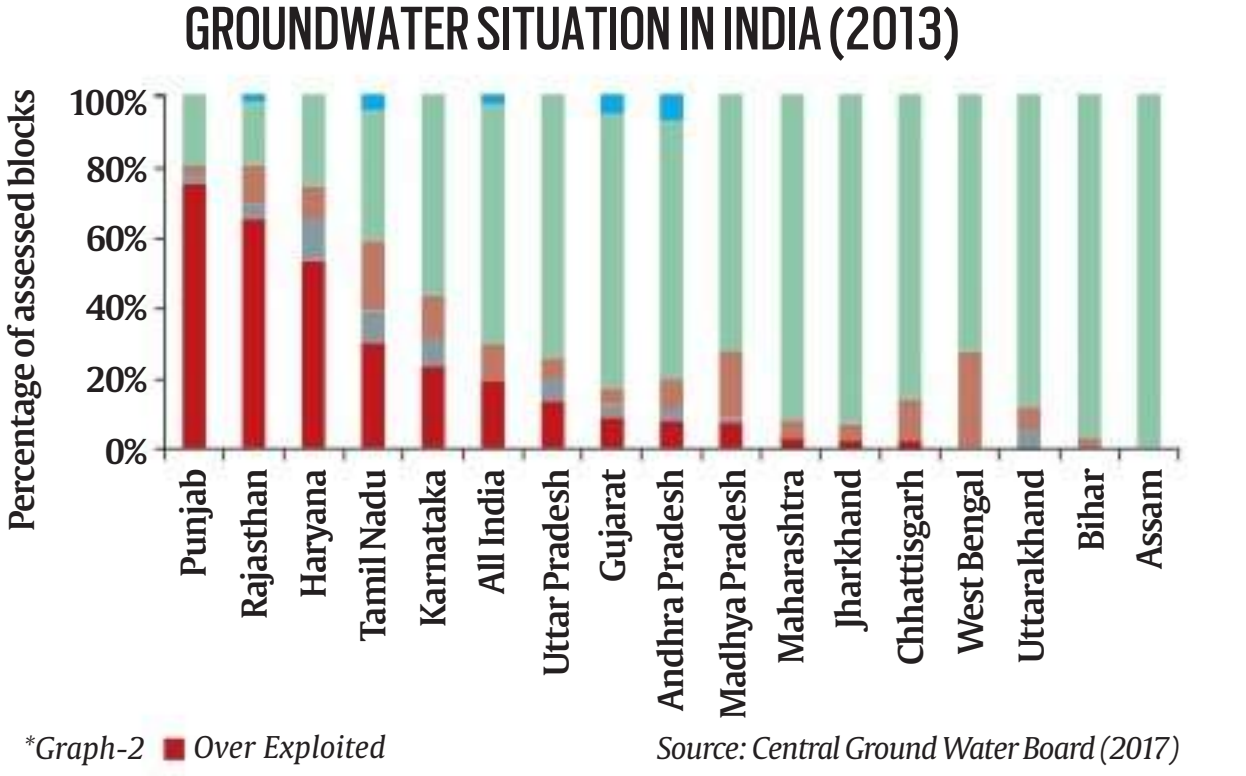
There is hardly any effective regulation of groundwater. The policy of cheap or free power supply for irrigation has led to a situation of near-anarchy in the use of groundwater. On the one hand, power subsidies to agriculture cost the exchequer roughly Rs 70,000 crore each year and on the other, this is depleting groundwater in an alarming manner. Overall, about 1,592 blocks in 256 districts are either critical or overexploited. In places like Punjab, the water table is going down by almost a metre a year, and this has been going on for nearly two decades. Almost 80 per cent of the blocks in Punjab are over-exploited or critical (see graph 2). This only shows how indifferent and short-sighted we are while tak-



ing away the rights of our own future generations.

Paddy and sugarcane, both water-guzzling crops, take away almost 60 per cent of India's irrigation water. One kilogram of rice produced in Punjab requires almost 5,000 litres of water, and one kg of sugar, say in Maharashtra, requires about 2,300 litres of water for irrigation. Estimates vary on how much water the plant really consumes, how much evaporates, and how much of it goes back into groundwater. But traditionally, say a hundred years ago, eastern Uttar Pradesh and Bihar used to be the hubs for sugarcane, and rice was grown largely in eastern and southern India, where rainfall was high and water plentiful. All that changed with new technology and populist policies like free power.

No political party wants to touch the rationalisation of power pricing for agriculture. Technological solutions like drip irrigation, sprinklers, etc. cannot make much headway unless policies are put on the right track. Israel has perhaps the best water technologies and management systems, ranging from drips to desalination to recycling (87 per cent) of urban waste water for agriculture. PM Modi visited Israel to find solutions to our water woes. But my visits to Israel revealed one thing clearly: Technologies cannot take you far enough unless the pricing of power and irrigation water is put on track.



The existing situation can be taken as a sort of current entitlement, and those who agree to get their power supply metered and if they save on power consumption compared to current levels, can be rewarded. Along with that, there could be an income support (of say Rs 15,000/ha) for crops that guzzle less water, say maize or soyabean in Punjab during the kharif season. This would provide savings on the power subsidy, but more importantly, in terms precious groundwater. At least one million hectares of paddy cultivation needs to shift away from the Punjab/Haryana belt.

One possible way out is to give monetary rewards to farmers for saving water and power for irrigation. The existing situation can be taken as a sort of current entitlement, and those who agree to get their power supply metered and if they save on power consumption compared to current levels, can be rewarded. Along with that, there could be an income support (of say Rs 15,000/ha) for crops that guzzle less water, say maize or soyabean in Punjab during the kharif season. This would provide savings on the power subsidy, but more importantly, in terms of precious groundwater. At least one million hectares of paddy cultivation needs to shift away from the Punjab/Haryana belt to eastern India. Eastern India can develop better procurement facilities for paddy for the PDS, and procurement from Punjab-Haryana needs to be discouraged/curtailed.

Similarly, sugarcane needs to be contained in the Maharashtra-Karnataka belt and expanded in the UP-Bihar belt. With new Co 0238 varieties that give recovery rates of more than 10.5 per cent, there is a good case that cane can be developed for ethanol from this belt. Will Modi 2.0 move in this direction to save water? Only time will tell.

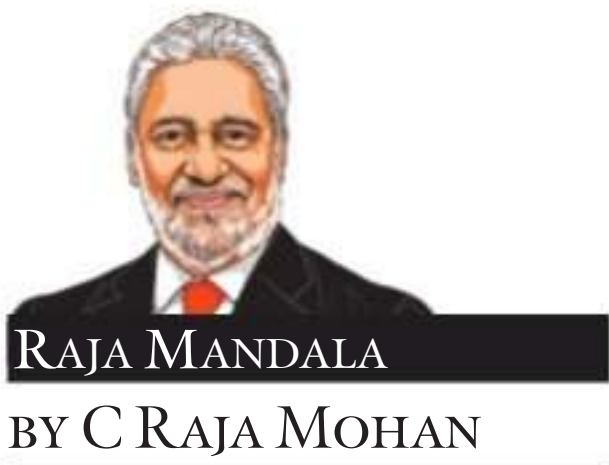
Gulati is Infosys Chair Professor for Agriculture at ICRIER

WHAT THE OTHERS SAY

"The menace of criminal charges humanitarian workers is of a piece with Trump's approach to immigration."
— WASHINGTON POST

When countries moonwalk

There is renewed global interest in the moon. India must leverage its space legacy to gain lunar advantage



RAJA MANDALA
BY C RAJA MOHAN

INDIA'S MOST AMBITIOUS space mission to date, Chandrayaan 2, is set for lift off next week and promises to make India the fourth country to soft-land a vehicle on the moon. Only the US, Russia and China have done that before. For India, more than symbolism is at stake in the success of Chandrayaan 2.

As outer space re-emerges as an arena for exciting scientific exploration and major technological innovation, India, as one of the earliest spacefaring nations, must necessarily be in the vanguard. At the same time, Chandrayaan is also about India carving out a potential niche for itself in the unfolding geopolitical scramble for the moon.

The launch of Chandrayaan 2 coincides with the 50th anniversary of the first man landing on the moon. In the five decades following America's Apollo 11 mission that got astronauts Neil Armstrong and Buzz Aldrin walking on the moon, just 10 others have roamed the surface of earth's satellite. All of them have been American men.

The next few years are likely to see men returning to the moon and women joining them. A lot of them will be non-Americans. Many of them will be Chinese and, hopefully, some of them Indian. The Europeans, Russians, Japanese and many others are also joining the moon scramble.

Soon after the first landing, the exorbitant costs of the Apollo programme led to its shut down. The last human (and American) landing was by Apollo 17 in December 1972. Recent years, however, have seen the revival of the worldwide interest in the moon.

During the Cold War, scientific prestige and claims for superior soft power drove America and Russia towards the moon. Today, commercial and strategic objectives are among the reasons propelling a new moon race among the nations. The race is not about repeating what Americans did half a century ago on the moon. It is about establishing a sustainable human presence on the moon. A lot of the hard work will be done by robots.

Finding water resources on the moon, then, has become the key to a credible long-term engagement with the Earth's satellite. Some of the most inviting real estate from that perspective are near the moon's north and south poles. Most of the current moon-landing missions are aiming for the poles. So is India's Chandrayaan 2. If all goes well, Chandrayaan 2 will deliver India's Vikram lander and Pragyan rover to the moon's south polar region.

While Indians will be proud to see their national flag on the moon, the world's missions to the moon are increasingly collaborative. Space is one arena that saw America and Russia collaborate even during the worst years of the Cold War.

Although the logic of international cooperation on the moon is more compelling than ever, competition too is becoming an unfortunate reality as countries jockey for unilateral gains on the moon.

Meanwhile, many private corporations have big plans to exploit the moon for commercial profit. To make matters worse, there are many ambiguities in the current international law on outer space that could encourage nations and companies to seek first-mover advantage on the moon.

At present, Beijing has one of the most advanced moon programmes. Its Chang'e missions, named after the Chinese moon goddess, began in 2007. Since then, China has put two spacecraft in lunar orbit (Chang'e 1 and 2) and landed two rovers on the moon (Chang'e 3 and 4). Chang'e 4 had the distinction of being the first landing on the far side of the moon that can't be seen from the earth.

Beijing has sent a prototype capsule (Chang'e 5 T1) to rehearse brining lunar material back to the earth. Chang'e 5, set for launch later this year, will do precisely that. China is expected to land crews to the moon in the early 2030s. The US, which turned its back on the moon in the early 1970s, has announced plans to return. In a major speech earlier this year, the US vice-president Mike Pence, declared the intent to land Americans back on the moon in 2024. Many experts believe that might be an unrealistic ambition. The plans of US National Aerospace Administration had been looking at 2028 for such a mission.

Pence's motivation in accelerating American moon plans is based on the sense that China might be about to capture the pole position in the Moon race. "Urgency must be the watchword", Pence told the US National Space Council in March this year. Like in so many other areas of technology, Washington is now trying to push back against China's challenge to the extended American dominance in outer space.

But the US private companies, which have brought great innovation to outer space technologies, are ramping up their ambitions for the moon. Amazon's Jeff Bezos wants to land crews on the Moon in the next five years. Tesla, Moon Express and Astrobotic Technology are other US companies aiming for the moon. While the target dates might slip, there is no doubt about the direction. The moon will see more and more of humans, from states as well as corporations.

India played an important role in the 1960s in drafting modern international law applicable to outer space and the moon. That role was rooted not in India's weight as a space power. Strong interest in issues relating to technology and international law, political enthusiasm for international scientific cooperation and some diplomatic influence in the United Nations helped India insert itself into the global debate on outer space. Today India needs something more — an ambitious and successful lunar programme — to shape the new rules of the road for the moon.

The writer is director, Institute of South Asian Studies, National University of Singapore and contributing editor on international affairs for The Indian Express



S MAHENDRA DEV

Getting the GDP numbers right

Estimates are not perfect, but the process is revised and fine-tuned

FORMER CHIEF ECONOMIC Adviser Arvind Subramanian's recent paper claims that the Indian GDP growth may have been overestimated by 2.5 per cent per annum between the period 2011-12 and 2016-17. A note by Prime Minister's Economic Advisory Council (PMEAC) rejects the methodology, arguments and conclusions of Subramanian's paper. A study done at our institute by Ashima Goyal and Abhishek Kumar show that after removing various flaws in Subramanian's data and procedures used, these indicators suggest official growth rates are overestimated before 2011 too. This study also shows that the GDP growth in a large number of countries is either overestimated or underestimated using these indicators. Therefore, the study rightly says that "these regressions cannot be used for predicting growth or for concluding Indian growth is overestimated or for pointing to problems in the estimation methodology". It is better now to concentrate on the next base revision by focusing on methodology, coverage and data in estimating GDP. There is no point in saying that GDP estimation has problems because ground level realities are different using some indicators.

I was a member of the National Statistical Commission (NSC) during 2013 to 2016 (Pronab Sen was the chairman) and was part of the process in base revision. In 2015, CSO introduced a new series of National Accounts Statistics (NAS) with 2011-12 as the base year.

The guiding principles for change in base are: One, revision of base year to a more recent year; two, complete review of existing data base and methodology employed in the estimation of various macro-economic aggregates and alternative data bases; and three, implementation of the international guidelines based on SNA, the System of National Accounts 2008 to the extent possible. Therefore, it was not just base revision but there were significant changes in methodologies, coverage and data.

The base revision for 2011-12 was undertaken by CSO under the guidance of the Advisory Committee on National Accounts Statistics, which constituted five sub-committees for the purpose. The reports of these committees provide a comprehensive assessment of the changes and their rationale. Improvements in GDP estimation is a continuous process. In fact, Rangarajan's commission on NAS was appointed 20 years back to give recommendations on significant deficiencies and improving credibility of official statistics. There have been several changes in recent GDP estimation. We focus here on two issues: Ministry of Corporate Affairs (MCA) 21 data base; estimation of household sector.

First, it is known that for the corporate sector, the old series used the RBI study on company finances from a sample of around 2,500 companies. There has been a long-standing demand to change this data. In 2011-12 series, corporate sector, both in manufacturing and

services, has been comprehensively covered by MCA 21 data. For the "manufacturing" enterprises, MCA 21 data base has been used to supplement the information available in the Annual Survey of Industries. In the new series, the CSO used the MCA 21 data set which had about five lakh non-financial private companies. The new series also adopted the concept of enterprise in place of establishment. This led to a big change in manufacturing sector value added. One major issue is on the blow-up method for non-responding companies. Critics say this method is leading to overestimation of GDP. This may impact the level of GVA, but it is not clear about the impact on growth rates. However, there are some suggestions on the alternative indicators for blow-up method and also on having sample surveys for companies not submitting accounts.

Second, there are changes in the estimation of value added in household sector. NSS establishment surveys and the NSS employment surveys are used to get value added in household sector. Earlier, workers were treated as a single homogeneous group. In the base revision, a concept called "effective labour input" was developed. Another change in tune with SNA is that quasi-corporations have been separated from the household sector and added to the corporate sector in the new series.

The use of MCA data and other changes in household sector led to increase in the share

of value added in corporate sector and decline in the share of household sector. But, it has not been established that overall GDP growth rates are overestimated.

Another issue is double deflation method — that is, deflating output and input separately while arriving GDP at constant prices. Single deflation has been in practice due to absence of separate deflators for inputs. An exercise done by G C Manna on manufacturing GVA with ASI data using double deflation method showed that it resulted in lower growth for the year 2012-13, and higher growth for the year 2013-14. Therefore, one cannot conclude that it is overestimation or underestimation if we use single deflation.

On 2011-12 base revision, it was a conscious and consensus (may not be unanimous) decision of CSO, NSC and various expert committees to have methodological revisions on the lines of UN SNA 2008. One cannot say GDP estimates are perfect as one has to operate on the data available in different domains. We have improved with each round of revision and with each improvement in data sources. We should now focus on methodology and data of CSO rather than saying ground-level realities are different using few indicators.

The writer is director, IGIDR, Mumbai and was member of the National Statistical Commission

LETTERS TO THE EDITOR

AFTER RAHUL

THIS REFERS TO the editorial, 'Crisis and opportunity' (IE, July 8). Rahul Gandhi is to be applauded for his far-sighted decision to relinquish the post of Congress president. But his task is not finished; he needs to navigate the party through impending hurdles to reposition it as a formidable force nationwide. On the plus side, India needs a strong Opposition to balance the democratic process and the Congress still has a high mass appeal. The hurdle is how to build on this goodwill.

Y G Chouksey, Pune

STRONG RUPEE

THIS REFERS TO the article, 'Opening a window' (IE, July 8). Now that the current account deficit and inflation are under control, key rates need to be brought down to aid domestic consumption even as the rupee needs to be strengthened in anticipation of increased imports to sustain higher growth levels. The idea of sovereign bonds was mooted in July 2013 when the rupee was at its lowest. Given the present stable political environ, there is a case for strengthening the rupee.

R Narayanan, Navi Mumbai

LAISSEZ FAIRE POLICY

THIS REFERS TO the editorial, 'Don't pick & choose' (IE, July 8). The govern-

LETTER OF THE WEEK AWARD

To encourage quality reader intervention, The Indian Express offers the Letter of the Week award. The letter adjudged the best for the week is published every Saturday. Letters may be e-mailed to editpage@expressindia.com or sent to The Indian Express, B-1/B, Sector 10, Noida-UP 201301. Letter writers should mention their postal address and phone number.

THE WINNER RECEIVES SELECT EXPRESS PUBLICATIONS

ment must refrain from going overboard in its endeavour to promote electric vehicles and other such manufacturing sectors. Such sops need not necessarily work and even if they do, it might just kill entrepreneurship in other allied sectors. To make big-ticket investments happen, the government should focus on ease of doing business.

Kamna Chhabra, Gurugram



The visible hand

BJP must not stake claim to form a Ministry in Karnataka without an absolute majority

The political crisis in Karnataka that has been brewing for months has boiled over, threatening the Congress-Janata Dal(S) coalition government. With 13 of its MLAs resigning from the Assembly in phases, and one independent withdrawing his support, the coalition's original strength of 118 in the 224-seat House appears to have come down to 104. If all the resignations are found valid and accepted by the Speaker, the halfway mark will drop from 113 to 106. The BJP has 105 MLAs and the support of independent MLA Nagesh, who has resigned as a Minister. All the Congress and JD (S) Ministers have resigned to allow the leadership the space to lure back the dissidents. With allegations of bribery, and abduction and confinement of lawmakers, what is unfolding is a mockery of democracy and a shameful disregard for the 2018 verdict. Though there are contradictions in the coalition and both parties had fought last year's election separately, post-poll coalitions are a legitimate and honourable route to the formation of a government in a hung Assembly. The legislators driven by nothing more than their greed are not setting a good example. Even if the Congress and the JD (S) manage to quell the rebellion and save the government, the truce will be dubious and tainted.

The BJP's hand in the crisis is not invisible. In fact, its imprimatur is unmistakable in the turmoil. The party, which emerged as the single largest in the election but short of a majority, has not been able to accept the verdict and play the role of a responsible Opposition. The BJP's maximalist approach of seizing power by all means and in all places may have served it well in terms of expanding its footprint. But this approach does not conform to its claimed adherence to democracy. In Arunachal Pradesh and Goa, the BJP had acted on its philosophy that the pursuit of power justifies all means. In Karnataka, the party has used the strategy of engineering resignations of MLAs to force by-elections several times over the last decade. Given this pattern, and considering the BJP State unit's relentless attempts to destabilise the coalition from the word go, Defence Minister Rajnath Singh's protestations in Parliament on Monday that the BJP had nothing to do with the current crisis in Karnataka carries little credibility. The party has meanwhile said that it would seek to form an alternative government, should the coalition crumble. The BJP must resist that temptation and instead wait for the results of the by-elections caused by the resignations. If the coalition collapses under its own weight, any alternative arrangement that is short of an absolute majority of the total strength of the House will be shaky and lacking in political legitimacy. That situation is best avoided.

A regrettable conviction

Mr. Vaiko being found guilty of sedition strengthens the case to scrap Section 124A

The conviction of prominent pro-LTTE politician Vaiko on the charge of sedition, based on a typically impassioned speech he had made in Chennai a decade ago, is a worrying development. Even though Section 124A, the IPC section that makes sedition an offence, attracts either a three-year term or imprisonment for life, the trial court sentenced him to a somewhat lenient one-year jail term. Yet, it is a matter of concern that political speeches are criminalised to the point of being deemed an offence against the state. Further, the timing of a political leader being found guilty of sedition is quite inopportune. In recent years, there has been an alarming rise in sedition charges being used to quell political dissent. This conviction will needlessly send out a message that such provisions are necessary to protect the government against being brought into hatred and contempt. Also, it comes at a time when demands to scrap the section is gaining momentum. There is greater recognition now than in the past that Section 124A is neither relevant nor needed today. The Law Commission released a consultation paper highlighting arguments for its reconsideration. There is a body of opinion that a modern democracy does not need a free speech restriction based on political concepts such as disloyalty and disaffection towards the state. Britain, which introduced the offence of sedition in India in 1870 to check the use of speech and writing to criticise its colonial administration, has abolished it.

It is true that Mr. Vaiko had unleashed a diatribe against the Union government by accusing it of betraying the Sri Lankan Tamil cause, and holding it responsible for the death of Tamil civilians in large numbers. However, whether his harshly worded indictment amounts to incitement of violence against the government is debatable. The speech was made at a function to mark the release of the Tamil version of a book that accused the Congress-led regime of complicity in Sri Lanka's military campaign. The court ruled that his allegations would sow the seeds of disaffection and hatred towards the government. Here is where the real mischief of Section 124A lies. Its definition of sedition as anything that excites disaffection against the government, or brings it under hatred and contempt, is too wide and can take in its fold not only incitement to taking up arms but also harmless, even if strident, criticism. In 1962, the Supreme Court limited its scope to acts that show actual intent or a tendency to create disorder or foment violence. Regrettably, the court has held that anyone who heard Mr. Vaiko's speech would develop hatred towards the government; that "mere advocacy" is the essence of the crime, and there need not be actual violence as a consequence. Higher courts will have the final say on whether he was guilty, but the case for abrogating Section 124A just became stronger.

Reinforcing caste hierarchies

The Maratha quota is a case in point of what a progressive Indian polity should not be doing



ASHWINI DESHPANDE

The description "backward" to define communities is yet another colonial relic which we, as a collective, embrace with such enthusiasm, that we almost forget what it is supposed to mean. Nowhere is this more apparent than in the arguments in favour of reservations by landowning castes that are politically and economically dominant. The demand for being classified as "backward" by Marathas has been ongoing since the 1990s. With the announcement of the inclusion of Marathas into the Socially and Educationally Backward Communities (SEBC), the Maharashtra government has, once again, yielded to the demands of this powerful caste group. This would be the third attempt in the last five years to grant this quota, which has been repeatedly struck down by the courts.

Turning to the state

The ferocity with which dominant castes, mostly rich, landowning, politically influential communities (Marathas in Maharashtra, Patidars in Gujarat, Jats in Haryana, Kapus in Andhra Pradesh), have turned towards the state and the public sector, demanding quotas in jobs and higher education, indicates that the economic growth in the last two decades, such as it was, did not manage to swing the fortunes of a large proportion of these communities upward enough. Their demand for being included in the quota bandwagon can be seen as an expression of their desire for good jobs and stable sources of livelihood for their youth, as their traditional sources

of livelihoods become more fragile due to a widespread and multifaceted agrarian crisis.

Yet, quotas are not magic wands that create jobs. And everyone would like a good job or a decent stable source of livelihood. Given that public sector jobs represent a shrinking and much coveted pie, what should the yardstick be to determine the validity of the demand for quotas?

Insights from data

What does the evidence tell us?

Rajesh Ramachandran and I looked at data from the India Human Development Survey (IHDS), and compared Jats in Haryana, Patels in Gujarat and Marathas in Maharashtra. We compared these to Brahmins, non-Brahmin forward castes, existing Other Backward Classes (OBC) and Scheduled Castes-Scheduled Tribes, in their respective States.

The results are very stark. Marathas, similar to Jats and Patels, are more likely to own or cultivate land than all other social groups in their respective States. Marathas have a lower per capita consumption expenditure than Maharashtra Brahmins, but are at the same level as other forward castes and OBCs, and significantly higher than SC-STs. Marathas, on an average, are as poor as Brahmins and other forward castes, but less poor than OBCs and SC-STs. Maratha households have greater access to electricity compared to SC-STs. Marathas are 6 and 14 percentage points more likely than OBCs and SC-STs, respectively, to have access to a flush toilet in Maharashtra. The average years of education for Marathas is 6.58, which is lower than Brahmins by 2.18 years, but is similar to other forward castes and OBCs, and 1.22 years more than the SC-STs. The Marathas are 13 percentage points less likely to have completed 12 years



PRASHANT NAKVE

or more of education as compared to the Brahmins, but are very similar to the forward castes, and do 2 and 6 percentage points better than the OBCs and SC-ST, respectively. Summing up, in most of the crucial socio-economic indicators, the Marathas are second only to Brahmins in the State, and are significantly better off than all other social groups.

The main bone of contention and the main motivation for quotas is access to government jobs. The surprising fact is that even before being included in the quota, the access of Marathas to government jobs is already similar to that of Brahmins, and higher than that for other forward castes and OBCs, and not different from that for SC-STs.

We examined both rounds of the IHDS data to see whether the position of these dominant communities deteriorated relative to the other groups. The short answer is no.

In terms of average per capita expenditure, their position has improved over time. In terms of probability of being poor, there is no worsening. There is, however, some evidence of a decline in the probability of owning or cultivating land, which could be the reason for the heightened anxiety.

Factors underlying anxieties

The Marathas are a predominantly agricultural community which be-

nefited from the Green and White Revolutions. The structural transformation of the Indian economy, especially the declining importance of agriculture, and growth of corporatised agriculture and water shortages affecting productivity, have meant that these groups feel increasingly vulnerable.

Yet, data show that the Marathas have lower levels of casualisation of the labour force in both the agricultural and non-agricultural sectors, as compared to the OBCs and SC-STs.

Overall, there is discontent among powerful farming communities due to the perception that real economic power lies in the hands of the big corporations, and the state, overtly or covertly, acts in their interest. These communities feel their power slipping away or eroding, in addition to feeling ill-prepared to shift towards urban, formal sector livelihood opportunities.

Individuals or communities who feel strongly that the odds of economic success are stacked against them are more likely to feel deprived. Other estimates from IHDS panel data show that "forward castes were about 30 per cent more likely to feel that they were worse off in 2011-12 than in 2004-05". Thus, perceptions of being worse-off are real: our analysis suggests that these perceptions are exactly that - feelings - not supported by evidence on the ground.

Having said this, economic changes that give rise to widespread anxieties, definitely need to be understood and genuine grievances, including those that might come from forward castes dealing with agrarian transformations, need to be addressed.

However, is reservation the real answer? Given increasing privatisation, the base, i.e. total jobs that are eligible for reservations, is al-

ready shrinking. Our other research shows how existing OBCs and SC-STs are further lagging behind upper castes on a range of material indicators. In this context, extending quotas to relatively richer and powerful groups would amount to diluting the already small and shrinking entitlement for communities that are truly disadvantaged and discriminated against.

A dilution

Recently, the Marathas have had two main demands: one, being made quota beneficiaries, and two, the repeal of the Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act. The State government has, once again, given in to the first. Should it consider the second, ours would be no country for the most marginalised.

Quite apart from turning the term "backward" on its head, the writing on the wall is clear. Despite the rhetoric that accompanied the 10% quota, the plan is not to move to a caste-free system. It is to dilute the entitlement of castes that are objectively "backward", stigmatised and discriminated against.

In the context of the lynching of Dalits for pursuing their traditional occupations, snatching away their livelihoods in the name of cow protection, violence targeted at inter-caste marriages, and other violence related to temple entry or for not following the illegal social norms dictated by untouchability, this move would legally reinforce the obnoxious hierarchies of the caste system. A forward-looking, progressive Indian polity should be discussing instruments to weaken the deadly tentacles of caste, not embolden and reinforce existing hierarchies.

Ashwini Deshpande is Professor of Economics, Ashoka University

A shot at economic logic

India needs to anticipate the promising impact of the African Continental Free Trade Area



MAHESH SACHDEV

The 12th Extra-Ordinary Summit of the African Union (AU) which concluded on July 8 at Niamey, the capital of the Niger Republic, saw 54 of 55 of its member states signing the African Continental Free Trade Agreement (AfCFTA) for goods and services. Of these countries, 27 have already ratified it. Actual cross-border free trade could start by July 2020 with an elimination of custom duties on 90% of the tariff-lines. If taken to its logical conclusion, this audacious project would eventually create an African Common Market of 1.2 billion people and a GDP of over \$3.4 billion - the metrics are comparable to India's. The AfCFTA would be world's largest FTA, and in a world dependent on African markets and commodities, it would have global impact.

Hurdles and optimism

However, there are three main reasons to be sceptical about the viability of the AfCFTA. First, the African Union (founded as the Organisation of African Unity in 1963) has been largely ineffective in dealing with the continent's myriad problems such as decolonisation, underdevelopment, Islamic terrorism and the Arab Spring. The AU's grand plans, including

the Muammar Qadhafi-funded Africa Unity project, have been spectacular flops. It is, therefore, natural to take the AfCFTA, the AU's most ambitious project so far, with a ladleful of salt. Second, serious political, organisational and logistical challenges to the AfCFTA notwithstanding, the national economies in Africa are generally weak with a low manufacturing base. They also lack competitiveness and mutual complementarity. Only a sixth of Africa's current total trade is within the continent. Third, the AfCFTA seems to be countercyclical to the ongoing global protectionist trends as seen in the U.S.-China trade conflict, Brexit, and the stalemates at the World Trade Organisation and the United Nations Conference on Trade and Development. World trade is likely to grow only by 2.6% in 2019, a quarter of last year's figure. Commodity prices are stagnant and globalisation is often being reversed. With Africa accounting for only 3% of global trade, can the AfCFTA defy the contrarian global tendencies?

Still, there are reasons to be cautiously optimistic. Given the strong global headwinds including a cooling Chinese ardour for Africa, greater collective self-reliance through African economic integration makes eminent sense. Further, the AfCFTA can build upon the experience of the continent's five regional economic blocks. While the AU Commission is not famous for efficient planning, it has prepared an extensive road map towards the AfCFTA with prelimi-



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ary work on steps such as incremental tariff reduction, elimination of non-tariff barriers, supply chains and dispute settlement. In December 2018, it organised the first Intra-African Trade Fair in Cairo with 1,086 exhibitors signing \$32 billion in business deals. A new breed of African transnational corporations such as Dangote, MTN, Ecobank and Jumia have continental ambitions. Indeed, the logistical and financial networks across the continent are poor and customs formalities are foreboding, but these can be eventually overcome with stronger political will. Moreover, vigorous "informal" trade across porous national borders is already a fact of African life.

Thus, by adopting the AfCFTA, African leaders are only following the economic logic. Looking into the future, a recent UN projection showed that nearly half the world's population growth between now and 2050 would come from sub-Saharan Africa, the population of which would double to nearly two billion. This surge in

consumer base would make the proposed AfCFTA even more important.

From the Indian angle

Africa is already an important economic partner for India with total annual merchandise trade estimated at \$70 billion or nearly a tenth of our global trade. India is Africa's third largest trading partner. While India's global exports have been largely stagnant, those to Africa have surged. For instance, exports to Nigeria in 2018-19 grew by over 33% over the previous year. Africa still has unfilled demand for Indian commodities, especially foodstuff, finished products (automobiles, pharmaceuticals, consumer goods) and services such as IT/IT-Enabled Service, health care and education, skilling, expertise in management and banking, financial services and insurance.

India needs to anticipate the AfCFTA's likely impact on its interests and try to influence and leverage it to enhance India-African economic ties. In principle, African economies becoming more formalised and transparent would be in India's interest. While local manufactured items and services may ultimately compete with Indian exports, Indian firms can co-produce them in Africa. If handled in a proactive manner, the AfCFTA is likely to open new opportunities for Indian stakeholders in fast-moving consumer goods manufacturing, connectivity projects and the creation of a financial backbone. India donated \$15 million to

Niger to fund the Niamey AU Summit. As the next step, New Delhi can help the AU Commission prepare the requisite architecture, such as common external tariffs, competition policy, intellectual property rights, and natural persons' movement. It can also identify various African transnational corporations which are destined to play a greater role in a future continental common market and engage with them strategically. The cross-linkages of a three million strong Indian diaspora spread across Africa can also be very valuable.

Finally, once the AfCFTA is accepted as beneficial game changer, the African elite could perhaps contemplate crossing another Rubicon: an India-African FTA.

Before Africa was "discovered" by the West, it had a thriving overland trade. Large camel caravans ferried commodities such as ivory, gold, mineral salt, precious stones and slaves across prosperous trading centres such as Timbuktu, Ghana, Kano, Burnu, Agadez, Edo, Zinder, Ghat, Addis Ababa, Dar es Salaam and Cairo. Subsequent colonialism and mercantilism destroyed internal trade routes, replacing them with an ecosystem in which Africans had better links with their foreign "mentors" than among themselves. By the AfCFTA, the Africans are only trying to correct this historic distortion.

Mahesh Sachdev was the Indian High Commissioner to Nigeria and the Ambassador to Algeria. He is the author of 'Nigeria: A Business Manual'

LETTERS TO THE EDITOR

Letters emailed to letters@thehindu.co.in must carry the full postal address and the full name or the name with initials.

Coalition power-play

The resignation of 13 lawmakers in Karnataka has exposed the innate vulnerability of fractured verdicts (Page 1, "CM to seek postponement of session," July 8). Governance in the State has gone for a toss as a result of constant political manoeuvring. It would be sheer naivete here to believe that the ruling party at Centre has had no role to play. However, this does not absolve the opportunistic coalition in the State of its responsibility either. Both groups have been playing power games, unmindful of ethics or people's interests. D.V.G. SANKARARAO, Vizianagaram, Andhra Pradesh

Vacuum at the top

The major reasons for the Congress's debacle were both its inability to remain a political force to reckon with and the BJP's success in convincing the Indian voter that they needed a party with a Hindu orientation at the helm (Editorial page, "The search for Chakrayya," July 8). Rahul Gandhi failed to impress as a leader. References to the past, as done in the article, cannot justify the perpetuation of rule by the Nehru-Gandhi family for this long. The Congress has so far done deservice to the nation by blocking the emergence of more efficient leaders. V. LAKSHMANAN, Tirupur, Tamil Nadu

■ Some of us old-timers were delighted to see a Gandhi remembering and recalling K. Kamaraj, arguably the most self-effacing, disciplined and dedicated Congress president. We remember Kamaraj for the historic Avadi session when the party adopted as its aim the establishment of a socialistic pattern of society. Jawaharlal Nehru trusted and admired Kamaraj as party president. But Indira Gandhi didn't. It didn't take much time for her to make the party "her field of action". This dynastic hold continues. Rahul Gandhi's resignation is not acceptable to the 'hangers-on' in the party. And though there are many such 'hangers-on' in Congress, there are also

youngsters who are committed, sincere and dedicated to the cause of the party. Mr. Gandhi has been wise in resigning as president. But he should ensure the Congress does not get a dummy leader as replacement. C.V. VENUGOPALAN, Palakkad, Kerala

Trading in EI leather

The Budget announcement of abolition of export duty on East India (EI) leather comes as a welcome corrective measure. Produced predominantly in Tamil Nadu for centuries, EI leather was exported for more than hundred years to European countries. Tanneries used natural materials like *avaram*,

Konnar barks and wattle extract and emitted less harmful effluents as compared to chrome tanneries. However, vested interests in the leather industry influenced the government and trade in EI leather was restricted first through quota and then using export duty. Many tanneries in places like Tiruchi Dindigul and Vellore were forced to shut down. The removal of export duty can spur employment opportunities and bring development to Tamil Nadu's backward regions. V.N. MOHAMED HUSSAIN, Chennai

Past continuous

The article, "Sub-soil water for Madras" (Op-Ed page,

'From the Archives', July 8) reminded me of the water crisis in 1969. A severe drought prevailed and thousands of animals died. The present crisis in Tamil Nadu is not much different and this is in no small measure due to the over-exploitation of natural resources. Former U.S. Congressman William Bourke Cockran once said: "The earth is a generous mother; she will provide in plentiful abundance food for all her children if they will but cultivate her soil in justice and in peace." We have to care for nature if we expect it to be kind to us. GOPAL MARIMUTHU, Chennai

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The importance of democratic education

Without it, we will continue to allow unhealthy scepticism about democracy to grow



A persistent concern exists about democracy's failure to fulfil our expectations. While our votes are forceful 'paper stones', effective in getting rid of governments we dislike, they are powerless to give us effective, efficient, good governments. Why do we have to put up with corrupt rulers with criminal records – qualities that obstruct good governance? Why tolerate those who strive to do more good for themselves than for the people, who have neither vision nor wisdom? Why have mediocre politicians who shun contact with people with ability and talent?

Better, wiser governments
Some cynics may respond to this crisis of democracy by arguing the following: to achieve our national goals, we must assemble the best team to govern. Such a team cannot be elected by popular mandate but instead by those who have the intellectual wherewithal to select those fit for it. To such people, democracy – which is committed to the principle of one person, one vote, and which extends franchise to all regardless of ability – can never produce the best team. They might draw an analogy from cricket where we play to compete at the highest level and win – something not possible if the best cricketers are not selected. But this is not achieved by popular vote. Instead, we rely on experts – a selection committee consisting of experienced cricketers. If popular mandate can't give us the best team that realises our national goal in cricket, why expect a different result in politics? Why not select our government by a similar procedure involving experts? So, to reiterate the conundrum: democratically elected governments in our times are neither efficient nor wise. They show a propensity to fail at achieving their national goal – a high quality of life for all people. Then why not abandon democracy? Or at least introduce an eligibility criterion, restricting the vote to those with formal education? Won't educa-



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tion help in identifying the best political representatives? A democrat need not reject this argument. She may respond that this need not entail abandoning universal adult franchise but the distribution of education to all. This seems a decent solution. Sustainable democracies require a high rate of literacy. The more educated we are, it might be claimed, the better we become at choosing the best people to run our government. But this argument is flawed. Literacy and education by themselves do not create good citizens or yield mature democracies. Many are formally illiterate but are politically astute and even possess qualities of good citizenship. Conversely, many educated people are prone to being self-obsessed, undemocratic, and even authoritarian. Primary, secondary or even higher education by itself does not guarantee good citizenship. The solution then is not just education per se, but universal education of a certain kind, one that is focused on improving the quality of our democracy. Our current education system does not focus on education in democracy or what we might call democratic education. Nor does it build on elements of democratic culture embedded in our traditions. Core elements
What then are the core elements of democratic education? For a start, it requires the cultivation of democratic virtues. For instance, the ability to imagine and articulate a minimally common good. This requires that we distinguish what is merely good for me from what is the good of all. And since each of us may develop our own distinct idea of the common good, to find an overlapping common good. Relatedly, an ability to

handle difference and disagreement and to retain, despite this difference, the motivation to arrive at the common good through conversation, debate, dialogue and deliberation. The ability to imagine and conceive a common good is inconsistent with what the Greeks famously called 'pleonexia', the greed to grab everything for oneself, to refuse to share anything, to not acknowledge what is due to each person, to have no sense of reciprocity or justice. It follows that the idea of the common good cannot be developed without some sense of justice. Democratic education requires training in not succumbing to pleonexia. Also crucial is a spirit of compromise, of moderation, and a willingness, within acceptable value parameters, of mutual give and take. None of this is possible without other general capabilities such as listening patiently to others, being empathetic to the plight of others, and having a commitment to continuing a conversation with people despite disagreement. More important is the ability to participate in a particular historical narrative or, as the political theorist Jeremy Webber puts it, a "commitment to a particular debate through time". Members of a political community become better citizens when they relate to critical issues through historically inherited terms of debate, a continuing narrative, a specific ongoing conversation. The reflection of that debate in political decision-making is central to the members' feeling of engagement and participation. For example, there is a particular way in which the question of religion has been framed in India, as also issues of nation, caste and gender. Individuals become effective and meaningful citizens only by

learning the terms set by debates around these specific issues. Since a useful entry to them is available through rich debates in the Constituent Assembly, a familiarity with them is a crucial ingredient of democratic education in India. It also follows that democratic education involves a basic understanding of our society and its history, of its multiple cultural, intellectual and religious traditions, which set the terms of specific debates. I am frequently appalled at my own ignorance of the historical trajectory of our complex social problems. And saddened to find that my highly educated friends do not know that a constitutional minority in India is not just a numerically small group but one potentially disadvantaged by virtue of that fact; some mistakenly believe that religious minorities have reservation in jobs and in institutions of higher education; massive illiteracy continues to exist about the atrocious nature of our caste system; many continue to think that 'secularism' is a wholly western concept, as if 'religion' is not! Only a proper democratic education can remove these misunderstandings and flaws. What then is democratic education? Conceived broadly, it is a historically specific enterprise, determined by the inherited vocabulary of specific political languages and the terms of debates in a particular community. It is designed specifically to enable conversation on issues central to a particular community, to strive for agreement where possible and to live peacefully with disagreement where it is not. In short, it involves social and historical awareness and key democratic virtues. Many of these understandings and virtues can be inculcated by a good liberal arts education. The 2019 National Education Policy recognises this but alas insufficiently. And as far as I can tell from my skimpy reading, it has virtually nothing to say about how this relates to democracy. So, it appears relatively innocent of the more specific requirements of democratic education. Without proper democratic education, I am afraid we will continue to perpetuate bad democratic practices, allow unhealthy scepticism about democracy to grow and eventually imperil it.
Rajeev Bhargava is Professor, CSDS, Delhi

A myopic view of foreign-made generic drugs

The U.S. is using the Ranbaxy experience to create a bogey



Allegations of widespread fraud concerning generic drugs manufactured overseas, especially in India, were recently highlighted in the U.S. Much focus was on the contamination found in one drug made by Ranbaxy. I do not wish to support Ranbaxy's deplorable behaviour. Nor do I wish to belittle the importance of the ongoing efforts to fix India's drug regulatory framework. The point here is that this focus has been deployed to undermine foreign generics. For instance, the Ranbaxy saga unfolded 14 years ago. Since then, several pharmaceutical companies, both foreign and local, generic and innovative, have been implicated in similar or worse behaviour. Notable examples include those of Martin Shkreli's Turing Pharmaceuticals, which hiked the price of a drug to 5,000%, and Purdue Pharmaceuticals, a company currently implicated for causing the opioid crisis. The strategy of raising fears of 'contaminated' foreign generics has successfully prejudiced Americans against valid generic drugs, even though they have remained a viable option. This frenzy about contamination of drugs is due partly to the expansion of the Food Safety Modernization Act (FSMA) to include global inspections. One objective in thus empowering the Food and Drug Administration (FDA) was to work with regulators of foreign countries and create a universal Current Good Manufacturing Practice (CGMP) system for drugs.

FDA's regulatory overreach
Instead, the FDA has positioned itself as a 'global regulator'. For example, in a recent statement, it mentioned that it inspects all brand-name and generic manufacturing facilities around the world based on information from whistleblowers or out of concern for drug safety. Arguably, this amounts to regulatory overreach as there is no international instrument standardising American CGMP practices as the global standard. Further, under the FSMA, if a foreign facility refuses inspection, the FDA's power is limited to refusing the food/drug entry into the U.S. America's interest in good manufacturing practices to protect its citizens is commendable. Nevertheless, given Washington's current zeal to propel exports, if India or

China pass legislation to inspect U.S. food or drug manufacturing facilities, U.S. companies not readily welcome the move. A prejudiced dialogue
In 2018, out of the 4,676 human pharmaceutical sites inspections that the FDA conducted worldwide, 61% were of foreign-based facilities. Similarly, out of 1,365 human drug CGMP surveillance inspections conducted, 55% were conducted at facilities outside the U.S. The FDA's publicising of its 'global vigilante experience' paints a picture of foreign-manufactured drugs as 'defective' or 'contaminated' while not fully acknowledging some of the regulatory failures within America. To provide a perspective, the 'drug recall list', a list of drugs deemed defective in spite of having cleared FDA regulatory approvals for the last 14 years, runs into over 149 pages. I cite this to merely highlight that a prejudiced dialogue that does not capture all perspectives can create imprecise impressions. As such, when the FDA inspects production facilities, there are both smaller and bigger issues that will come up. There is no scale to determine whether the problems portrayed in the final report are simple ones, such as one tap not working, or more impactful ones, such as use of contaminated water. The absence of a proper scale provides a loophole, enabling the regulator to cherry-pick and treat all instances of non-compliance as egregious violations. In addition, in the U.S., there is no proper legal definition of the oft-used term 'contaminated drugs'. Section 351 of Title 21 of the U.S. Code defines 'adulterated drugs' and when a drug is deemed 'adulterated' for being contaminated, the regulator needs to specify whether the adulteration relates to the manner of preparation, the packaging standards or the manufacturing practices. For India, the discussion in the U.S. is notable not only because it houses generic manufacturing facilities but also because India is a nation on the verge of breaking into the innovation market. Thus, it is time India took a more robust role to ensure public availability of facts on both the importance of generics and their limitations. The country needs to create strong voices and partnerships that can highlight the benefits and pitfalls alike to create a robust space for innovation that can coexist with access to medication. After all, innovation and policy failings need not be an excuse to deny access to lifesaving medication to productive workforces.
Srividhya Ragavan serves as a Professor of Law at Texas A&M University School of Law

Towards a free trade agreement

India and the U.S. should aim to progressively eliminate trade and investment barriers

MARK LINSOTT
Trade turmoil has been putting at risk the U.S.'s strategic partnership with India. In the last two months, the U.S. has withdrawn from India preferential tariff benefits under its Generalized System of Preferences (GSP) programme, and India has imposed retaliatory tariffs in response to tariffs that the U.S. applied last year on steel and aluminium. Conflict and disputes are not new to the U.S.-India relationship. They have ranged from trade in jute and almonds in the period of the General Agreement on Tariffs and Trade to poultry and solar panels under the World Trade Organization (WTO). But this moment is different because the conflict may run deeper with more serious implications. If the two fail to relieve the building tension, a tit-for-tat trade war mimicking that between the U.S. and China may follow. The U.S. is India's single most important export market; India is a huge and growing market for U.S. investment and exports. An escalating series of retaliation and counter-retaliation could undermine efforts to advance what might be the most consequential bilateral relationship in the 21st century.



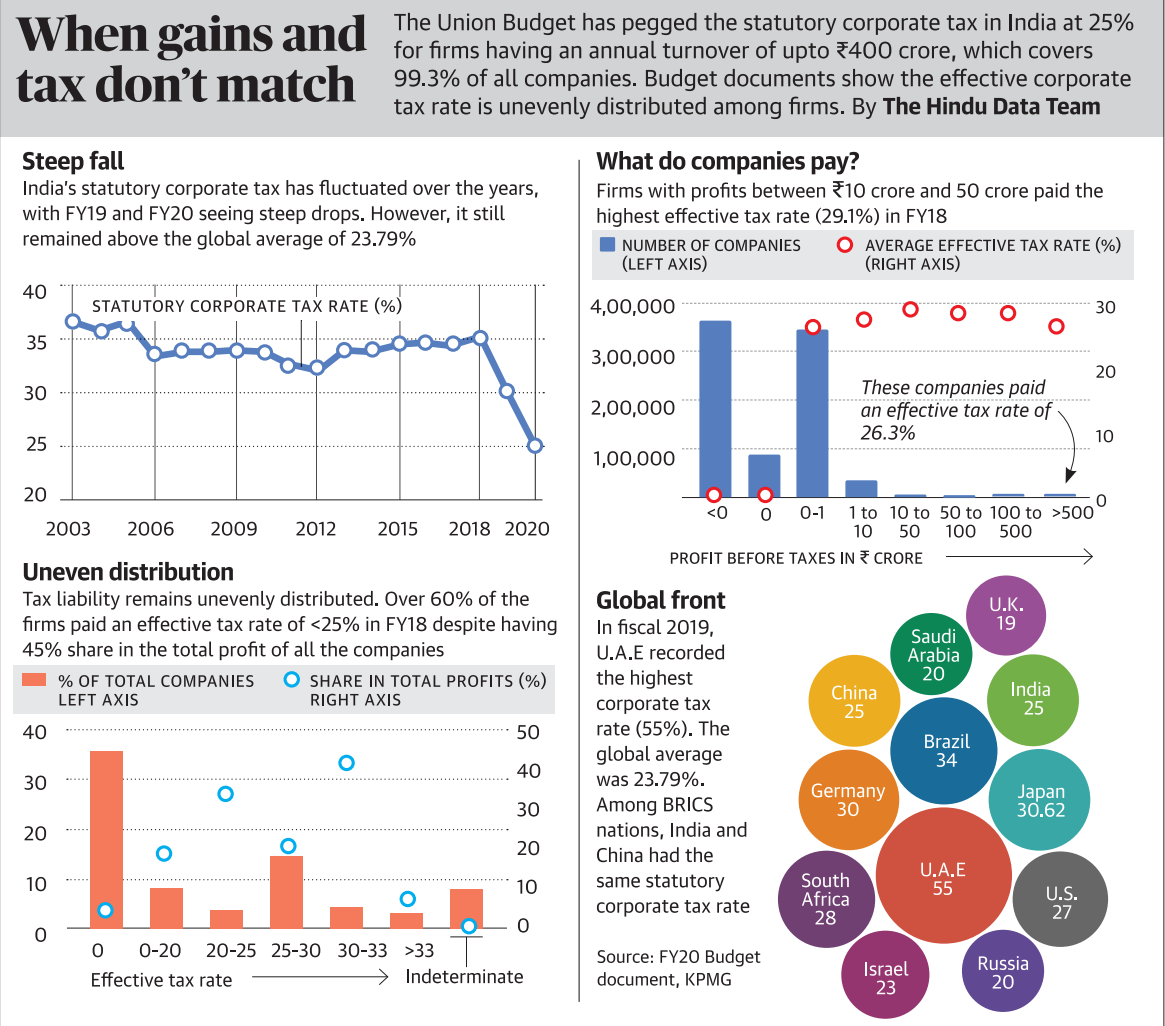
trade, regulatory coherence, and intellectual property rights, matching their earlier successes on the WTO Trade Facilitation Agreement. This future work would be better advanced if India created a new career trade staff that reports directly to the Prime Minister's Office. The U.S. administration has experienced trade staff, even at senior levels, who build negotiating skills over their careers and relationships of rapport and trust with their foreign counterparts. India could better serve its trade interests with the same kind of approach. This is a scenario that could evolve into a new relationship of common purpose on trade. Trade disputes will continue to crop up, as they do even in the healthiest of relationships, but these would be best pursued through the WTO.

Thinking big
However, even this scenario is a limited one; the U.S.-India strategic partnership deserves higher aspirations on trade. The goal should be a more comprehensive platform for expanding trade and investment through the progressive elimination of trade and investment barriers, from protectionist regulatory measures to tariffs and restrictions on trade in services. This might even lead some day to the negotiation of a free trade agreement, which is the ultimate example of economic integration in a trade relationship. Neither country has been particularly successful at negotiating free trade agreements compared to others around the world – the EU just concluded one with Vietnam. Each has a strong but messy democracy with many voices against free trade agreements. Each is a tough negotiator with a passionate commitment to its national interests. But both can dream big together and trade should be central to those dreams.

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DATA POINT



FROM THE HINDU ARCHIVES
FIFTY YEARS AGO JULY 9, 1969

U.S. troops in Viet Nam begin pull out

The initial pullout of 25,000 American troops from Viet Nam began to-day [July 8] with the departure of a battalion of 814 infantrymen. Garlanded with plastic flowers thrown round their necks by pretty Viet Namese girls, most of the young troops laughed and smiled as they boarded nine giant transport jets. The men had stood to attention in blazing sun at Saigon's Tan Son Nhut airport for three hours. Girls handed them parcels of gifts - dolls, tapes of Viet Namese music and flags. South Viet Nam President Nguyen Van Thieu flew in by helicopter minutes before the end of the ceremonial farewell parade and told the soldiers: "Your departure bears testimony to the success of the role of the U.S. force in Viet Nam." The departure of the battalion, the third of the 60th Infantry Regiment, Ninth Infantry Division, for Tacoma, Washington, marked a turning point in the Viet Nam war, which has cost 36,866 Americans dead. To-day's vanguard left exactly a month after President Nixon and President Thieu announced on Midway Island that 25,000 Americans would be sent home by the end of August. The pull-out reverses a process that began almost exactly 19 years ago.

A HUNDRED YEARS AGO JULY 9, 1919.

Housing in Bombay.

At a meeting of the Bombay Municipal Corporation on Monday [July 7], Mr. Cowasjee Jehangir presiding, discussion was resumed on the proposition moved by Dr. A.G. Veigas that the President be requested to address the Government regarding the desirability of appointing a committee to investigate and report early the housing question in all its bearings and suggest practical measures for increasing the housing accommodation for the poor and the middle class population of the city. The subject was discussed at great length. The Medical members of the Corporation touched upon the medical aspect of the question and urged that on the proper solution of the housing question depended the health of the city. The city's slums had become the breeding places for a number of diseases and it was the duty of the Government, the Municipality and public bodies to take up the question in right earnest. The President pointed out that the question of housing was at present occupying the serious attention of the Government who were considering the scheme whereby the Government, the various local bodies and the employers of labour could solve it.

बिज़नेस स्टैंडर्ड

वर्ष 12 अंक 122

धनाढ्यों पर कर

वित्त मंत्री निर्मला सीतारमण ने बजट प्रस्तुत करने के दौरान शुरुआत में ही यह कह कर एकदम उचित किया कि सरकार वैध तरीके से लाभ अर्जित करने को खराब नहीं मानती। यह स्वागत योग्य टिप्पणी थी। देश में कारोबारी जगत बहुत लंबे समय तक लाइसेंस राज का शिकार रहा और पैसे कमाने को हमेशा अच्छा नहीं माना गया।

उन्हें यह श्रेय भी मिलना चाहिए कि उन्होंने कम कॉर्पोरेट कर दर का लाभ 0.7 फीसदी कंपनियों को छोड़कर शेष तक पहुंचाया, हालांकि उम्मीद की जा रही थी कि यह सबको मिलेगा।

परंतु इस घोषणा का सुखद प्रभाव बहुत लंबे समय तक कायम नहीं रहा क्योंकि मंत्री ने 2 करोड़ रुपये से अधिक आय अर्जित

करने वाले करदाताओं पर अधिभार बढ़ाने का प्रस्ताव रख दिया। प्रस्ताव के मुताबिक 2.5 करोड़ रुपये और 5 करोड़ रुपये से अधिक को कर योग्य आय वाले करदाताओं के लिए प्रभावी कर दर में क्रमशः 3 और 7 फीसदी का इजाफा होगा। प्रस्ताव करदाताओं के एक छोटे तबके को ही प्रभावित करेगा लेकिन यह विचार कई स्तरों पर गड़बड़ है

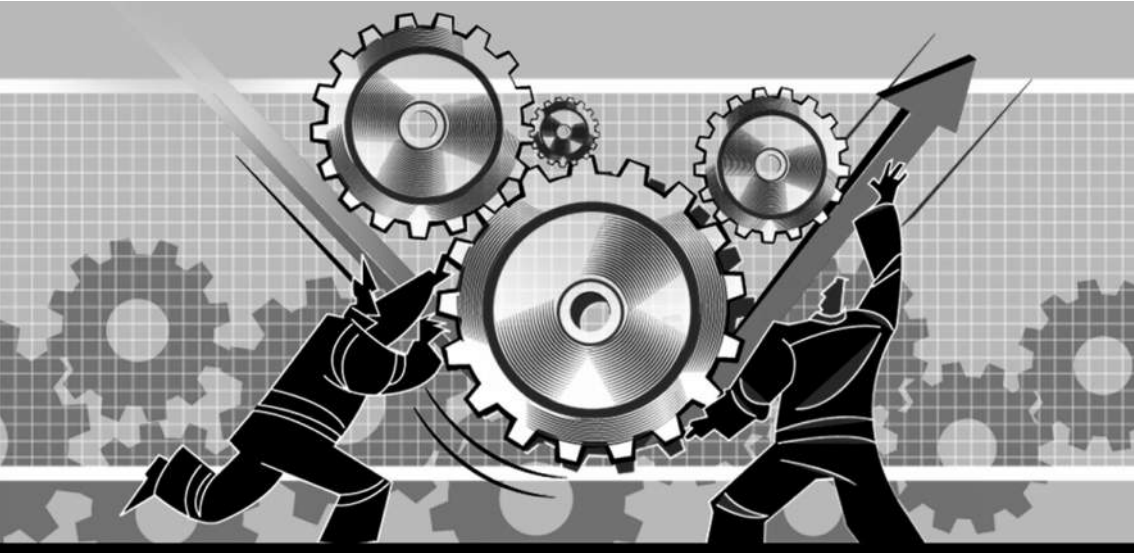
और इससे बचा जाना चाहिए था। अनुमान है कि आय कर संग्रह में 3,000 करोड़ रुपये से भी कम इजाफा होगा। व्यापक तौर पर देखा जाए तो यह कर ढांचे को सरल बनाने के मूल विचार के ही खिलाफ है। हालांकि अतीत में भी कई तरह के उपकरण और अधिभार लगाए गए हैं लेकिन इस बजट में यह काम अलग ही स्तर पर हुआ। स्वाभाविक

सी बात है कि राजनीतिक कारणों से इन्हें पलटना भी संभव नहीं होगा। यह स्पष्ट नहीं है कि सरकार ऐसी व्यवस्था को बदलना क्यों चाहती है जो लंबे समय से लागू है। अनुभव बताता है कि जब दरें कम रहती हैं तो संग्रह बढ़ने की आशा रहती है।

यह बात भी सर्व स्वीकार्य है कि सरकार को सामाजिक दायित्व पूरा करने के क्रम में राजस्व और पूंजीगत व्यय दोनों बढ़ाने की आवश्यकता है। ऐसे में संग्रह बढ़ाने के लिए अनुपालन और कर दायरा बढ़ाने पर ध्यान केंद्रित किया जाना चाहिए। कोशिश यह होनी चाहिए कि लोगों को कर चुकाने के लिए प्रोत्साहित किया जाए और कर प्रशासन को सुधार कर अनुपालन न होने की घटनाओं का पता लगाया जा सके। हालांकि अनुपालन

और प्रशासन के मोर्चे पर कुछ प्रगति देखने को मिली है लेकिन रियायतों और छूट की सीमा की नियमित समीक्षा ने कर आधार में सार्थक बढ़ोतरी की संभावनाओं को सीमित किया है। उदाहरण के लिए अंतरिम बजट में 5 लाख रुपये तक की कर योग्य आय वाले करदाताओं को पूरी छूट दी गई थी। इसका राजस्व प्रभाव 18,000 करोड़ रुपये से अधिक था। वांछित यह है कि कम तादाद वाले करदाताओं से अधिक राशि वसूलने के बजाय ऐसी व्यवस्था कायम की जाए जहां ढेर सारे लोग थोड़ा-थोड़ा कर चुकाएं। इतिहास बताता है कि उच्च कर दर कर वंचना को जन्म देती है। संभव है कि अत्यधिक अमीर तबका अपना कर दायित्व कम करने की राह तलाश करे। यह देखना दिलचस्प

होगा कि नए अधिभार के बाद वास्तविक संसाधनों में क्या तब्दीली आती है। इसके अलावा अगर सरकार मानती है कि अमीरों को अधिक योगदान करना चाहिए तो उसे कर स्लैब और पारदर्शी बना रहेगा तथा राज्यों को भी उचित हिस्सेदारी मिलेगी। दरअसल सरकार ने नई प्रत्यक्ष कर संहिता पर काम कर रहे पैनल की मुश्किलें बढ़ा दी हैं। आशा की जानी चाहिए कि पैनल प्रत्यक्ष करों को सहज बनाने की अनुशंसा करेगा और सरकार इससे संतुष्ट होगी। उच्च वृद्धि दर हासिल करने के लिए यह आवश्यक है कि देश में एक स्थिर, सहज और ऐसी कर व्यवस्था हो जिसके बारे में अनुमान लगाना आसान हो।



अजय मोहंती

आर्थिक वृद्धि में तेजी के लिए रणनीतिक कदम

विनिर्माण और व्यावसायिक गतिविधियों के लिए निर्यात केंद्रित पश्चगामी एकीकरण रणनीति आर्थिक वृद्धि तेज करने के लिए जरूरी है। बता रहे हैं नितिन देसाई

आर्थिक समीक्षा और बजट भाषण दोनों में आर्थिक वृद्धि दर को मौजूदा 6-7 फीसदी दायरे से आगे ले जाने की जरूरत पर बल दिया गया है। अगले पांच वर्षों में अर्थव्यवस्था का आकार 5 लाख करोड़ डॉलर तक पहुंचाने का लक्ष्य अब साफ तौर पर आर्थिक नीति के केंद्र में है। लेकिन इस लक्ष्य के लिए जरूरी 10-11 फीसदी वृद्धि दर विनिर्मित उत्पादों के उत्पादन एवं विनिमेय सेवाओं में खास तेजी लाए बगैर संभव नहीं है। इसके साथ ही ढांचागत क्षेत्र, पूंजी बाजार और श्रम गतिशीलता में भी जबरदस्त सुधार लाने की जरूरत होगी।

वृहद स्तर पर सकल घरेलू उत्पाद (जीडीपी) में विनिर्माण की हिस्सेदारी करीब चार दशकों से 17 फीसदी के आसपास टिकी हुई है। सूचना प्रौद्योगिकी और पर्यटन जैसे क्षेत्रों में विनिमेय सेवाओं की हिस्सेदारी बढ़ी है। कुल मिलाकर तैयार उत्पाद बनाने वाले उद्योगों का हिस्सा बुनियादी सामग्री के बरफ्स बढ़ा है। विनिर्माण उद्योगों में वृद्धि तेज हो सकती है अगर मांग में वृद्धि होती है। घरेलू उपभोग की मांग आर्थिक वृद्धि का वाहक नहीं हो सकता है क्योंकि इसके त्वरित वृद्धि का कारण होने के बजाय उसका नतीजा होने की अधिक संभावना है। इस साल के बजट में नए सिरे से समर्थित आयात प्रतिस्थापन की पुरानी नीति की सीमित संभावना है और वैश्विक प्रतिस्पर्द्धात्मकता की मंशा पर चोट करता है। हालांकि हमारी बड़ी जरूरतों को देखते हुए रक्षा या मेट्रो रेल जैसी ढांचागत परियोजनाओं या सार्वजनिक सेवा के

डिजिटल नेटवर्क के लिए उन्नत उपकरणों की सार्वजनिक खरीद कुछ परिष्कृत इंजीनियरिंग उद्योगों में वृद्धि को रफ्तार दे सकती है, अगर खरीद का फैसेला करने वालों का लंबी अवधि का नजरिया हो। हालांकि अर्थव्यवस्था पर इसका व्यापक प्रभाव कम होगा और बाहरी मांग में व्यापक तेजी विनिर्माण निर्यात एवं विनिमेय सेवाओं की वृद्धि का नतीजा होनी चाहिए।

आर्थिक समीक्षा तोत्र वृद्धि को लेकर चीन के रिकॉर्ड का जिक्र करती है जिसमें विनिर्माण क्षेत्र की निर्यात-केंद्रित वृद्धि ने अहम योगदान दिया था। वृद्धि रणनीति को लेकर चीन और कुछ पूर्व-एशियाई देशों के दृष्टिकोण को निर्यात-केंद्रित बैकवर्ड इंटीग्रेशन के रूप में परिभाषित किया जाता है। मूल कंपनी के सक्रिय प्रवर्तन में संचालित हो रही घरेलू कंपनियों ने आयातित तकनीक, उपकरणों एवं माल के सहारे उच्च वृद्धि वाले निर्यात-योग्य उत्पाद बनाने से लेकर उत्पादन में इस्तेमाल होने वाले इनपुट उत्पादों के विनिर्माण की भी क्षमता हासिल कर ली। तकनीकी विकास का स्वदेशीकरण मुख्य रूप से मूल कंपनियों के रास्ता दिखाने से ही संभव हो पाया।

भारत में ऐसा नहीं हुआ है। मसलन, हमारे दवा उद्योग का निर्यात काफी तेजी से बढ़ा है। लेकिन यह अब भी काफी हद तक चीन से आयात किए जाने वाले रसायनों पर ही आश्रित है। हालिया उदाहरण स्मार्टफोन उद्योग का है जो भारत में असेंबलिंग गतिविधि भर ही है। निर्यात के मोर्चे पर सफल एक और क्षेत्र साफ्टवेयर सेवा है। लेकिन इसमें

आंशिक बैकवर्ड इंटीग्रेशन ही हुआ है और कृत्रिम मेधा एवं मशीन लर्निंग जैसे अग्रिम क्षेत्रों में तो बहुत कम हुआ है।

भारत पूर्व एशियाई देशों का उदाहरण अपना सकता था और उसने ऑटो क्षेत्र में यह किया भी था लेकिन वह बढ़ती घरेलू मांग का नतीजा था निर्यात का नहीं। जब 1980 के शुरुआती दशक में मारुति आई तो उसने सुनिश्चित खरीद, वित्त एवं तकनीकी मदद के व्यवस्थित तरीके से कल-पुर्जा उत्पादन को बढ़ावा दिया था। आज भारत में वैश्विक रूप से प्रतिस्पर्द्धी ऑटोमोबाइल एवं उपकरण उद्योग हैं जो एक महत्त्वपूर्ण वैश्विक खिलाड़ी के तौर पर उभरा है।

हम इस नजीर को दोहराने के लिए क्या कदम उठा सकते हैं ? बैकवर्ड इंटीग्रेशन में लिए प्रोत्साहन देने वाली निर्यात-केंद्रित रणनीति एक नवजात उद्योग रणनीति से खासी अलग है क्योंकि इसमें सक्षमता एवं लागत कटौती के लिए अंतर्जात दबाव होता है।

निर्यात-केंद्रित रणनीति इन चार बातों की प्रचुरता पर निर्भर करती है। गैर-विनिमेय इनपुट खासकर ढांचागत सेवाओं की सक्षम आपूर्ति, जरूरी कौशल रखने वाले श्रमिकों की उपलब्धता, खरीद क्षमता उत्पादों एवं उत्पादकता में परिवर्तन के अनुरूप विनिमय दर और तकनीकी गतिशीलता की प्रचुरता मायने रखती है।

बिजली, परिवहन और संचार जैसे बुनियादी ढांचे की उपलब्धता आज के समय में विनिर्माण निवेश के लिए बड़ी समस्या नहीं रह गई है। असली समस्या कारोबार सहूलियत और व्यापार नीति-निर्माण,

असम हैं लेकिन दीर्घावधि में विनिर्माता एवं कारोबारी सेवाओं के निर्यात के लिए कंपनी एवं देश के स्तर पर तकनीकी क्षमता रखना सबसे ज्यादा मायने रखता है। तकनीकी गतिशीलता उत्पादकता बढ़ाने वाले कारक या ऊर्जा और माल उत्पादकता में सुधार से कहीं अधिक है। इसमें शुम्पीटर के आर्थिक सिद्धांत का वह पहलू भी शामिल हो जो नए उत्पादों, प्रक्रियाओं, व्यवसाय प्रवृत्तियों के रूप में लागू नवाचारों की दर और नए बाजारों के विकास की दर का जिक्र करता है।

बाह्य बाजार-उन्मुख विकास रणनीति तकनीकी गतिशीलता पर दोनों तरह से दबाव डालती है। कीमत को प्रतिस्पर्द्धी बनाए रखने की जरूरत के चलते संसाधन सक्षमता में सुधार और विकसित होते वैश्विक बाजारों में प्रासंगिक बने रहने के लिए नए उत्पादों एवं प्रक्रिया के नवाचारी विकास के लिए तकनीकी गतिशीलता। कमतर विनिमय दर से मदद मिल सकती है और अधिमूल्य वाली विनिमय दर कीमत प्रतिस्पर्द्धा को चोट पहुंचा सकती है। लेकिन एक वैश्विक बाजार में प्रवेश और वहां ठिके रहने के लिए दोनों ही संभावनाएं बेहद कम गुणवत्ता मानकों और नवाचार के जरिये इनमें किए जाने वाले बदलावों पर निर्भर करेगा।

निर्यात-केंद्रित बैकवर्ड इंटीग्रेशन रणनीति की राह में सबसे बड़ी बाधा नीति बनाने का वह तरीका है जिसमें नए सिरे से डिजाइन साधनों के बजाय बड़े लक्ष्यों पर जोर दिया जाता है। आर्थिक वृद्धि की कारगर नीतियां साध्य के बजाय साधनों पर अधिक बल देती हैं।

रुपये करने का प्रस्ताव रखा गया है। परंतु यह बढ़ोतरी मोटे तौर पर प्रधानमंत्री किसान सम्मान निधि (पीएम-किसान) और किसानों की पेंशन योजना में बढ़ाई गई है। वर्ष के लिए 64,916 करोड़ रुपये से 55,000 करोड़ रुपये की राशि पीएम किसान योजना में और 900 करोड़ रुपये की राशि किसानों की पेंशन के लिए है। दूसरे शब्दों में कहें तो अन्य कृषि योजनाओं और परियोजनाओं के लिए केवल 9,000 करोड़ रुपये की राशि बढ़ाई गई। इसमें बहुप्रतीक्षित शोध परियोजनाएं भी शामिल हैं।

इससे सरकार की यह मान्यता सामने आती है कि किसानों की जरूरत मोटे तौर पर कृषि हस्तांतरण और पेंशन योजना से पूरी हो जाएगी। गत वर्ष सरकार ने पीएम किसान योजना पर 20,000 करोड़ रुपये आवंटित किए गए थे। इस वर्ष यह बढ़कर 75,000 करोड़ रुपये हो जाएगी। यहां प्रावधान में कमी नजर आती है। सरकार ने पीएम किसान योजना का विस्तार कर सभी किसानों को उसमें शामिल करने का निर्णय किया है। ऐसे में इस मद में 87,000 करोड़ रुपये का

कृषि और संबद्ध गतिविधियों में यह रझान बदला हुआ प्रतीत होता है। वर्ष 2019-20 में इस क्षेत्र के लिए वित्तीय आवंटन 75 फीसदी बढ़ाकर 1.5 लाख करोड़

रुपये करने का प्रस्ताव रखा गया है। परंतु यह बढ़ोतरी मोटे तौर पर प्रधानमंत्री किसान सम्मान निधि (पीएम-किसान) और किसानों की पेंशन योजना में बढ़ाई गई है। वर्ष के लिए 64,916 करोड़ रुपये से 55,000 करोड़ रुपये की राशि पीएम किसान योजना में और 900 करोड़ रुपये की राशि किसानों की पेंशन के लिए है। दूसरे शब्दों में कहें तो अन्य कृषि योजनाओं और परियोजनाओं के लिए केवल 9,000 करोड़ रुपये की राशि बढ़ाई गई। इसमें बहुप्रतीक्षित शोध परियोजनाएं भी शामिल हैं।

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भारत से जुड़ी प्रतिबद्धताओं पर केंद्रित यह वित्तीय आवंटन में बिना समुचित इजाफे के, अमीरों पर कर बढ़ा कर और तीन दर्जन से अधिक वस्तुओं के आयात शुल्क में बढ़ोतरी करके घरेलू उद्योग के लिए समान माहौल तैयार करने की कोशिश के साथ बजट में कई नई पहल की गई हैं। इनमें बाहरी बाजारों से उधार लेना, प्रत्यक्ष विदेशी निवेश और विदेशी पोर्टफोलियो निवेश के मानक शिथिल करना तथा सरकारी उपक्रमों में सरकार की शेयर हिस्सेदारी को 51 फीसदी से कम करना शामिल हैं।

इस बजट को भारत समर्थक बजट के रूप में प्रस्तुत करना भाजपानीत केंद्र सरकार का एक राजनीतिक कदम है। हकीकत इससे अलग है। यह ऐसा बजट है जो नए क्षेत्रों में विदेशी पूंजी का प्रवेश, निजीकरण और नए सहज श्रम कानून आदि की राह आसान करता है। बजट को भारत समर्थक दिखाने का मुल्लाम जानबूझ कर पहचाना गया है ताकि आर्थिक खुलेपन को नकारने की किसी भी तरह की राजनीतिक कोशिश को रोका जा सके।

कानाफूसी

औचक निरीक्षण

अगर आप बदलाव चाहते हैं तो आपको लोगों को सक्रिय रखना होगा। राज्य के अफसरशाहों के साथ अपनी शुरुआती मुलाकातों में से एक में आंध्र प्रदेश के नए मुख्यमंत्री वाई एस जगनमोहन रेड्डी ने उनसे कहा कि वे विभिन्न सरकारी संस्थानों में रात को औचक रुकने का कार्यक्रम बनाएं ताकि उनकी सेवा गुणवत्ता में सुधार किया जा सके। उन्होंने अधिकारियों से कहा कि वे छात्रावासों, सार्वजनिक स्वास्थ्य केंद्रों आदि में जाएं, वहां की कैंटीन में भोजन करें और यदि संभव हो तो रात में वहीं सो जाएं। उन्होंने सुझाव दिया कि वे किसी से अपनी योजना के बारे में चर्चा न करें और नियमित अंतराल पर संस्थानों का औचक निरीक्षण करना जारी रखें। उन्होंने कहा कि ऐसा करने से इन संस्थानों को चलाने वाले लोग कभी ढिलाई नहीं बरतेगे। उन्होंने यह भी कहा कि जब उन्हें संस्थानों में अंतर नजर आने लगे तो 'तब और अब' की तस्वीरें भी खींच कर रखें।

आदित्य का उदय

शिव सेना की युवा इकाई युवा सेना के अध्यक्ष आदित्य ठाकरे ने अपनी लोकप्रियता बढ़ाने के लिए इंडियन पॉलिटिकल ऐक्शन कमेटी (आई-पैक) की सहायता लेने का निर्णय लिया है। इसके तहत एक यात्रा का आयोजन किया जाएगा। उनके पिता उद्धव ठाकरे और परिवार के अन्य राजनीतिक रूप से सक्रिय सदस्यों ने भी उनके इस कदम का समर्थन किया है। यात्रा का लक्ष्य न केवल उनकी लोगों तक पहुंच आसान करना है बल्कि उन्हें भविष्य के संभावित मुख्यमंत्री के रूप में जनता के सामने पेश करना भी है। आदित्य महाराष्ट्र के विभिन्न जिलों की यात्रा करेंगे और विभिन्न सत्रों में भागीदारी करेंगे जहां कॉलेज के युवाओं और कामकाजी युवाओं के साथ सवाल जवाब किया जाएगा।



आपका पक्ष

देश में जीरो बजट खेती का सुझाव

देश में कृषि क्षेत्र जलवायु परिवर्तन तथा जल की कमी से जूझ रहा है। रासायनिक खेती महंगी होती है और यह जमीन को उत्पादक क्षमता कम कर देती है। रासायनिक युक्त खाद्य मनुष्य के स्वास्थ्य को नुकसान पहुंचा रहा है। इस वजह से कई बीमारियां जन्म ले रही हैं। इसलिए केंद्र एवं राज्य सरकार इस समस्या से निपटने के लिए कृषि सुधार के लिए कदम उठा रही हैं। सरकार के समक्ष देश की 136 करोड़ से अधिक आबादी को अनाज मुहैया कराने का दायित्व है। लोगों को खाद्य सुरक्षा कानून के तहत सस्ती दर पर अनाज भी उपलब्ध कराना है। सरकार ने विगत दिनों जैविक खेती को अधिक महत्त्व दिया है जिसके परिणामस्वरूप सिक्किम पूरी तरह जैविक खेती करने वाला देश का पहला राज्य बना है। लेकिन जैविक खेती खर्चीली है और इसकी उत्पादन क्षमता उम्मीद से कम है। इसके अलावा जैविक फसल की कीमत भी अधिक होने से केवल



विशेष वर्ग के लोग ही इसे खरीद पाते हैं। इसलिए केंद्र सरकार ने अपने बजट सत्र में जीरो बजट खेती को संकल्पना पेश की है। विदर्भ के एक किसान ने कुछ वर्ष पूर्व जीरो बजट खेती की संकल्पना पेश की थी। यह खेती पूरी तरह से प्राकृतिक होती है जो देसी गाय के गोबर से बनी खाद पर आधारित है। एक देसी गाय की गोबर खाद

किसानों को जैविक खेती पर जोर देना चाहिए जो पर्यावरण के अनुकूल है

एवं गोमूत्र से एक किसान 30 एकड़ जमीन पर जीरो बजट खेती कर सकता है। देसी गाय के गोबर का खेत में उपयोग करने से मिट्टी के पोषक तत्वों में वृद्धि होती है तथा

पाठक अपनी राय हमें इस पते पर भेज सकते हैं : संपादक, बिजनेस स्टैंडर्ड लिमिटेड, 4, बहादुर शाह जफर मार्ग, नई दिल्ली - 110002. आप हमें ईमेल भी कर सकते हैं : lettershindi@bsmail.in **उस जगह का उल्लेख अवश्य करें, जहां से आप ईमेल कर रहे हैं।**



दिल्ली डायरी
ए के भट्टाचार्य
इस बजट को भारत समर्थक बजट के रूप में प्रस्तुत करना भाजपानीत केंद्र सरकार का एक राजनीतिक कदम है। हकीकत इससे अलग है।

प्रावधान होना था। क्या किसान पेंशन योजना में केवल 900 करोड़ रुपये की राशि पर्याप्त होगी ? ध्यान रहे कि बजट भाषण में ग्रामीण भारत पर ध्यान केंद्रित करना एक राजनीतिक कदम है जिसे बेहद सावधानीपूर्वक तैयार किया गया है। मोदी सरकार शहरी या अमीर वर्ग के बजाय ग्रामीण भारत के हित में काम करती हुई दिखना चाहती है। बहरहाल, ग्रामीण विकास या जल संसाधन के लिए किया गया मामूली आवंटन बजट में उल्लिखित प्रतिबद्धता का समर्थन नहीं करते। मोदी सरकार का भारत समर्थक छवि को मजबूत करने में अमीरों पर कर में इजाफे और घरेलू उद्योग के संरक्षण के लिए टैरिफ बढ़ाने जैसी बातें अधिक अहम हैं। यही बात इस बजट को अलग बनाती है। यह चतुर्धाईपूर्वक तैयार किया गया दस्तावेज है जो बजट समर्थक नीतिगत पैकेज के बीच देश की अर्थव्यवस्था की विदेशी पूंजी के लिए और अधिक खोलता है और निजीकरण तथा रेलवे आदि बुनियादी ढांचा क्षेत्र में निजी क्षेत्र की भूमिका बढ़ाने जैसे सुधारों की जमीन तैयार करता है।

बजट पर होने वाली चर्चा जहां भारत से जुड़ी प्रतिबद्धताओं पर केंद्रित है वहीं वित्तीय आवंटन में बिना समुचित इजाफे के, अमीरों पर कर बढ़ा कर और तीन दर्जन से अधिक वस्तुओं के आयात शुल्क में बढ़ोतरी करके घरेलू उद्योग के लिए समान माहौल तैयार करने की कोशिश के साथ बजट में कई नई पहल की गई हैं। इनमें बाहरी बाजारों से उधार लेना, प्रत्यक्ष विदेशी निवेश और विदेशी पोर्टफोलियो निवेश के मानक शिथिल करना तथा सरकारी उपक्रमों में सरकार की शेयर हिस्सेदारी को 51 फीसदी से कम करना शामिल हैं।

इस बजट को भारत समर्थक बजट के रूप में प्रस्तुत करना भाजपानीत केंद्र सरकार का एक राजनीतिक कदम है। हकीकत इससे अलग है। यह ऐसा बजट है जो नए क्षेत्रों में विदेशी पूंजी का प्रवेश, निजीकरण और नए सहज श्रम कानून आदि की राह आसान करता है। बजट को भारत समर्थक दिखाने का मुल्लाम जानबूझ कर पहचाना गया है ताकि आर्थिक खुलेपन को नकारने की किसी भी तरह की राजनीतिक कोशिश को रोका जा सके।



दैनिक जागरण

चरित्र सबसे बड़ा धन है जिसकी सावधानी से रक्षा की जानी चाहिए

जोखिम भरे रास्ते

यह गंभीर चिंता का विषय बनना चाहिए कि देश की रजधानी से सटे ग्रेटर नोएडा को आगरा से जोड़ने वाला यमुना एक्सप्रेस वे एक और भीषण हदसे का गवाह बना। इस बार उत्तर प्रदेश रोडवेज की एक बस बेकाबू होकर गहरे नाले में जा गिरी। इस हादसे में करीब तीस यात्रियों की जान चली गई। इस हादसे पर प्रधानमंत्री समेत अन्य अनेक प्रमुख लोगों ने शोक व्यक्त किया है, लेकिन क्या इन शोक संवेदनाओं से हालात बदलेंगे और जानलेवा सड़क हादसे थमेंगे? यह प्रश्न इसलिए, क्योंकि मार्ग दुर्घटनाओं और उनमें मरने एवं घायल होने वालों की संख्या लगातार बढ़ती जा रही है। इसकी अनदेखी नहीं की जा सकती कि चंद दिनों पहले जम्मू-कश्मीर के किरतवाड़ जिले में एक मिनी बस के खाई में गिरने से 35 लोग काल के गाल में समा गए थे। इसके थोड़े दिन पहले हिमाचल प्रदेश के कुल्लू जिले में एक बस के नाले में गिर जाने से 44 लोगों की मौत हो गई थी। करीब एक पखवाड़े के अंदर देश के विभिन्न हिस्सों में एक के बाद एक बस दुर्घटनाओं में सौ से अधिक लोगों की मौत यही बताती है कि अपने देश के रास्ते कितने अधिक जोखिम भरे हो गए हैं। किरतवाड़ और कुल्लू के मामले में यह सामने आया था कि दुर्घटना का शिकार हुई बसों में क्षमता से अधिक यात्री सवार थे। यमुना एक्सप्रेस वे पर हुए हादसे का कारण बस ड्राइवर को झपकी आना और साथ ही बस की रफ्तार कहीं तेज होना बताया जा रहा है। तेज रफ्तार वाहनों और लापरवाही के कारण यमुना एक्सप्रेस वे लगातार गंभीर दुर्घटनाओं से दो-चार हो रहा है, लेकिन ऐसा लगता है कि यह मान लिया गया है कि एक्सप्रेस वे पर तो दुर्घटनाएं होना लाजमी ही है। अगर ऐसा कुछ नहीं है तो फिर मार्ग दुर्घटनाओं को रोकने के उपाय क्यों नहीं किए जा रहे हैं?

यह ठीक नहीं कि देश में जैसे-जैसे एक्सप्रेस वे तैयार होते जा रहे हैं वैसे-वैसे उनमें दुर्घटनाओं का सिलसिला भी तेज होता जा रहा है। नि:संदेह बेहतर सड़कें समय की मांग हैं, लेकिन इसका यह मतलब नहीं कि वे भीषण दुर्घटनाओं का गवाह बनती रहें। जिस तरह विभिन्न एक्सप्रेस वे पर दुर्घटनाएं बढ़ रही हैं उसी तरह देश के पर्वतीय इलाकों के रास्ते भी। आम तौर पर हर बड़े सड़क हादसे के बाद उन्हें रोकने के लिए उठाए जाने वाले कदमों पर चर्चा होती है, लेकिन कुछ समय बाद सफ कुछ पहले की ही तरह होता हुआ दिखाई देता है, क्योंकि सड़क हादसों में वर्ष मार्ग दुर्घटनाओं में मरने वालों की संख्या बढ़ती जा रही है। अब तो यह संख्या सालाना डेढ़ लाख मौतों के आंकड़े को पार करने वाली है। मार्ग दुर्घटनाओं में मरने अथवा अपंग होने वाले लोगों की बढ़ती संख्या केवल संबंधित परिवारों के लिए ही आफत नहीं बनती, बल्कि वह समाज और देश को भी कमजोर करने का काम करती है, क्योंकि सड़क हादसों में मरने वाले ज्यादातर लोग अपने घर-परिवार के कमाऊ सदस्य होते हैं। बेहतर हो कि हमारे नीति-नियंता यह समझें कि जानलेवा सड़क हादसे रोकने के लिए कुछ ठोस कदम उठाने की सख्त जरूरत है।

भ्रष्ट व्यवस्था पर चोट

जम्मू-कश्मीर में भाजपा-पीडीपी गठबंधन सरकार के कार्यकाल में खादी एवं ग्रामोद्योग बोर्ड में पिछले दरवाजे से हुई 101 नियुक्तियों को तत्काल भ्रभाव से रद किए जाने का राज्यपाल प्रशासन का फैसला सराहनीय है। इसमें दो राय नहीं कि राज्यपाल जम्मू-कश्मीर में आतंकवाद के दौर में पैर पसार चुकी भ्रष्ट व्यवस्था पर चोट कर रहे हैं। राज्यपाल ने इससे पहले नेताओं और नौकरशाहों पर यह कहते हुए निशाना साधा था कि विकास के लिए आए धन से उन्होंने अपने घर तो बने, लेकिन समाज की बेहतरी के लिए कुछ नहीं किया। जम्मू-कश्मीर में भ्रष्टाचार सबसे ज्वलंत मुद्दा है। बेशक पिछले कुछ दिनों में जिस तरह भ्रष्ट अधिकारियों के ठिकानों पर छापे मारे जा रहे हैं, उससे राज्यपाल प्रशासन की गंभीरता नजर आती है। विडंबना यह है कि जैकफेड के जिन अधिकारियों के ठिकानों पर छापे मारे गए, उनमें से तो कई सेवानिवृत्त हो गए थे। सेवानिवृत्त अधिकारियों ने अकूत संपत्ति अर्जित की। यह एक दो माह पहले की वही, बल्कि कई वर्षों की दो नंबर की कमाई है। विडंबना यह है कि भ्रष्टाचार पर अंकुश लगाने के लिए कई योजनाएं बनीं। यहां तक कि पूर्व मुख्यमंत्री ने राज्य को भ्रष्टाचार मुक्त बनाने के मुद्दे को घोषणा पत्र में भी शामिल किया। इतना ही नहीं सरकार बनने पर मुफ्ती मुहम्मद ने भ्रष्टाचार के इख्ते के लिए कई कदम उठाते हुए करीब साढ़े चार सौ अधिकारियों की सूची तैयार की। पूर्ववर्ती सरकार ने करीब सौ से अधिक भ्रष्ट अधिकारियों को बाहर का रास्ता तो दिखा दिया, लेकिन स्टेट विजिलेंस ने अधिकारियों के खिलाफ कोर्ट में पेश किए गए चालान को इतना कमजोर बना दिया कि अधिकतर आरोपी नौकरी में बहाल हो गए। स्टेट विजिलेंस ब्यूरो अभी भी स्वायत्त नहीं है। ब्यूरो अभी भी राज्य गृह विभाग के अधीन है। जब तक विजिलेंस ब्यूरो को पूर्ण स्वायत्तता नहीं मिलेगी तब तक राज्य में भ्रष्टाचार पर लाम्हा नहीं लग सकती। ब्यूरो विभागों के भ्रष्ट नौकरशाहों पर नकेल कसने में कतराता है। उन्हें डर रहता है कि अगर अपने से बड़े अधिकारी पर शिकंजा कसा गया तो वे उन्हें छोड़ेंगा नहीं। इसलिए प्रशासन को चाहिए कि स्टेट विजिलेंस ब्यूरो को स्वायत्तता दी जाए, जिससे कि वह निर्भीक होकर अपना काम करे।

देश में गहराता जल संकट

सुधीर कुमार

नरेंद्र मोदी सरकार ने अपने दूसरे कार्यकाल के पहले बजट में देश में गहराते पेयजल संकट और सुखते जलस्रोतों को देखते हुए 2024 तक पाइपलाइन के जरिए हरेक घर तक जल पहुंचाने का लक्ष्य निर्धारित किया है। गौरतलब है कि वित्त मंत्री निर्मला सीतारामण ने नव सृजित जल शक्ति मंत्रालय के लिए 28,261 करोड़ और पेयजल के स्वच्छता विभाग के लिए 20,016 करोड़ रुपये आवंटन की घोषणा की है। अपने बजट भाषण में उन्होंने कहा कि सभी नागरिकों को सुरक्षित एवं पर्याप्त पेयजल उपलब्ध कराना सरकार की प्राथमिकता है। सरकार ने सभी देशवासियों को स्वच्छ पेयजल उपलब्ध कराने के वादे के साथ-साथ वर्षा जल संचयन, भूमि जल संभरण और अवशिष्ट जल का कृषि के लिए फिर से प्रयोग के लिए स्थानीय अवसरंचना के निर्माण पर बल देने की रूपरेखा भी तैयार की है।

नीति आयोग की मानें तो अभी जैसे हालात हैं उसके मुताबिक 2020 तक 21 शहरों में भूजल पूरी तरह खत्म हो जाएगा। नीति आयोग की समग्र जल प्रबंधन सुचकांक रिपोर्ट में कहा गया है कि 2030 तक देश में पानी की मांग उपलब्ध जल

जल संरक्षण जरूरी है, ताकि पेयजल किल्लत, सूखा और अकाल जैसी आपदाओं से मानवता की रक्षा हो सके

वितरण को दोगुनी हो जाएगी। आयोग ने चेतावनी भी दी है कि तब केवल पानी की समस्या की वजह से देश की जीडीपी में छह प्रतिशत की कमी आ सकती है।

बीते दिनों प्रधानमंत्री नरेंद्र मोदी ने मन की बात कार्यक्रम के जरिए देशवासियों से जल संरक्षण आंदोलन चलाने का आग्रह किया था। जिस रफ्तार से देश में जल स्रोत सुख रहे हैं, उससे जल संकट और भी भयावह होता जा रहा है। भारत सरकार ने जल से संबंधित सभी विषयों पर त्वरित निर्णय लेने के लिए जल शक्ति मंत्रालय के नाम से एक नया मंत्रालय बनाया है। गत 1 जुलाई को सरकार ने देश के 256 जिलों में 'जल शक्ति अभियान' शुरू किया है। इसके तहत जल, संरक्षण एवं वर्षा जल के संचय पर जोर दिया जा रहा है। तमिलनाडु देश का पहला राज्य है, जहां वर्षाजल संचयन को अनिवार्य बनाया गया है,

जबकि राजस्थान में आज भी परंपरागत तरीके से तालाब, जोहड़ एवं सरोवर बनाकर जल संग्रहण किया जाता है, लेकिन अन्य राज्य वर्षा जल संरक्षण एवं संग्रहण के प्रति उदासीन क्यों हैं? फिलहाल वर्षा जल संग्रहण के लिए चार बातों पर विशेष ध्यान देने की जरूरत है। नैसर्ग-जलस्रोतों की सफाई, अधिक से अधिक तालाब का निर्माण, पुराने तालाबों का जीर्णोद्धार और वर्षा जल संरक्षण पर जोर। वर्षा जल संग्रहण विभिन्न उपयोगों के लिए वर्षा के जल को रोकने और एकत्र करने की विधि है। इसके माध्यम से वर्षा जल की प्रत्येक बूंद को संरक्षित करने के लिए नलकूपों, राइट्टे एवं कुओं में एकत्रित किया जाता है। यह न सिर्फ भूमिगत जल के स्तर को नीचा होने से रोकता है, बल्कि मृदा अपरदन को रोकने तथा जल में उपस्थित फ्लोराइड और नाइट्रेट जैसे प्रदूषकों को कम करने के साथ ही जल के अन्य स्रोतों पर हमारी निर्भरता भी कम करता है। बहरहाल दुनिया को जल संकट से उबारने के लिए जल संरक्षण के आसान तरीकों को अपनाना जरूरी है, ताकि पेयजल किल्लत, सूखा और अकाल जैसी आपदाओं से मानवता की रक्षा हो सके।

(लेखक बीएचयू में अध्येता हैं)

गोपालकृष्ण गांधी

कुछ मसलों पर प्रधानमंत्री के विचार और कांग्रेस अध्यक्ष राहुल गांधी के इस्तीफा का निर्णय बेहतर भविष्य की आस जगाता है

पिछले कुछ सप्ताहों की चार घटनाओं से मुझे बहुत संतोष हुआ, बल्कि यह कहें कि आनंद मिला। संतोष और आनंद में कोई अंतर है? नहीं भी है और है भी। पर्याय से हम परिचित हैं। फिर प्रश्न उठता है कि एक ही भाषा में एक ही अर्थ के दो-दो भिन्न शब्द क्यों? ठीक सवाल है और सवाल में ही उसका जवाब है। पर्याय से हमें दो शब्द नहीं, लेकिन एक सूक्ष्म विक्त्य मिलता है, जिसकी भाषा और विचार को जरूरत है। पूरक की सहनता से पर्याय का अंतर साफ होता है। संतोष फुलका है, आनंद पूड़ी। संतोष रसगुल्ला है, आनंद रसमलाई। संतोष सौफ है, सुपारी भी, लेकिन आनंद है स्वादों से भरा बनारसी पान। आह! तो ये चार प्रसंग कुछ ऐसे हैं:

पहला: अभी हुए हमारे निर्णायक आम चुनावों में भीपाल निर्वाचन क्षेत्र के आंदोलन-प्रचार ने हमें एक दुखभरा अनुभव दिया। मैं उसकी अंतर्वस्तु में नहीं जाना चाहता। साखी प्रज्ञा सिंह ठाकुर ने गांधी-गोउसे को लेकर जो कहा सो कहा। क्या कहा, हम सब जानते हैं, लेकिन आनंद! हमारे प्रधानमंत्री नरेंद्र मोदी जी ने यथाशीघ्र उस बयान का खंडन किया। साखी ने एक वार्ता में कहा- 'देशवासियों से माफ़ी मांगती हूं...। क्षमा-प्रार्थना जो है, वह वातांलाप की दुनिया से ऊपर, साहित्य से भी कुछ आगे, कस्य के क्षेत्र में संचार करती है। मेरा अर्थ सरसों या मजबूत मांगी हुई क्षमा से नहीं। मेरा अर्थ हृदय से क्षमा-याचना से है और मैं मानना

चाहूंगा कि साधु-साध्वी जो कहते हैं वह सच होता है। अगर गेरुआधारी कोई झूठ बात कहता है तो वह साधु नहीं, अभिनेता है। मैं मानना चाहूंगा कि साखी प्रज्ञा ने जब देश की जनता से अपने कहे पर क्षमा मांगी तो वह अपने साधु-दिल से मांगी, न कि किसी सियासी-दिमाग से। मुझे उन दिनों पूछा गया, टिप्पणी दीजिए! कुछ सोचकर मैंने कहा कि गांधीजी अगर होते तो कहते, साखी को भगवान क्षमा करें। क्षमा मांगना बहादुरी का परिचायक है। क्षमा करना बड़पन का और जब वह (मांगने और देने की) क्रिया पूर्ण होती है तो नैतिकता को आनंद होता है। मानवता को आनंद होता है, शिष्टा को, शिष्टाचार को, सभ्यता को, संस्कृति को आनंद होता है। युद्ध अदना-ईश्वान को भी आनंद हुआ। यहां यह कहना जरूरी है (सच्चाई के तौर पर) कि उस चुनाव में मेरी प्रार्थनामय मंशा थी कि गरीब-नवाज, पिछड़ों के दोस्त, समता-सेवक दिग्विजय सिंह विजयी निर्भाएं। वह बात अलहदा है। जीवन में हम सब न जाने कितने विरोधाभासों को लेते हुए चलते हैं। यह आनंद-दर्द-आनंद का मिश्रण जीवन में मेरी एक दुविधा है। बहरहाल दर्द खुशी का बड़ा भाई है। वह बहका को इन्कार नहीं करता।

दूसरा: विजय-प्राप्ति के बाद अपनी पहली मन की बात में प्रधानमंत्री जी ने राजनीति, चुनाव, सियासी हार-जीत को परे रखते हुए ऐसी बात उठाई जो हमारे लिए महत्व क्या, जिंदगी-मौत का सवाल है- पानी की किल्लत। उत्तर भारतीयोंके लिए कल्पना क्या मुश्किल है कि चेन्नई में

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हालिया आम चुनाव में बंगाल में वाम मोर्चे को एक सीट नहीं मिली। एक प्रत्याशी को छोड़ सभी की जमानत जब्त हो गई। 27 वर्ष तक ज्योति बसु जैसे लोकप्रिय नेता के शासन के बाद वाम मोर्चे की ऐसी दुर्गति पर विश्लेषण आवश्यक हो जाता है। मार्क्सवादियों की धर्मनिरपेक्षता और धर्म से दूरी, दोनों ही विवाद के विषय बन गए हैं। एक जमाना था जब वामपंथी बंगाल के प्रमुख धार्मिक आयोजनों में शामिल होने में भी शर्म महसूस करते थे। कमोबेश यही स्थिति केरल में भी है। मार्क्सवादियों की पहचान नास्तिक के रूप में मची है। धर्म को छोड़कर सभी सीटों पर पराजित रहा। इसका कारण सबरीमाला का विवाद बना। सुप्रीम कोर्ट के एक फैसले के तहत इस मंदिर में महिलाओं को प्रवेश की अनुमति मिली, लेकिन सदियों पुरानी परंपरा उक्त मंदिर में महिलाओं के प्रवेश को वर्जित करती है। मार्क्सवादी भारतीय समाज में धर्म की महत्ता समझने में गलती कर गए। वहीं भाजपा ने इसके विरुद्ध जन अभियान चलाया। इससे उसे लोकसभा की सीट तो नहीं मिली, लेकिन मत प्रतिशत में बढ़ोतरी जरूर आंकी गई। इस मसले पर प्रारंभ में कांग्रेस पार्टी दुविधा में रही।

चूंकि राज्य में भाजपा का संगठनात्मक ढांचा व्यापक नहीं था, इसलिए कांग्रेस वाले नेतृत्व को ही अत्यावृत्ति जीत मिली। हालांकि सबरीमाला घटनाक्रम से चिंतित होकर केरल के मार्क्सवादी संगठनों द्वारा कुछ प्रयास किए जा चुके हैं। केरल में सत्ताधारी माकपा के सांस्कृतिक संगठनों द्वारा 'रामायण महीने' का आयोजन किया गया ही प्रयास था। पिछले वर्ष जुलाई से अगस्त तक वहां मलयालम महीना कारकीर्दक मनाने की परंपरा के साथ ही 'रामायण महीने' का आयोजन पार्टी का एजेंडा बना। वहां ऐसी मान्यता है कि इससे गरीबी एवं भीषण बारिश से होने वाली बीमारियों से मुक्ति मिलती है। इस दौरान राज्य के सभी 14 जिलों में संस्कृत संगम संस्था के सदस्यों द्वारा रामायण आधारित व्याख्यानमाला आयोजित की गई। केरल सरकार की इस पहल के बाद दलगत प्रतिक्रियाओं के तहत माकपा पर छवि बदलने की कोशिश जैसे आरोप भी लगे। ऐसी प्रतिक्रियाओं पर आश्चर्य नहीं होना चाहिए, क्योंकि कम्युनिस्टों एवं समाजवादियों की पहचान नास्तिक के रूप में मची है। धर्म को लेकर भारतीय समाज से इनकी दूरी बनी रही है। बंगाल में भी मार्क्सवादियों द्वारा दुर्गा पूजा के कार्यक्रमों से दूरी बनाए रखना उन्हें भारी पड़ा। मार्क्सवादी चिंतन के लोग सभी तरह के धर्मों को क्रांति की राह में बड़ा रोड़ा मानते रहे हैं। लेकिन ने तो धर्म को अफीम तक कह दिया था। कम्युनिस्टों की पहचान ईश्वर और धर्म को नहीं मानने वाले के रूप में बन गई। समय के साथ यह धारणा विश्वव्यापी हो गई और धर्म



केसी त्यागी



वामपंथी यह समझें तो बेहतर कि वे भारतीय समाज में धर्म की व्यापक स्वीकृति को समझने में गलती कर गए

और कम्युनिस्टों के बीच दूरी बढ़ती चली गई। भारत के कम्युनिस्टों के वक्तव्य, आचरण एवं घोषणापत्र भी धर्म निरोधी होते गए। यद्यपि 1947 के बाद देश में कम्युनिस्टों का प्रभाव तेजी से बढ़ा। बंटवारे के बाद भी धार्मिक असहिष्णुता इतनी तीव्र नहीं थी जितनी आज है। कम्युनिस्टों के नेतृत्व में तेलंगाना का सशस्त्र विद्रोह और 1957 में नंबूद्रीपाद के नेतृत्व में केरल में कम्युनिस्टों की पहली सरकार बनी। वहां के चर्च से जुड़े शिक्षण संस्थान भी कम्युनिस्टों के निशाने पर आ गए।

कांग्रेस सोशलिस्ट पार्टी से अलग होकर डॉ. राममनोहर लोहिया, जयप्रकाश नारायण और नरेंद्र देव ने अलग दल का निर्माण किया। समाजवादियों में आचार्य नरेंद्र देव नास्तिक थे। जयप्रकाश भी धार्मिक आचरण से दूरी बनाए रखते थे। सबसे अनूठा और निराला व्यक्तित्व डॉ. लोहिया का रहा जिन्होंने राम, कृष्ण और शिव के व्यक्तित्व पर विस्तार से प्रकाश डालने का काम कर तुलनात्मक विश्लेषण भी किया। 1960 के दशक में उन्होंने अपने समाजवादी मित्रों एवं कार्यकर्ताओं को रामायण मेला आयोजित करने का सुझाव भी दिया। रामायण मेले से जुड़ा उनका यह वक्तव्य आज भी प्रासंगिक है कि 'धर्म और राजनीति का रिश्ता बिगड़ गया है। धर्म दीर्घकालीन राजनीति है और राजनीति अल्पकालीन धर्म। हम आज एक दुर्भाग्यपूर्ण परिस्थिति में हैं जिसमें बुराई से लड़ाई में धर्म का कोई रास्ता नहीं रह गया

है और वह निर्जीव हो गया है, जबकि राजनीति अत्यधिक कलह भरी हो गई है।' मेले के आयोजन से उनका तात्पर्य पूछे जाने पर उनका उत्तर था, 'आनंद, दृष्टि, रस-संचार और हिंदुस्तान को बढ़ावा' इसके मुख्य उद्देश्य हैं। डॉ. लोहिया का स्पष्ट मत था कि धर्म और राजनीति की जड़ें एक हैं, लेकिन उनके दायरे को अलग-अलग रखना ही कल्याणकारी होगा। डॉ. लोहिया के अकस्मात निधन के बाद समाजवादी आयोजन दिशाहीनता का शिकार हो गया। मंडल के बाद की दलीय राजनीति ने इसे संकीर्ण और सिद्धांतहीन बना दिया। अधिकांश मंडलवादी दल परिवार, जाति की राजनीति के साथ भ्रष्ट आचरण के दोषी बनते गए। इसके परिणाम भी सामने हैं।

राजनीति और धर्म के प्रति लोहिया के विचार आज भी प्रसांगिक हैं। यदि कम्युनिस्टों और समाजवादियों द्वारा इन विचारों का अनुसरण किया जाता तो आज उनकी स्थिति अलग होती। राज्य विशेषों से राजनीतिक सफलता मिल जाने के बावजूद वामपंथी एवं समाजवादी आस्तिक-नास्तिक के कठपंर से बाहर नहीं निकल पाए और यही एक बड़ा कारण रहा कि देश के सभी हिस्सों में उनकी स्वीकार्यता नहीं बन पाई। आज श्रीराम से जुड़े आयोजन मात्र से इन दलों पर पाला बदलने, तुष्टीकरण के प्रयास आदि के आरोप लग रहे हैं, क्योंकि धर्म का राजनीतिक और राजनीति का धार्मिक इस्तेमाल हुआ है। आज की दुनिया भिन्न और बदली हुई है। सोवियत संघ के विघटन के बाद समूचे पूर्वी यूरोप का सांस्कृतिक एवं धार्मिक हलिया बदल गया।

भारतीय समाज में धर्म और उससे जुड़े प्रतीकों की जड़ें गहरी भी हैं और पुरानी भी। हमारे यहां धार्मिक प्रचारकों और गुरुओं की लंबी फेहरिस्त है, लेकिन समाज सुधारकों के नाम पर चंद महनुभाव ही हैं जो अपनी विश्वसनीयता खते हैं। मौजूदा परिप्रेक्ष्य में वामपंथियों ने अगर इस मर्ज को समझा है तो यह स्वागतयोग्य है, लेकिन उन्हें भी धोंग एवं आडंबर के प्रपंच से बचकर 'रामायण महीने' का आयोजन करना होगा, क्योंकि धर्म और राजनीति के अविवेकी मिलन से दोनों भ्रष्ट होतें हैं। किसी एक धर्म को किसी एक राजनीति में नहीं मिलना चाहिए। इससे सांप्रदायिक कट्टरता जन्म लेती है। धर्म और राजनीति को अलग रखने का मतलब यही है कि सांप्रदायिक कट्टरता से बचें और दोनों का घालमेल न करें। सिद्धांत आधारित धार्मिक कार्यक्रम एवं राजनीति जनकल्याण के हित में भी होंगे। इससे धर्म भी तार्किक होंगे और मार्क्सवादी भी व्यावहारिक होंगे।

(लेखक जदयू के राष्ट्रीय प्रवक्ता हैं)

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अवधेश राजपूत

(जहां मैं रहता हूं) और देश के कई हिस्सों में बारिश के विलंब से अकाल चल रहा है। भूख से भी ईंसान कुछ समय निपट सकता है। प्यास की बात अलग होती है और प्यास सिर्फ पीने के पानी की नहीं है। खेती प्यासी है, उद्योग प्यासा है। अस्पतालों, स्कूलों और छात्रावासों के नलके सूखे हैं। प्रधानमंत्री जी ने जब कहा कि हमें बूंद-बूंद की किरपायत करनी है तो मैं आनंदमय हो गया। पानी के बारे में पर्यावरणविद बोलते हैं, पॉलिटिशियन-लोग नहीं, क्यों? क्योंकि यह विषय, यह चेतावनी, यह हृदयगत लोकप्रिय नहीं। पानी कम हो गया है, यह एक गंभीर संदेश है। पानी का ध्यान से इस्तेमाल करें, यह एक कठिन सलाह है। उससे कोई जोट नहीं मिलने वाले, उससे कोई वाहवाही नहीं मिलने वाली, लेकिन प्रधानमंत्री का फर्ज बनता है कि कड़वे सच बोलें। हमारे प्रधानमंत्री जी ने मन की बात में यह कड़वा सच बोला। मैं प्रभावित हूं, आनंदित हूं। प्यास की दलीय राजनीति ने इसे संकीर्ण और शहरी अमीर सुनेंगे? आवश्यक है कि वे इसे ओरों से पहले और उनसे ज्यादा ध्यान से सुनें, क्योंकि उद्योगपति और शहरी अमीर ही पानी का सबसे

भारी उपयोग करते हैं। अगर ये सब प्रधानमंत्री के आह्वान को सुनें तो क्या बात होगी। वे जरा सोचें, समझें और अपने मुनाफे में कुछ नियंत्रण बरतें। तीसरा: मैं आकाश विजयवर्गीय-कांड के बारे में कुछ नहीं कहूंगा। बहुतों ने बहुत कुछ कह दिया है। मैं सिर्फ प्रधानमंत्री जी के बयान के बारे में इतना कहना चाहूंगा कि उन्होंने जो कहा है, वह सराहनीय ही नहीं, अनुकरणीय है। राजनीति में संयम बोली में, आचार में जरूरी है। वह नहीं इंसान हो जो अपने बलबूते पर खड़ा या खड़े हो, जो नेहरू-गांधी परिवार के इशारों पर न निर्भर हो, जो हार और दुर्भाग्य को कोख से महत्वा गांधी, पंडित नेहरू, सरदार पटेल और मौलाना आजाद की कांग्रेस को पुनर्जन्म दे और जो बाबासाहेब आंबेडकर, राजजी, पेरियार, नेताजी, शहीद भगत सिंह, लोकनायक जयप्रकाश नारायण, आचार्य नरेंद्र देव और डॉ. लोहिया जैसे गैर कांग्रेसी नेताओं से ऊर्जा पाए। तभी राहुल गांधी का त्याग कांग्रेस और देश का संभोग्य बनेगा।

दिल आनंदित हो गया। उन्हें धन्यवाद देता हूं, किंतु...क्या सियासी लोगों के साथ समाज को भी इस हितवायत की जरूरत नहीं? 'लिंगिय' शब्द अंग्रेजी का है, अमेरिका से आया हुआ, लेकिन उसका अर्थ आज हम सब जानते हैं। आकाश को दिया हुआ अत्यावश्यक सबक उन उन्मादियों को भी मिलना चाहिए, जो नफरत से उन पर वार करते हैं, जिनकी पहचान से उनको घृणा है। सच्चे पाठ की पूर्ति तभी होती है जब सारे दोषी उसके सहपाठी बनते हैं।

चौथा: पद-त्याग हमेशा एक ऊंची बात माना गई है। उसमें नैतिकता निहित है, नेकी सम्मिलित है। कांग्रेस अध्यक्षता से मुक्त होना बिल्कुल जरूरी था राहुल गांधी के लिए। जवाबदेही करके भी कुछ होता है, यह हमारी राज-प्रणाली में लाल बहादुर शास्त्री ने सबसे पहले हमें दिखाया, जब वह रेल मंत्री थे। तमिलनाडु के अरियालुर में रेल दुर्घटना के बाद उन्होंने एक क्षण भी संचे बिना इस्तीफा दे दिया। मामी और इस्तीफा बहन-भाई हैं। राहुल गांधी ने अपने निर्णय पर डटे रहकर एक उत्तम उदाहरण दिया है। मैं आनंदित हूं, आभारी हूं। चुनाव में कांग्रेस की व्यापक पराजय का जिम्मा कांग्रेस के प्रादेशिक नेताओं से मांगना तब ही हो सकता है जब कांग्रेस अध्यक्ष स्वयं वैसा ही करें, लेकिन यह त्याग अपने लक्ष्य पर तभी पहुंचेगा जब अगला कांग्रेस अध्यक्ष एक ऐसा इंसान हो जो अपने बलबूते पर खड़ा या खड़े हो, जो नेहरू-गांधी परिवार के इशारों पर न निर्भर हो, जो हार और दुर्भाग्य को कोख से महत्वा गांधी, पंडित नेहरू, सरदार पटेल और मौलाना आजाद की कांग्रेस को पुनर्जन्म दे और जो बाबासाहेब आंबेडकर, राजजी, पेरियार, नेताजी, शहीद भगत सिंह, लोकनायक जयप्रकाश नारायण, आचार्य नरेंद्र देव और डॉ. लोहिया जैसे गैर कांग्रेसी नेताओं से ऊर्जा पाए। तभी राहुल गांधी का त्याग कांग्रेस और देश का संभोग्य बनेगा।

(वर्तमान में अध्यापनरत लेखक पूर्व राजनयिक एवं पूर्व राज्यपाल हैं) response@jagran.com



प्रभु स्मरण

मनुष्य हर चीज को समय से पूर्व पाने के लिए आतुर रहता है। किंतु कर्म के वृक्ष पर भाग्य के फल को तभी पकना है जब लीलाधारी प्रभु ने उसे पकने के लिए निर्दिष्ट किया है। दिंसंबर में पकने वाला फल, वसंत ऋतु में खिलने वाला सुप्रभात फूल न फकवरी में पक सकता है, न पतझड़ में ही खिल सकता है। यदि मनुष्य अपनी कृत्रिम बुद्धि एवं ज्ञान से इस अवधि में कुछ अंतर लाता भी है तो उसकी नैसर्गिकता एवं मौलिकता अवश्य प्रग्नचिह्नित होती है। कर्म करना मनुष्य के हाथ में है, फल देना ईश्वर के हाथ। हम सब सांसारिक संबंधियों रूपी मजदूरों के ठेकेदार मात्र हैं जो इस लोक में उद्देश्यों के किसी खास कालात्मक एवं स्मरणीय भवन को बनाने के लिए लीलाधारी द्वारा किसी विशेष कालखंड के लिए प्रतिनियुक्त हैं। हम अपने तथाकथित मजदूरों के समूह को सुविधाएं जुटाकर सुखी रखने का उपक्रम कर सकते हैं, लेकिन उनके संचित कर्मों के फल से उन्हें संवित नहीं कर सकते।

उनके भाग्यफल एवं कर्म की डोर तो केवल ईश्वर के हाथ में है। जीवन के रंगमंच में मनुष्य की भूमिका महज दर्शक भर की है। वह उन नाटक से प्रसन्न अथवा क्षुब्ध भर हो सकता है, लेकिन उन कुछ नहीं सकता। 'व्यक्ति निष्क्रिय हो दूसरों के भविष्य की चिंता में अपने वर्तमान को रुग्ण करता रहता है जो पुनः उसके संतोष का कारण बनता है। मनुष्य के कर्म के उन्नत को चलायमान रखने के उद्देश्य से ईश्वर ने भविष्य एवं चक्रक कालमाल के उससे वंचित रखा है। यदि किसी को अपने भविष्य का सुखद परिणाम पूर्व में ही ज्ञात हो जाए तो वह उस दिशा की ओर लगने वाले प्रयासों की गति धीमिल हो नहीं, अत्यंत धीमी भी कर देगा। जीव सक्रिय एवं सकारात्मक दिशा की ओ अग्रसर होता रहे, इसलिए लोककल्याणकारी ईश्वर ने यह भविष्य-दर्शन फल जीव को बताने से परहेज भी किया है, ताकि वह निरंतर आस्थावान एवं आश्वान रहकर सार्थक दिशा में उद्योग करता रहे। सांसारिक विषय-वासनाओं की चिंता छोड़ मनुष्य यदि ईश्वर की साधना, भक्ति की त्रिवेणी में चिंतारहित हो पवित्र तन से डुबकी लगाए तो उसका भी विस्तारहित अनेक हाथ ले उसे इस्तीफाई भवसागर से पार लगाने का स्वतः उपक्रम कर लेंगे। वह साफ मन से आस्था एवं विश्वास के साथ प्रभु का स्मरण करके तो देखे।

डॉ. दिनेश चमोला 'शैलेश'

कर्मचारी एवं अधिकारी के खिलाफ किसी तरह का मामला आने पर कार्रवाई हो जाती है, लेकिन भ्रष्ट एवं उदंड राजनीतिज्ञों के खिलाफ कार्रवाई करना कठिन होता है। इनका सही इलाज जनता ही कर सकती है। अगर वह ठान ले कि चुनाव में गलत लोगों को नहीं जिताएंगे तो ऐसे लोग राजनीति से बाहर हो जाएंगे।

चाणक्य शर्मा, बांके बिहारी अपार्टमेंट, गुरुग्राम

कर्नाटक में नाटक

कर्नाटक में फिर सरकार बदलने के आसार नजर आ रहे हैं। विधायक इस्तीफा दे रहे हैं। राजनीतिक उठापटक फिर शुरू हो गई है। कुमार स्वामी की सरकार गिरने की संभावनाएं प्रबल होती जा रही हैं। भाजपा नेता एडवोकेटों की उम्मीदें जाग रही हैं। दूसरी ओर आरोप लगा जा रहे हैं कि इस्तीफों के पीछे कमल का हाथ है। इस्तीफा देने वालों में कांग्रेस के विधायक भी हैं, जिन्हें कांग्रेस के बंद नेता समझा रहे हैं। कर्नाटक के सियासी नाटक में देखना है कि इस्तीफाई भवसागर से पार लाने का स्वतः उपक्रम कर लेंगे। वह साफ मन से आस्था एवं विश्वास के साथ प्रभु का स्मरण करके तो देखे।

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इस संतंभ में किसी भी विषय पर राय व्यक्त करने अथवा दैनिक जागरण के राष्ट्रीय संस्करण पर प्रतिक्रिया व्यक्त करने के लिए पाठकगण सादर आमंत्रित हैं। आप हमें पत्र भेजने के साथ ई-मेल भी कर सकते हैं।

अपने पत्र इस पते पर भेजें : दैनिक जागरण, राष्ट्रीय संस्करण, डी-210-211, सेक्टर-63, नोएडा ई-मेल: mailbox@jagran.com

हाशिये पर नदी

नदियों को जोड़े जाने की परियोजना देश की बड़ी और महत्वाकांक्षी परियोजनाओं में से एक है। लेकिन इस बार केंद्र सरकार के सालाना बजट में नदी जोड़ो परियोजना के लिए सिर्फ एक लाख रुपए रखे गए हैं। यह बात चौंकाने वाली इसलिए है कि खरबों रुपए वाली इस लंबी-चौड़ी परियोजना को करीब अट्‌टाईस लाख करोड़ रुपए के केंद्रीय बजट में इस बार कुछ करोड़ रुपए भी नहीं दिए गए। ऐसे में क्या इसका यह मतलब निकाला जाए कि अब यह परियोजना सरकार की प्राथमिकता सूची में कहीं नहीं रह गई है, इस पर कदम बढ़ाने में सरकार की कोई दिलचस्पी नहीं है, या उसे ऐसी परियोजना में कोई दम नजर नहीं आ रहा? ऐसा भी नहीं कि सरकार ने इस परियोजना को बंद करने का एलान कर दिया हो। यह भी हो सकता है कि सरकार इस महत्वाकांक्षी परियोजना को लेकर ऊहापोह की स्थिति में हो और आगे किस तरह बढ़ा जाए और इस काम पर कितना खर्च होगा, इसका आकलन चल रहा हो। ऐसे बहुत से कारण और अंदेशो हैं जो इस परियोजना को लेकर सरकार के रुख के बारे में सवाल खड़े करते हैं।

भारत में नदियों को जोड़ने की दिशा में लंबे समय से विचार-विमर्श और काम चल रहा है। लेकिन यह सब मंथर गति से ही हो रहा है। इसलिए आज तक इस दिशा में कोई ठोस नतीजा सामने नहीं आ पाया। भारत में सबसे पहले 1972 में दो हजार छह सौ चालीस किलोमीटर लंबी नहर के माध्यम से गंगा और कावेरी को जोड़ने का प्रस्ताव तत्कालीन सिंचाई मंत्री केएल राव ने रखा था। नदी जोड़ो परियोजना की शुरुआत विधिवत रूप से सन 2002 में हुई थी। इसके तहत सबसे पहले केन-बेतवा परियोजना को हाथ में लिया गया। तब इस योजना पर एक सौ तेईस अरब डॉलर लागत आने का अनुमान था। लेकिन अभी तक भी यह परियोजना पूरी नहीं हो पाई है और न ही जल्द इसके पूरे होने के आसार हैं। ऐसे में पिछले अठारह साल में इसकी लागत भी कई गुना बढ़ गई है। यह ऐसी समस्या है जो दूसरी नदियों को जोड़ने वाली परियोजनाओं में सामने आएगी। यानी भारी-भरकम खर्च और लंबे समय के बाद भी ऐसी परियोजनाएं पूरी नहीं हो पाएं तो इन पर सवाल खड़े होना स्वाभाविक है। अगर केन-बेतवा परियोजना पर तेजी से काम होता और समय से यह परियोजना पूरी हो गई होती तो उत्तर प्रदेश और मध्यप्रदेश का बुंदेलखंड क्षेत्र आज सुखे की मार नहीं झेल रहा होता।

भारत पिछले कई सालों से गंभीर जल संकट से जूझ रहा है। देश के कई हिस्से पूरे साल पानी की कमी का सामना करते हैं। किसानों को सिंचाई के लिए पर्याप्त जल नहीं मिल पाता। भारत में जिस तरह का मौसम चक्र है, उसमें सूखा और बाढ़ जैसी समस्याएं हालात को और गंभीर बना देती हैं। इन प्राकृतिक आपदाओं से निपटने के लिए ही नदी जोड़ो परियोजना शुरू की गई थी। इस परियोजना का कोई एक नहीं, कई फायदे हैं। पेयजल संकट से लेकर सिंचाई संबंधी समस्या तक का समाधान इस परियोजना से हो सकता है। पर्याप्त जल की उपलब्धता से

सस्ती बिजली का उत्पादन हो सकेगा, नहरों का विकास होगा और नौवहन के विकास से परिवहन लागत कम होगी। लेकिन समस्या यह है कि नदी जोड़ो परियोजना पर पूरा करने में राज्यों के नदी जल विवाद भी बड़ी बाधा हैं। हालांकि ऐसे मसले कानूनी और संवैधानिक दायरे में सुलझाए जा सकते हैं। लेकिन ऐसी महत्वाकांक्षी परियोजनाएं अगर पैसे की कमी, सरकारी तंत्र की लचर कार्यप्रणाली और राजनीतिक इच्छाशक्ति के अभाव की शिकार हो जाएं तो लक्ष्य हासिल कैसे होंगे!

हादसों की सड़क

सोमवार तड़के यमुना एक्सप्रेस-वे पर जिस तरह का हादसा हुआ, उसने एक बार फिर यह सोचने पर मजबूर किया है कि आधुनिक और बेहतरीन सड़कें केवल रफ्तार के लिहाज से जरूरी हैं या फिर उन पर सफर का सुरक्षित होना पहले सुनिश्चित किया जाना चाहिए। लखनऊ से दिल्ली की ओर जा रही उत्तर प्रदेश परिवहन की एक बस यमुना एक्सप्रेस-वे से करीब तीस फुट गहरे नाले में जा गिरी। इस त्रासद हादसे में उन्तीस लोगों की मौत हो गई और अठारह बुरी तरह घायल हो गए। इस हादसे को भी शायद सड़कों पर होने वाले आम हादसों की तरह देखा जाएगा और इसके कारण के रूप में किसी अप्रत्याशित स्थिति को जिम्मेदार मान लिया जाएगा। अब एक रिवायत की तरह सरकार की ओर से इस घटना की जांच के आदेश दे दिए गए हैं और पीड़ितों को राहत के रूप में इलाज और मुआवजे की घोषणा हो गई है। लेकिन क्या इस हादसे के बाद संबंधित महकमे इसके कारणों पर विचार करने के बजाय फिर से किसी बड़ी दुर्घटना के होने तक अगला कदम उठाने के लिए इंतजार करेंगे? इस तरह की कोई एक घटना बड़े सबक के लिए काफी होनी चाहिए। लेकिन ऐसा लगता है कि हर कुछ समय के बाद एक्सप्रेस-वे के हादसों के बावजूद सरकार या संबंधित महकमों की नींद नहीं खुलती।

इस हादसे की वजह फिलहाल बस के चालक को आई झपकी बताई जा रही है। अगर अंतिम तौर पर यही कारण बताया जाता है तो आखिर क्या वजह है कि तेज रफ्तार वाली सड़कों पर ऐसी व्यवस्था और निगरानी नहीं सुनिश्चित की जाती कि वाहन चलाते समय झपकी जैसी स्थिति में चालक किसी तरह की मामूली चूक भी नहीं करें। इसके लिए सहायक चालक से लेकर वाहन चलाते समय शरीर और दिमाग से पूरी तरह सक्रिय रहने के इंतजाम किए जा सकते हैं। लेकिन निर्धारित गति और दूसरे तमाम नियम-कायदों को भी पूरी तरह अमल में लाना किसकी जिम्मेवारी है? अच्छी और निर्बाध सड़क देख कर ऐसे तमाम चालक होते हैं, जो रफ्तार की सीमा को तोड़ कर वाहन चलाते में संकोच नहीं करते। उन्हें न दूसरों की जान की फिक्र होती है, न अपनी। लेकिन ऐसे बेलगाम लोगों को रोकने और उनके खिलाफ कार्रवाई अगर होती दिखे तो दूसरों को सबक मिल सकता है। लेकिन ऐसा लौटा है कि एक्सप्रेस-वे के प्रबंधन में लगे संबंधित महकमे या समूहों को इससे कोई खास फर्क नहीं पड़ता।

कुछ समय पहले सूचनाधिकार कानून के तहत सामने आई जानकारी के मुताबिक यमुना एक्सप्रेस-वे पर पिछले करीब छह सालों के दौरान लगभग पांच हजार हादसे हुए, जिनमें सवा सात सौ लोगों की जान चली गई और साढ़े सात हजार से ज्यादा लोग घायल हुए। यह आंकड़ा अपने आप में यह बताते के लिए काफी है कि सुविधा की सड़क आज किस तरह हादसों की त्रासदी के नए अध्याय की गवाह बन रही है। दरअसल, एक्सप्रेस-वे पर किसी तरह की बाधा नहीं होती है, इसलिए उस पर गाड़ी चलाते हुए चालक एक तरह से खुद को बेफिक्र पाते हैं। इस क्रम में शरीर में सुस्ती आती है और नींद की झपकी की आशंका भी रहती है। जाहिर है, मामला केवल नियम-कायदे लागू कराने वाली एजेंसियों से लेकर चालक की अपनी जिम्मेदारी और सावधानी से भी जुड़ा है। इसलिए एक्सप्रेस-वे पर सफर के लिए जो नियम-कायदे तय किए गए हैं, उन पर पूरी सख्ती से अमल हो, यह सुनिश्चित किए जाने की जरूरत है। वरना तेज रफ्तार और निर्बाध सड़कें एक ओर सुविधा का अहसास देंगी तो दूसरी ओर बड़े हादसों जैसे त्रासद नतीजे भी देंगी।

कल्पमेधा

हमारी शंकाएं विश्वासघाती हैं। वे हमें उन अच्छाइयों से वंचित रखती हैं, जिन्हें प्रयत्न करके प्राप्त करते हैं।

—शेक्सपियर

रोबोट युग में रोजगार की चुनौती

रोबोटों की मदद से कारों की असेंबली

संयुक्त राष्ट्र ने दुनिया के विभिन्न देशों की जनसंख्या से संबंधित जो रिपोर्ट हाल में जारी की है, उसके अनुसार पूरी दुनिया की आबादी वर्ष 2050 तक बढ़ कर नौ सौ सत्तर करोड़ हो जाएगी। दुनिया की आधी से ज्यादा जनसंख्या वृद्धि नौ देशों में होगी जिनमें भारत, नाइजीरिया, पाकिस्तान, कांगो, इथियोपिया, तंजानिया, इंडोनेशिया, मिस्र और अमेरिका हैं। दुनिया के अन्य सभी देशों की तुलना में भारत को जनसंख्या समस्या के सबसे भीषण रूप का सामना करना होगा। रिपोर्ट में यह भी कहा गया कि भारत की आबादी आने वाले कई वर्षों तक बढ़ती रहेगी। निश्चित रूप से सात साल बाद जब भारत दुनिया का सबसे अधिक जनसंख्या वाला देश होगा तो चुनौतियां और अधिक गंभीर रूप धारण कर चुकी होंगी। दुनिया की कुल जनसंख्या में भारत की हिस्सेदारी करीब अठारह फीसद हो गई है। जबकि

भारत में 2050 तक जनसंख्या का अनुमान

2050 तक जनसंख्या का अनुमान

2050 तक जनसंख्या का अनुमान

2050 तक जनसंख्या का अनुमान

2050 तक जनसंख्या का अनुमान

अगले एक दशक तक रोबोट दो करोड़ लोगों की नौकरियां छीन सकते हैं। रिपोर्ट के अनुसार ये रोबोट न केवल शहरी क्षेत्रों, बल्कि ग्रामीण क्षेत्रों में भी रोजगार के लिए नई चुनौती होंगे। भारत में 2030 तक दस में से सात नौकरियां पर रोबोट असर दिखा सकते हैं। ऐसे में नई पीढ़ी को रोबोट से मुकाबला करने योग्य बनाना होगा।

रोबोटों की मदद से कारों की असेंबली

रोबोटों की मदद से कारों की असेंबली

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रोबोटों की मदद से कारों की असेंबली

भारत में आबादी तेज रफ्तार से बढ़ रही है। इसके साथ ही बेरोजगारों की तादाद में भी भयानक इजाफा हुआ है। पिछले महीने संयुक्त राष्ट्र ने वैश्विक आबादी पर जो रिपोर्ट प्रकाशित की है, उसमें कहा गया है कि वर्ष 2027 तक भारत की आबादी दुनिया में सर्वाधिक होकर डेढ़ अरब से भी ऊपर निकल जाएगी। अभी भारत की आबादी एक सौ सैंतीस करोड़ है, वहीं चीन की आबादी एक सौ तियालीस करोड़ है। ऐसे में वर्ष 2027 तक चीन को पीछे छोड़ भारत दुनिया का सर्वाधिक जनसंख्या वाला देश बन जाएगा। इन आंकड़ों के साथ जो चिंताएं जुड़ी हुई हैं, वे परेशान करने वाली हैं। ऐसे में भारत के समक्ष जनसंख्या के भारी दबाव के कारण गरीबी, रोजगार, आवास, खाद्यान्न, कुपोषण, जन स्वास्थ्य एवं शहरीकरण की विभिन्न समस्याएं और अधिक चिंताजनक रूप में दिखाई देंगी। इसलिए जरूरी है कि इन आसन्न चुनौतियों पर गंभीरतापूर्वक विचार हो और देश जनसंख्या नियंत्रण के लिए उपयुक्त रणनीति के साथ आगे बढ़े।

रोबोटों की मदद से कारों की असेंबली

रोबोटों की मदद से कारों की असेंबली

रोबोटों की मदद से कारों की असेंबली

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