

Parched Chennai wasted conservation potential

It didn’t move on rainwater harvesting, reclaiming wastewater; other cities must learn from the crisis

CHENNAI’S WATER CRISIS perhaps signals the start of a new normal—abject water-deprivation in parts of India. Indeed, a 2018 report by NITI Aayog speaks of 21 Indian cities, including Bengaluru, Delhi, and Hyderabad, running out of groundwater by 2020; Chennai is the worst-affected among 400 cities across the world studied for water scarcity—four Indian cities are in the top-20 most affected—using data gathered by The Nature Conservancy and the World Wide Fund for Nature. India’s water-crisis—600 million people already face high-to-extreme water stress every year—is rooted in the fact that it has just 4% of the world’s freshwater resources while supporting 16% of its population. Scarcity is compounded by poor quality—with nearly 70% of water contaminated, 200,000 die every year due to inadequate access to safe water. A business-as-usual scenario means, by 2050, India’s GDP could see a 6% loss. Inadequate storage—annual precipitation is 15 times, and the volume eventually available for utilisation four times the country’s reservoir capacity—and abuse of scant resources, thanks to poor agricultural policy among other reasons, are not the only problem. For a country looking at high-levels of water-stress in the future—clashes over water are happening not just between states, but also within—India doesn’t really focus on recycle and reuse or better household/building level harvesting. About 80% of the water that reaches households is lost as wastewater that is never reclaimed. Contrast this with Singapore, which imported 55% of its water requirement from Malaysia in 1965 and yet, has managed to provide 100% access to clean water over the last three decades. Key to its success is its reclamation of wastewater. The Singapore Public Utilities Board, since 2000, has been treating wastewater using microfiltration, reverse osmosis and UV treatment, in addition to the usual water treatment processes, and has delivered potable water that is purer than even the WHO standards. Today, NEWater, the reclaimed water, meets 40% of Singapore’s water needs while desalination plants, started in 2005, meet another 10%. To be sure, Delhi has announced plans to emulate the NEWater model, but the fact is, cities are failing at even simpler solutions. In Bengaluru, the tanker mafia is flourishing as the government has failed to meet demand—with the tankers extracting groundwater from areas adjacent to the city, water deficiency is spreading. The city draws 1,350 million litres externally per day, and yet it squanders 3,000 million litres of the daily average rainfall it receives. The Mumbai Metropolitan region has been battling for a linking of the Damanganga and Pinjal rivers—at significant environmental costs, experts say—but it fails to harvest the 2,400 mm of rainfall it receives, and won’t reclaim wastewater. Tamil Nadu, in 2003, promulgated a landmark ordinance on compulsory rainwater harvesting by all buildings. Chennai has 12.5 lakh buildings, including government ones, and a 2015 government-mandated audit by Rain Centre, an NGO, found that government buildings in the greater Chennai region were the worst violators of the harvesting rule. Now, when Tamil Nadu rainfall deficit has reached 41%, the city is virtually shutting down in distress. The complete neglect of wetlands, lakes, waterbodies and flood-plains and the concretisation/metalling march in cities has come at the cost of water percolation and silting of rivers. Once water-surplus, Chennai sacrificed nearly 75% of its waterbodies from a little over three decades ago to urban development. A study by Anna University shows Chennai lost 33% of its wetlands between 2006 and 2016 and 24% of its agricultural land (crucial for groundwater replenishment). Concurrently, barren land and area under settlement increased by 15% and 13%, respectively. Unsustainable urbanisation, and apathy for water reclamation and harvest brought Chennai to its knees. Other cities must learn from the crisis—given the climate crisis’s impact on monsoon, time for action is running out.

The grey in the black

Estimates of black economy vary from 7-120% of official GDP!

THOUGH THE GOVERNMENT, and the BJP, has spent an inordinate amount of time obsessing about the size of the black economy—the demonetisation exercise in 2016 was meant to be a direct assault on this—the reality is that there is no clarity on just how big the black economy is. The latest report of the Standing Committee on Finance collates the studies done by three leading research institutes—NIPFP, NCAER and NIFM—and comes up with numbers that vary widely and, in many cases, are not even that large in relative terms. In terms of the total black money, the revenue secretary told the committee that the estimates varied from 7% to 120% of the reported GDP. And, as for the money held overseas, NIPFP put it at 0.2% to 7.4% of GDP between 1997-2009, NCAER at \$384-490bn between 1980-2010 (that’s around 3% of GDP in that period) and NIFM even lower at \$216bn. While that still seems a lot of money in absolute terms, the fact is that amnesty schemes haven’t really worked in the past and, in any case, given the way GDP is growing, the government would do well to concentrate on closing loopholes for present tax evasion. While VDIS netted ₹9,700 crore in 1997, the IDS netted ₹28,000 crore in 2016—the latter, however, is less than 0.2% of that year’s GDP. Given that tax-to-GDP was 8.7% in FY01 and rose to 12.1% in FY08, it is clear that there is a lot more to be made from tightening the tax noose on current income. This 12.1% number fell to 10.1% in FY14, the year before the BJP came to power, and then rose to 11.2% in FY18, before falling to 10.9% in FY19; what is important is to stop tax compliance from falling, and to try to keep raising it. The first step, of course, would be to plug all loopholes in the tax framework so as to minimise the leakage; too many exemptions and rebates will ultimately allow assesses to fudge their accounts. As the economy gets more formalised, and the GST system becomes more effective with invoices being matched regularly, it should become harder for businesses to evade taxes. The authorities must, at the same time, mine all the information they are able to access on incomes, revenues, most important, expenditures. Operation Insight, for instance, which is a linking of several databases on purchases of jewellery, automobiles, property, credit card payments, airline tickets, etc, can be a big source of data, with which to track down evaders. Moreover, with every bank account now mandatorily linked to PAN numbers, banks can be asked to furnish lists of cash withdrawals by individuals above a certain threshold. To make this work, though, banks must quickly weed out fake PANs by matching them with the customers’ Aadhaar numbers. Given much of the unaccounted wealth in the country is in the form of property, the amendments to the Benami Property Act and the crack-down on lakhs of shell companies—used to avoid taxes—will also help.

Offroading Education

Doing away with the minimum-education criterion for drivers is a bad idea

LAST WEEK, THE ministry of road transport and highways decided to do away with the requirement of a minimum educational qualification for driving a commercial vehicle. An amendment Bill aims at removing Rule 8 of the Central Motor Vehicles Rules, 1989, which states that a driver needs to be educated up till class 8th for driving a transport vehicle. The reason given by the ministry for this amendment is that many people from backward regions of India depend on low-income livelihoods, such as driving—but the rule on the minimum educational level becomes a hurdle since many don’t meet it. In such a scenario, the ministry felt that the mandatory rule for being able to drive transport vehicles should not depend on one’s education level, but on the skill-set associated with driving. Also, the ministry feels that this decision will help tackle the shortage of 22 lakh drivers in the transport sector. It proposes to substitute the education criterion with strict skill testing of drivers. While that may seem alright in the short-term, doing away with basic education as a requirement for any job, especially when the government is providing elementary education for free, is a bad step in the long run. Future jobs, including driving, will need basic education for skill deployment. With the digitisation of the transport sector unfolding at its current pace—from GPS-based navigation to text/picture-based interface with transport apps—acquiring the necessary skills will require basic education. In any case, automated vehicles may even make drivers redundant—basic education can prove a redeemer if it opens up opportunities for a second career. India may plunge further in the Human Development Index if it disincentivises the pursuit of education. Educational attainment of children shows a high correlation with that of parents—the move may lead to low education attainment for generations to come.

ON SATURDAY, JUNE 23, Laxmikant Kauthakar, 35, called to say that he would plant illegal genetically-modified (GM) herbicide-tolerant (HT) cottonseed stacked with the bollworm-killing Bt trait the next day. He had stopped growing cotton in 2014, unable to afford manual weeding and pesticides, and switched to sugarcane and pigeon pea (tur) instead. When reminded of the stiff penal provisions of the Environment Protection Act, 1986, Kauthakar said, “It is not about me. There are no jobs. Business is competitive. Our children don’t want to do agriculture. They are rushing to the cities.” He said there was a shortage of labour and costs of manual weeding were high. “Whatever technology is there in the world should be available to us. This is our right.” On Sunday, Kauthakar planted HTBt cottonseed at his farm in Adgaon Buzurg village, in Akola district’s Telhara tehsil. He and 10 others, including Lalit Patil Bahale, were booked under the Seed Act, the Environment Protection Act and sections 143 (unlawful assembly), 180 (refusal to sign statement), 188 (disobedience of public servant’s order) and 420 (cheating) of the Indian Penal Code. Akola District Collector, Jitendra Papalkar, said the government had no issues with HTBt cotton, if approved. The seeds sown had no labels. A sample had been sent for testing to the Central Institute of Cotton Research, Nagpur. “Who will bear responsibility if farmers suffer losses?” he asked. Wilful planting of illegal HTBt cotton began on a 3-acre slice of Bahale’s 38-acre farm at Akoli Jahangir village, in Akola district’s Akot tehsil on June 10. The Shetkari Sanghatana, which believes in free markets and free access to agricultural biotechnology, is organising the protest planting. Bahale is a microbiologist. He had stopped growing cotton about two decades ago, after persistently losing the cotton crop to bollworms. That was before the GM Bt cotton trait was approved for cultivation in 2002. Bahale has switched to high-value horticulture. The movement has gained traction. As of Monday, June 24, 19 farmers had lent their farms for the protest planting, including Mahadeo Khamkar of Anandwadi village in Ahmednagar’s Shrigonda tehsil, Madhusudan Hame of Shegaon (Kund) in Wardha’s Hinganghat tehsil, Nilesh Nemade of Adgaon in Akot tehsil, Baburao Appaji Golde of Revgaon in Jalna

The conservative case for a carbon tax

If economic conservatives want to stay relevant, they need to provide market-based solutions to one of the biggest challenges of the 21st century—climate change

REPUBLICANS HAVE LONG been nearly united in their opposition to any comprehensive effort to reduce climate change. Part of the opposition is political: They may be making the calculation that, although voters are worried about the issue, actual carbon-pricing programs have not always fared so well at the polls. But a significant part of Republican opposition is philosophical: They are worried about opening the door to a centrally planned economy. For the sake of the planet—and their party—they need to let this go. This isn’t to say that Republican fears are irrational. Consider the case of Washington State’s ill-fated carbon-tax proposal. In 2016, centrists in the state introduced an initiative that would impose a \$25 carbon tax and use the revenue to cut other taxes in the state. It is the kind of proposal that Republican economists such as Greg Mankiw have long supported, and in fact he supported this tax. Opposing the tax, however, was a coalition of left-wing groups known as the Alliance for Jobs and Clean Energy, which said the bill didn’t do enough to tackle issues of poverty, race and social injustice. The state Democratic Party eventually lined up behind the alliance, and the measure was defeated. Fast forward three years to the drafting of the Green New Deal resolution in the US Congress. This time, the national Democratic Party enlisted the support of organisations like the Sunrise Movement to ensure that the plan would be compatible with the so-called climate-

justice movement. The final product includes language “guaranteeing a job with a family-sustaining wage, adequate family and medical leave, paid vacations, and retirement security” to all Americans as well as a vow to repair the “historic oppression of indigenous peoples, communities of colour, migrant communities, deindustrialised communities, depopulated rural communities, the poor, low-income workers, women, the elderly, the unhoused, [and] people with disabilities.” No matter how one feels about this list of priorities, it goes far beyond reducing greenhouse gas emissions. Nonetheless, the Green New Deal resolution has been endorsed by the major Democratic presidential candidates. So conservatives are correct that powerful groups on the left are seeking to use climate-change legislation to fulfil much more expansive objectives. That just makes it all the more important for them to advocate more strongly for a pro-market approach to climate change. If they don’t, then the debate will devolve into a choice between the extreme vision favoured by climate-justice advocates and the bloated, something-for-every-interest-group version favoured by the Democratic establishment. As an alternative, conservatives should offer the same type of pro-growth tax exchange that the climate-justice movement defeated in Washington State three years ago. That proposal might not have been progressive enough for Washington, but it

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district, Akshay Mahajan of Bori village in Ralegaon tehsil of Yavatmal district, and Radheyshyam Wable of Umbra village in Hingoli. The slogans explain why: *Chor Bt nahin, halkache Bt* (Not by stealth, Bt by right) *Tantragyan swatantra amchya hakkachi, nahin kunyacha bapache* (Technology freedom is our right, not anybody’s patrimony). *Chor Bt nahin, Imandaar Bt* (Honest Bt, not stolen Bt). “Why do we have to go by hook or crook?” asks Anil Ghanvat, President of the Sanghatana. An agricultural science graduate, he practices farming in Ahmednagar. “This government has compelled us to be smugglers.” The Field Inspection and Scientific Evaluation Committee, set by the Department of Biotechnology in 2017 to ascertain the spread of illegal HT cotton, estimated the area covered by illegal HT cotton at 15-17% of the total. It advised that the crop be destroyed. Not wishing to risk farmers’ anger, states like Andhra Pradesh banned the sale of the herbicide Glyphosate, which spares HT cotton, but kills weeds, when sprayed. Illegality cannot be condoned. But, what is driving farmers in droves to commit illegality, and risk monetary fines and prison sentences? The nub of the issue is the government’s lack of accountability on GM crops. If a developer has spent time and money complying with a procedure established by law, can ministers deny or stall approval merely because they do not agree with the science or it doesn’t suit their political interests? Who is responsible for losses caused to research companies, which acted in good faith, when their GM seeds are not approved for cultivation despite passing bio-safety trials and being approved by regulatory committees? Who will compensate farmers for losses or extra costs arising from being denied such technology? Shouldn’t there be a time-frame for granting of approvals? And, if public sensitivity is the issue, shouldn’t it be addressed with devices like labelling?

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would probably sell nationally. There are small-government conservatives, typified by Grover Norquist, who fear that even a modest carbon tax would grow over time and be used to fund additional spending rather than tax cuts. Here Republicans should rely on an old mantra they usually invoke: Trust the voters. Energy taxes, which affect the prices of things people buy every day, are more transparent than income taxes. (Many voters don’t even realise they got an income tax cut in 2017.) Gas taxes are so salient, in fact, that after the California legislature passed a 12 cents per gallon increase in 2017, voters almost repealed it by referendum the next year. There is also a concern in some parts of the country that a carbon tax would be the death knell to a coal industry already in decline due to larger economic forces. Pairing a carbon tax with relief for coal miners would at least provide some recompense for job losses that are all but inevitable. There are obvious reasons why Republicans have been hesitant to embrace carbon taxes. But American politics are shifting rapidly. Failure to articulate a climate change policy has hurt Republicans with younger voters. If economic conservatives want to stay relevant, they need to provide market-based solutions to one of the biggest challenges of the 21st century. *This column does not necessarily reflect the opinion of the editorial board of Bloomberg LP and its owners*

ON JHARKHAND LYNCHING

President of INC, Rahul Gandhi

The brutal lynching of this young man by a mob in Jharkhand is a blot on humanity. The cruelty of the police who held this dying boy in custody for 4 days is shocking as is the silence of powerful voices

farmers are denied the technology and Indian consumers have to eat pesticide-laced brinjal. Another example is the GM mustard hybrid, DMH-11, developed by a team of Delhi University scientists with (public) funding from the National Dairy Development Board (NDDB) and the Department of Biotechnology. The GM technology deployed in it, to first induce male sterility and restore fertility after cross pollination, allows the efficient development of high-yielding hybrids in mustard, which is self-pollinating. The research was first published in an international journal in 2001. Field trials began in 2002. After 15 years, in May 2017, the GEAC recommended release for cultivation. Environment minister Anil Madhav Dave passed away before he could approve it, within days of the recommendation. His replacement, Harsh Vardhan, sat on the file, reportedly, because the Swadeshi Jagran Manch, one of 36 organisations affiliated to the Rashtriya Swayamsevak Sangh (RSS) is opposed to GM technology. In the case of HT cotton, pollen-flow studies began in 2006. Between 2008 and 2012, two levels of bio-safety research studies were conducted and the dossier was presented to GEAC in 2013. But in August 2016, the developer, Mahyco, withdrew the application for commercial release of the cottonseed because agriculture minister Radha Mohan Singh had upended India’s intellectual property rights regime with curbs on retail prices and royalty payments that favoured seed companies more than farmers. Mahyco reckoned that even if HT cottonseed, combined with the insect-resistant Bt trait, were released, it would not profit from it. “We don’t want price controls or limits on royalty,” says Ajit Narde, who heads Shetkari Sanghatana’s technology cell. Ghanvat says farmers don’t mind paying royalty for proprietary traits and market prices for seed so long as they get more than proportionate returns. The Shetkari Sanghatana does not agree with Gandhi’s vision of self-contained villages or his disapproval of modern technology, but like him, it wants farmers to be self-reliant. It draws inspiration from his Satyagraha technique. “We see Gandhiji’s spectacles everywhere but not his vision,” said Pradnya Bapat, the Sanghatana’s leader tartly.

LETTERS TO THE EDITOR

PM Modi’s speech Prime Minister Narendra Modi’s no holds barred vituperative attack on the Gandhis is nothing new. However, it is not clear why he considered them central to his articulations in the Parliament. While Modi never tires of reminding us of the Congress party’s dependence on the Nehru-Gandhi dynasty, he deems it unnecessary to acknowledge the umbilical cord existing between RSS and BJP. Evidently, BJP is the political arm of RSS. That Modi is larger than life does not mean that RSS does not pull the strings. Conveniently Modi, an erstwhile RSS *pracharak* omitted to mention that RSS extended support to the Emergency. What is more, he forgot to refer to blots on India’s democracy other than the Emergency. Hate crimes have increased manifold during his rule. As for Modi’s call for fulfilling the dream of an inclusive nation, it is doubtful that a leader who refused to wear a skull cap and compared victims of communal violence to puppies possesses the moral authority to act as a unifier. One wishes that Prime Minister Narendra Modi shows the strength of personality to repudiate his description of himself as a Hindu nationalist (which he did in a BBC interview in the run-up to 2014 general election) and re-christen himself as an Indian nationalist to do justice to the Constitution and the exalted office that he holds.

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CITIES AT CROSSROADS

Saving
India's water

What is needed is a political compact between the Centre and the states to jointly address the challenges of saving India's water, while actively involving local governments and engaging with the communities of water users. It is a tall order, but there is no alternative than to begin

CHENNAI HAS BEEN MUCH in the news recently for its water crisis. Scuffles and suffering have been reported from different parts of the city. Water crimes in Ranchi have also hit the headlines. Cities in Madhya Pradesh have seen stabbings and killings over water, and the police have been called upon to guard water tankers and water sources. Cape Town in South Africa was the first major city in the modern era to face the threat of running out of drinking water, as reported by the BBC in February 2018. The BBC listed another 11 cities most likely to run out of water. This list included Bengaluru.

The 2030 Water Resources Group on *Charting Our Water Future*, set up by the erstwhile Planning Commission in 2009, had projected that if the current demand pattern for water continues, by 2030 the available water will meet only about half of India's demand for water. Ten years later, in 2019, the water crisis is here and it is taking its toll on rural as well as urban areas of India. We are staring at a train wreck in slow motion and we need to act fast and act boldly to avoid the crash.

Water scarcity in India has come about not so much from insufficient supply of water as from the way in which we manage the water we have. Agriculture

uses 78% of India's water, and uses it very inefficiently (agricultural water-use efficiency is 30% for surface water and 55% for groundwater in India, compared with 77% in Israel). Notwithstanding the large investments in irrigation networks, about two-thirds of water used for irrigation comes from groundwater. Two factors—the huge electricity subsidies for farmers to pump groundwater and the fact that groundwater is largely unregulated—have led to a steady explosion in its use through tube wells for irrigation over the past several decades. About 80% of rural demand for drinking water is also met by groundwater.

Urban India's inefficiency in water use arises from inadequate, old and dilapidated distribution networks, inefficient operations, inadequate metering, incomplete billing and collection, and a general state of poor governance. Another source of inefficiency comes from not treating wastewater and using the recycled water for specialised uses such as horticulture and also for flushing toilets. Underpricing of urban water also contributes to wasteful use of water. If something is underpriced, users will use more of it.

Most of us living in cities expect to have access to drinking water from taps in our homes. This requires a distribution network of pipes that can bring water

from the basic source of bulk supply to our homes. However, access to treated tap water is available to only 62% of urban households (Census 2011). Those who are unconnected to the piped network, and include mostly but not only the poor, have to rely on buying water from tankers at exorbitant rates. This leads to increasing but unaccounted use of groundwater by extensive digging of borewells to meet the demand deficit of water.

There is clearly a need to expand coverage to the "unconnected" population. This will call for expansion and renovation of the infrastructure of the distribution network. It will also call for additional supplies of water, especially because the groundwater that is currently being used to supply this population is expected to dry up. The NITI Aayog has projected that ground water for 21 cities will run out by 2020 (i.e. next year), and the cities include Bengaluru, Delhi, Chennai and Hyderabad.

Financing the expansion in urban water supply will be a problem. Even if the capital cost of the infrastructure is made available either through national missions or public-private partnership, the operation and maintenance cost of running the system (and in the case of PPP, a large part of the capital cost) will have to be recovered through user charges. Pricing water is important both for demand management and for economic viability of water-delivery systems.

We also need to mobilise more supply of water from basic natural sources. Only then can greater connectivity result in piped water delivery to all in urban areas. The mobilisation of additional supplies of water poses a major challenge, since the natural recharge zones are increasingly eroded because of unplanned urbanisation.

In addition, we need to deal with the supply constraints arising from the neglect of rivers, lakes, ponds and other waterbodies in and around our cities, which feed the reservoirs that are the bulk sources of water. These waterbodies need to be protected from encroachment so that our catchment area for water storage and rainwater harvesting is not reduced. This requires strict vigilance on land-use planning and building permissions in our cities. It may even warrant removal of existing encroachments. An important role has to be played by the concerned state governments including ensuring compliance with environmental guidelines laid

down by the ministry of environment, forest and climate change, and also the National Green Tribunal. Above all, increased water-use efficiency in agriculture is critical to release water supply from agriculture for other uses.

The quality of water issue is also very significant for public health. Only about 30% of the municipal wastewater or sewage is treated, and the rest is released untreated into rivers and/or the ground. Because of density and concentration in urban areas, contamination from wastewater happens much faster. It is also important to ensure that untreated sewage is not dumped into open storm

water drains through which it is carried and discharged into waterbodies. Surveys of groundwater in recent years show higher and higher levels of microbiological contamination. It is essential to ensure that the wastewater is treated before it finds its way back into our basic source of water and contaminates it.

Water is even more important than food for survival. No wonder, water governance is intimately linked to politics. It reminds me of the Pakistani play *Kala Mainda Bhes* (Black is My Attire), which I saw in Delhi some 20 years ago. In the play, the owner of the only well in the village, *Khoao Shah* (literally meaning the Lord of the Well), reigned supreme and his rule was called "*Khoao Shah di Sarkar*" which was subordinate only to what was called *Vaddi Sarkar*, i.e. the Almighty. Cities in Tamil Nadu and Madhya Pradesh certainly have no *Khoao Shah* yet, but the crisis of water supply seems just as acute.

It is clear that management of water requires a holistic approach taking account of the multiple aspects that have been spelt out above. In a way, setting up of the ministry of jal shakti is recognition of this, except that jal shakti deals with rural water needs only. We cannot split urban water from rural. Water will flow from rural to urban and vice versa, and has always done so. Besides, reshaping water governance will require state governments and local governments to take coordinated action in a federal system. What is needed is a political compact between the Centre and the states to jointly address the challenges of saving India's water, while actively involving local governments and engaging with the communities of water users. It is a tall order, but there is no alternative than to begin.

UNION BUDGET

Bringing the
economy
back on trackFRANK
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Sluggish economic growth, addressing collection targets are areas to target

THE UNION BUDGET 2019 is scheduled at a time where reviving a relatively—by recent standards—sluggish economic growth and addressing collection targets are the most important areas for the government as it starts the journey into its second term. Therefore, in an effort towards pushing consumer spending by leaving more disposal income in the hands of the middle class and mobilising private investment without compromising on tax revenue collections, which fund public spending, the Union Budget 2019 could be walking a tightrope for the government.

On the personal tax front, increasing the basic exemption limit may not align with the government's objective of widening the tax base and, thus, reduction in slab rates could be an alternate that may be considered to reduce the tax burden on the middle class. Although given the sops provided in the Interim Budget in February 2019, this appears unlikely. Also, to channelise individual savings into infrastructure spending of the government, reintroduction of infrastructure bonds with tax incentives may be on the cards.

At the beginning of the first term of the NDA government, corporate tax rate was proposed to be gradually reduced to 25% by the end of the five-year term, from the 30% rate applicable to the corporates. But in the Union Budget 2018, which was the last full Budget of the government, the corporate tax rate was reduced to 25% only for MSMEs with turnover/gross receipts less than ₹250 crore. With other major economies like the US bringing in tax rate cuts to attract investments, India would not want to be seen as an outlier with higher tax rates amongst major economies. Conversely, fiscal prudence may not permit the government to provide a corporate tax rate cut. However, coverage of corporates within this lower tax bracket may be broadened by increasing the threshold of turnover of ₹250 crore.

Employment data has been an area of concern in the recent times. To further promote the start-up initiative and MSME growth, tax incentives like exemptions on income from funding activities for the first few years may be provided to the investor community/angel investors. This could help mobilise private investment, generate employment, increase consumer spending, and revive the growth rate.

From the perspective of incentivising sustainable growth through large-scale manufacturing and adoption of electric vehicles, it would not be surprising to see some incentives and tax holidays for manufacturers of electric vehicles and batteries or providers of charging infrastructure being introduced in the Union Budget 2019. The incentives may also be extended to the consumers of electric vehicles to take care of the additional cost burden due to higher costs of these vehicles—more importantly, with subsidies that existed in FAME being withdrawn under FAME-II.

Towards addressing the challenges around generation of black money, the government may consider imposition of taxes in the range of 3-5% on cash withdrawal of more than ₹10 lakh in a year. It is believed that paying ₹30,000-50,000 on value of ₹10 lakh can be perceived as a loss by the common man, and this will push the economy towards complete digitisation and keep a tab on the generation of black money.

For the international community, the draft rules released for public comments last month, dealing with allocation of appropriate profits of MNCs doing business in India for taxation in India, may be introduced either in the Union Budget 2019 or around that time. This will have significant implications on many of the MNCs doing business in India, physically or through digital means.

One will also wait to see how the new finance minister deals with the introduction of the new direct taxes code and what announcements are made in this regard.

We need to deal with the supply constraints arising from the neglect of rivers, lakes, ponds in and around our cities, which feed the reservoirs that are the bulk sources of water

There could be efforts towards pushing consumer spending by leaving more disposal income in the hands of the middle class and mobilising private investment

DEAR PRIME MINISTER, YOU have been voted back to power at the Centre for a second innings of five years with a thumping majority. It happened because you connected meaningfully with the masses, and especially with the urban and rural poor (includes small/marginal farmers, landless labourers), by announcing and executing (to some extent) a plethora of schemes (Jan Dhan, life insurance at ₹1 per day, Ujjwala, Swachh Bharat, Saubhagya, Ayushman Bharat, Mudra loans, PM Fasal Bima Yojana, PM-Kisan, etc), benefiting them in one way or the other. These schemes resonated so well with the masses that even important issues—such as a slowing economy, high unemployment rate, demonetisation, implementation of GST, farmers' distress and the Rafale controversy—did not matter to the poor voter as much as 'Pulwama' and 'Balakot', which demonstrated your strong, decisive and stable leadership to the people in the absence of any easily-acceptable alternative.

Having said that, my purpose here is not to analyse the reasons of your victory in the parliamentary elections, but to emphasise that now is the time for introspection and pondering as to what is to be done in the next five years. I say this because the poor of the country are still poor and facing untold miseries, and we should not forget that they voted for

Need anti-drought
measures, Mr PM

Droughts occur in India at frequent intervals and a permanent solution needs to be found

PP
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Modi with some good hopes in the near future. It needs to be stressed here that achievements under various programmes of the government during the last five years (2014-19) can only be said to have small but without any significant impact on the quality of social and economic aspects of life. Added to all this, now we are facing the big challenge of impending drought this year, and my objective here is to focus on the various issues concerning drought and, sir, what your government needs to do about it. To my mind, there are four main factors that appear to be contributing to drought. These are as under:

First, according to India Meteorological Department (IMD), the pre-monsoon

rains (March-June, 2019) have fallen short by 25%—the second-driest pre-monsoon season in the last 65 years (it fell short by 31% in 2012). Here, it would be interesting to note that one of India's wettest places, Agumbe in Karnataka's Western Ghats, received 158% less pre-monsoon rains this year. Now, due to the occurrence of weak El Nino weather phenomenon over the Equatorial Pacific Ocean region, monsoon rains (June-September, 2019) are expected to be less than normal (which is 96-104% of long period average)—and even though IMD is somewhat changing its predictions recently, only time will tell and we should not be caught unawares.

Second, only about 35% of the culti-



vated area has proper irrigation facilities (which are also being adversely impacted by melting glaciers due to global warming) and the rest 65% is rain-dependent. Further, groundwater is getting scarce by the day due to overexploitation in some regions/states due to wrong choice of crops being grown. Punjab stares at a parched future because 96% of the 35.78 billion cubic metres (bcm) of groundwater extracted is used by paddy growers, and it is estimated that the state would empty all its subsoil water within 22 years if the current rate of fall of 51 cm per year in its level continues, thus turning the country's food bowl into a desert. A similar glaring example is that of Maharashtra, where growing of sugarcane is consuming 60-65% of irrigation water. What a grim scenario and a great environmental concern, too.

Third, water scarcity leading to drought is being created, as out of a total annual precipitation of 4,000 bcm, only 1,100 bcm of water is eventually used either because of losses (2,900 bcm) due to evaporation or due to constraints like water harvesting and lack of storage capacity, which is barely 270 bcm today.

The situation is being worsened by the fact that a large number of anti-drought projects (7.9 lakh, costing ₹417 crore) related to water harvesting and micro-irrigation taken up in many states under MGNREGA are incomplete or have been abandoned due to inadequate fund allocation, and only 27,000 works have been completed so far. Karnataka, Maharashtra (Vidarbha region) and Andhra Pradesh (Amaravati) are some cases in point where a large number of drought-proofing works are incomplete.

Fourth, water availability in the reservoirs of 91 dams in the country was about 31.65 bcm as on May 30, 2019, which is about 20% of the total storage capacity of these reservoirs, according to the Central Water Commission (CWC). The states worst affected and having storage much less than last year in the corresponding period are Karnataka, Andhra Pradesh, Telangana, Kerala and Tamil Nadu (of a total live storage capacity of 51.59 bcm, reservoirs have live storage availability of

5.19 bcm) in the south, and Maharashtra and Gujarat (total live storage capacity is 31.26 bcm and availability is only 3.53 bcm) in the west. Other affected states are Jharkhand, Odisha and West Bengal and in the east, and Rajasthan and Madhya Pradesh in central India.

It must be mentioned that of the 634 districts, 393 are not drought-ready and only 241 districts (40%) are drought-resilient. Thus, the situation is very grave and farmers' distress is going to increase manifold. This would adversely impact India's GDP growth and lower the achievements under UN Sustainable Development Goals, in which we are already lagging behind targets. Droughts occur in India at frequent short intervals and a permanent solution needs to be found out by taking correct policy decisions, which have been eluding us so far.

To conclude, although many state governments like Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Odisha and Rajasthan have declared many districts as drought-hit, the central government is yet to declare drought formally. I hope the meeting of the Governing Council of the NITI Aayog under the chairmanship of the Prime Minister, held on June 15, would have taken a serious note of threatening drought and water management in drought-hit areas with the same urgency as shown in the appointment of the two PM-led panels on struggling growth and job creation.