# Advantage BJP

In Maharashtra, as the opposition is stuck in the past, the ruling party is promising change

s campaigning gains momentum in Maharashtra for the Assembly election on October 21, the rul-Ling BJP has reinforced itself and disoriented the opposition. With this election, the slow changes in Maharashtra politics over the last five years have taken shape. Devendra Fadnavis is the first non-Congress Chief Minister in the State to complete a five-year tenure. He has decimated internal party rivals and forced ally Shiv Sena to accept a subordinate status. The BJP unilaterally announced 164 seats for itself out of the total 288 and the Sena, which used to get the lion's share of Assembly seats and the CM's post, meekly accepted the situation. This supremacy of the BJP is partly due to national factors, but the fact that the party's Hindutva nationalist politics has trumped the Sena's regional agenda is itself noteworthy. The Thackerays at the helm of the Sena used to control power in the State without contesting elections, but this time, one of them is personally in the fray, in yet another sign of the changed times. The BJP augmented itself with a cocktail of social and administrative measures over the last five years. It weakened the Maratha power network but also offered the community reservation. Massive protests by run down farmers was met with a loan waiver scheme. The Bhima Koregaon incident of 2018 in which a Dalit gathering was attacked by a violent group was followed by an extensive crackdown on social activists and Dalits by the State police. The BJP's social engineering meanwhile roped in OBCs to its fold.

Ruthless efficiency remains the hallmark of the BJP, while the NCP-Congress combine is battling internal dissent, organisational disintegration and an unfavorable social climate. Several coalition leaders crossed over to the other side. NCP chieftain Sharad Pawar is himself the target of an ED inquiry. Former Mumbai Congress chief Sanjay Nirupam is unhappy that his supporters have been ignored in ticket selection and will not campaign for the party. Dynastic politics appears to be the comfort zone of an opposition in retreat. Children of several leaders are in the fray, and among the new entrants is Rohit Pawar, the grand-nephew of the patriarch. The NCP-Congress manifesto is a combination of nativist slogans such as reserved employment for the local population and addresses broader issues regarding agricultural crisis and environment. Grand intentions of the alliance are hardly inspiring because of the popular apathy towards dynastic politics and the elites who stand rightly accused of rigging the social and economic order to their benefit. The Congress-NCP combine is deeply entangled in the State's cooperative and sugar sectors, which was once a source of strength but is currently a millstone around its neck. Maharashtra is the perfect stage for an ascendant BJP that is promising to bring down the old order.

# A delicate balance

growth without affecting welfare measures

ortugal's centre-left Socialists (PS) are eyeing a second consecutive term in office after securing about 37% of the vote in Sunday's elections. But the rigours of putting together a coalition all over again may have sobered the sense of victory for Prime Minister António Costa, who leads a minority government. The Socialists have emerged as the largest party, unlike in 2015, when the centre-right Social Democrat (PSD)'s failure presented them with an opportunity to forge a coalition. The Socialists' main coalition partner, the anti-capitalist Left Bloc (BE) has held on to its seats, while the Communist party (PCP) has lost a few. The new parliamentary arithmetic appears advantageous to the Socialists, but it may not always convert into greater political leverage. When the coalition took shape among the three parties some weeks after the 2015 elections, it was described as "geringonca", or an 'unlikely contraption'. The two left-wing parties backed a minority PS government only on the latter's promise to end the austerity policies of the centre-right administration.

This time around, conditions are markedly different, with unemployment around 6%, and a positive outlook from credit ratings agencies. Mr. Costa has committed to maintaining fiscal discipline and a surplus budget to cushion Lisbon from the risk of a global recession. While the prospect of a zero per cent budget deficit may hold some appeal in European Union circles, the Socialists' allies are concerned about Mr. Costa's evident shift in stance. The BE has not guaranteed support for Mr. Costa, declined to accept ministerial positions, and instead offered backing based solely on specific issues. The party has said that it would advocate for an increase in the minimum wage, roll-back of pension cuts, investments to combat global warming and other labour legislation. Mr. Costa, possibly expecting a more assertive BE, had cautioned voters against the risk of political instability - drawing comparison with the impasse in neighbouring Spain – if the Socialists were not handed a majority. Now that the polls are behind, the Prime Minister has the delicate task of negotiating with the same allies in the weeks ahead. A guarantee to eschew the path of punitive austerity could go some way to assuage the concerns of the BE and the PCP. Mr. Costa should also address the charge that despite his antiausterity drive, several sectors are woefully in need of public investment. His priority regarding the need for a stable government is understandable. The political deadlock he had warned of after Sunday's elections must be averted at any cost. Mr. Costa seems best placed for the task, going by the plaudits he has won for balancing the need for growth and fiscal rectitude.

# Stirring up the truth about ZBNF

Zero Budget Natural Farming has no scientific validation and its inclusion into agricultural policy appears unwise



R. RAMAKUMAR & ARIUN S.V.

ost criticisms of modern agricultural practices are criticisms of post-Liebig developments in agricultural science. It was after the pioneering work of Justus von Liebig and Friedrich Wöhler in organic chemistry in the 19th century that chemical fertilizers began to be used in agriculture. In the 20th century, the criticisms levelled against Green Revolution technologies were criticisms of the increasing "chemicalisation" of agriculture.

Claims were made that alternative, non-chemical agricultures were possible. Organic farming became an umbrella term that represented a variety of non-chemical and less-chemical oriented methods of farming. Rudolf Steiner's biodynamics, Masanobu Fukuoka's one-straw revolution and Madagascar's System of Rice Intensification (SRI) were examples of specific alternatives proposed. In India, such alternatives and their variants included, among others, homoeo-farming, Vedic farming, Natu-eco farming, Agnihotra farming and Amrutpani farming. Zero Budget Natural Farming (ZBNF), popularised by Subhash Palekar, is the most recent entry into this

According to Mr. Palekar, all knowledge created by agricultural universities is false. He calls Liebig as "Mr. Lie Big". He labels chemical fertilizers and pesticides as "demonic substances", cross-bred cows as "demonic species" and biotechnology and tractors as "demonic technologies". At the same time, Mr. Palekar is also critical of

organic farming. For him, "organic farming" is "more dangerous than chemical farming", and 'worse than [an] atom bomb". He calls vermicomposting a "scandal" and Eisenia foetida, the red worm used to make vermicompost, as the "destructor beast". He also calls Steiner's biodynamic farming "bio-dynamite farming". His own alternative of ZBNF is, thus, posed against both inorganic farming and organic farming.

Mr. Palekar's premise is that soil has all the nutrients plants need. To make these nutrients available to plants, we need the intermediation of microorganisms. For this, he recommends the "four wheels of ZBNF": Bijamrit, Jivamrit, Mulching and Waaphasa. Bijamrit is the microbial coating of seeds with formulations of cow urine and cow dung. Jivamrit is the enhancement of soil microbes using an inoculum of cow dung, cow urine, and jaggery. Mulching is the covering of soil with crops or crop residues. Waaphasa is the building up of soil humus to increase soil aeration. In addition, ZBNF includes three methods of insect and pest management: Agniastra. Brahmastra and Neemastra (all different preparations using cow urine, cow dung, tobacco, fruits, green chilli, garlic and neem).

#### **Unsubstantiated claims**

To begin with, ZBNF is hardly zero budget. Many ingredients of Mr. Palekar's formulations have to be purchased. These apart, wages of hired labour, imputed value of family labour, imputed rent over owned land, costs of maintaining cows and paid-out costs on electricity and pump sets are all costs that ZBNF proponents conveniently ignore.

Second, there are no independent studies to validate the claims that ZBNF plots have a higher yield than non-ZBNF plots. The Govern-

ment of Andhra Pradesh has a report, but it appears to be a self-appraisal by the implementing independent studies based on field trials are not available. There is a report from the La Via Campesina for Karnataka, but it is based on accounts of practitioners and not field trials. One field trial is ongoing at the G.B. Pant University of Agriculture and Technology, but its full results will be available only after five years. According to reliable sources, preliminary observations of these field trials have recorded a yield shortfall of about 30% in ZBNF plots when compared with non-

#### Standing reason on its head

Third, most of Mr. Palekar's claims stand agricultural science on its head. Indian soils are poor in organic matter content. About 59% of soils are low in available nitrogen; about 49% are low in available phosphorus; and about 48% are low or medium in available potassium. Indian soils are also varyingly deficient in micronutrients, such as zinc, iron, manganese, copper, molybdenum and boron. Micronutrient deficiencies are not just yield-limiting in themselves; they also disallow the full expression of other nutrients in the soil leading to an overall decline in fertility. In some regions, soils are saline. In other regions, soils are acidic due to nutrient deficiencies

or aluminium, manganese and iron toxicities. In certain other regions, soils are toxic due to heavy metal pollution from industrial and municipal wastes or excessive application of fertilizers and

On their part, agricultural scientists do identify the improper/imbalanced application of fertilizers, that too with no focus on micronutrients, as a matter of concern. Hence, they recommend locationspecific solutions to nurture soil health and sustain increases in soil fertility. They suggest soil testbased balanced fertilisation and integrated nutrient management methods combining organic manures (i.e., farm yard manure, compost, crop residues, biofertilizers, green manure) with chemical fertilizers. But ZBNF practitioners appear to insist on one blanket solution for all the problems of Indian soils. One of Mr. Palekar's favourite remarks is that "soil testing is a conspiracy".

Fourth, Mr. Palekar has a totally irrational position on the nutrient requirements of plants. According to him, 98.5% of the nutrients that plants need is obtained from air, water and sunlight; only 1.5% is from the soil. All nutrients are present in adequate quantities in all types of soils. However, they are not in a usable form. Jivamrit, Mr. Palekar's magical concoction, makes these nutrients available to the plants by increasing the population of soil microorganisms. All these are baseless claims. The Jivamrit prescription is essentially the application of 10 kg of cow dung and 10 litres of cow urine per acre per month. For a five-month season, this means 50 kg of cow dung and 50 litres of cow urine. Given nitrogen content of 0.5% in cow dung and 1% in cow urine, this translates to just about 750 g of nitrogen per acre per season. This is totally inadequate considering the

soils.

Finally, the spiritual nature of agriculture that Mr. Palekar posits is troublesome. Some of his statements are odd. He has claimed that because of ZBNF's spiritual closeness to nature, its practitioners will stop drinking, gambling, lying, eating non-vegetarian food and wasting resources. For him, only Indian Vedic philosophy is the "absolute truth". By placing cows at the centre of ZBNF, he (wrongly) claims that India's cattle population is falling. From there, he espouses empathy for the activities of gau rakshaks. All of this reeks of a cultural chauvinism that uncritically celebrates indigenous knowledges and reactionary features of the past.

#### Scientific approach needed

Undoubtedly, improvement of soil health should be a priority agenda in India's agricultural policy. We need steps to check wind and water erosion of soils. We need innovative technologies to minimise physical degradation of soils due waterlogging, flooding and crusting. We need to improve the fertility of saline, acidic, alkaline and toxic soils by reclaiming them. We need location-specific interventions towards balanced fertilisation and integrated nutrient management. While we try to reduce the use of chemical fertilizers in some locations, we should be open to increasing their use in other locations. But such a comprehensive approach requires a strong embrace of scientific temper and a firm rejection of antiscience postures. In this sense, the inclusion of ZBNF into our agricultural policy by the government appears unwise and imprudent.

R. Ramakumar is NABARD Chair Professor and Arjun S.V. is a student at the

# Rethinking water management issues

NITI Aayog's strategy for water resources is a continuation of failed policies of the past



CHETAN PANDIT &

n December 2018, NITI Aayog released its 'Strategy for New India @75' which defined clear objectives for 2022-23 with an overview of 41 distinct areas. In this document, however, the strategy for 'water resources' is as insipid and unrealistic as the successive National Water Policies (NWP). Effective strategic planning must satisfy three essential requirements. One, acknowledge and analyse past failures; two, suggest realistic and implementable goals; and three, stipulate who will do what, and within what time frame. The 'strategy' for water fails on all three counts.

### No new vision

The document reiterates two failed ideas: adopting an integrated river basin management approach, and setting up of river basin organisations (RBOs) for major basins. The integrated management concept has been around for 70 years, but not even one moderate size basin has been managed thus anywhere in the world. And 32 years after the NWP of 1987 recommended RBOs, not a single one has been established for any

The water resources regulatory

authority is another failed idea. Maharashtra established a water resources regulatory authority in 2005. But far from an improvement in managing resources, water management in Maharashtra has gone from bad to worse. Without analysing why the WRA already established has failed, the recommendation to establish water resources regulatory authorities is inexcusable.

The strategy document notes hat there is a huge gap between irrigation potential created and utilised, and recommends that the Water Ministry draw up an action plan to complete command area development (CAD) works to reduce the gap. Again, a recommendation is made without analysing why CAD works remain incomplete, that too despite having a CAD authority as an integral component of the ministry.

Goals include providing adequate and safe piped water supply to all citizens and livestock; providing irrigation to all farms; providing water to industries; ensuring continuous and clean flow in the "Ganga and other rivers along with their tributaries", i.e. in all Indian rivers; assuring long-term sustainability of groundwater; safeguarding proper operation and maintenance of water infrastructure; utilising surface water resources to the full potential of 690 billion cubic metres; improving on-farm water-use efficiency; and ensuring zero discharge of untreated effluents from industrial units. These goals are not just over ambitious, but absurdly unrealis-



tic, particularly for a five-year window. Not even one of these goals has been achieved in any State in the past 72 years. Some goals, such as 'Har Khet Ko Pani (irrigation to every field)', are simply not achievable.

### Who is accountable?

A strategy document must specify who will be responsible and accountable for achieving the specific goals, and in what time-frame. Otherwise, no one will accept the responsibility to carry out various tasks, and nothing will get done. Take one goal: "Encourage industries to utilise recycled/treated water". Merely encouraging someone to do something, is not a "goal". That apart, NITI Aayog does not say who will do this encouraging, and how? Should the State Water Ministries do this by restricting or even withholding recalcitrant industry's access to fresh water? Should the Environment Ministries cancel clearances for industries which do not practise recycling? Or should the Finance Ministries do this through monetary incentives and disincentives? No one knows.

Of the issues listed under 'con-

straints', only one, the Easement Act, 1882, which grants groundwater ownership rights to landowners, and has resulted in unconextractions groundwater, is actually a constraint. The remaining are are not constraints. These are: irrigation potential created but not being used; poor efficiency of irrigation systems; indiscriminate use of water in agriculture; poor implementation and maintenance of projects; cropping patterns not aligned to agroclimatic zones; subsidised pricing of water; citizens not getting piped water supply; and contamination of groundwater. These are problems, caused by 72 years of mis-governance in the water sector, and remain challenges for the future.

Ideas listed under 'way forward' and 'suggested reforms' do not say how any of these will come about. For example, there is no recommendation to amend the Easement Act, or to stop subsidised/free electricity to farmers. On the contrary, the strategy recommends promoting solar pumps. These are environmentally correct and ease the financial burden on electricity supply agencies. However, the free electricity provided by solar units will further encourage unrestricted pumping of groundwater, and will further aggravate the problem of a steady decline of groundwater levels.

### Reforms overlooked

The document fails to identify real constraints. For example, it notes that the Ken-Betwa River interlinking project, the India-Nepal Pancheshwar project, and the Siang project in Northeast India need to be completed. A major \_\_\_\_ roadblock in completion of these projects is public interest litigations filed in the National Green Tribunal, the Supreme Court, or in various High Courts. Unless the government has a plan to arrest the blatant misuse of PIL for environmental posturing, not only these but also other infrastructure projects will remain bogged down in court rooms.

The document takes no cognisance of some real and effective reforms that were once put into motion but later got stalled, such as a National Water Framework law; significant amendments to the Inter-State River Water Disputes Act; and the Dam Safety Bill.

India's water problems can be solved with existing knowledge, technology and available funds. But India's water establishment needs to admit that the strategy pursued so far has not worked. Only then can a realistic vision emerge. It is unfortunate that NITI Aayog has failed to admit this and has prescribed only a continuation of past failed policies. Far from solving our water problems, this helps India to continue walking on the unsustainable path it has pursued for decades.

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## 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.

## **Growing intolerance?**

The Editorial ("Sedition annoyance", October 8) is a grim reminder of the height of intolerance towards freedom of expression. India's pluralistic society has seen disturbances on religious lines, but never before has anyone felt that the country is treading the dangerous path of religious polarisation as we see it

It is painful to see the secular fabric which has been woven together with mutual understanding and harmony since Independence, being shredded which even those of standing in the ruling party are turning a blind eye to and intentionally so - and all the more

worrying. If true patriots have FIRs slapped on them for their genuine concern about secularism, then the plight of the common man who dares to raise a finger against the establishment on religious intolerance, is anybody's guess. The Prime Minister and the Home Minister should concentrate on good governance which includes facing criticism and the press, allaying the fears and concerns of people instead of always keeping the country on tenterhooks and focusing on development in the run-up to elections rather than on the planks of hyper-nationalism and Hindutva. G.B. SIVANANDAM,

■ The democratic strength of a nation is assessed by how its citizens can freely express their thoughts and views despite being caustic to the ruling dispensation or those who are majoritarian. By framing charges of sedition against eminent people, the notion of intolerance has only been strengthened. Criticism of government is not sedition. GAGAN PRATAP SINGH, Noida, Uttar Pradesh

Sedition arises out of demonstrable crime against the state and not out of disenchantment with it. It is a pity that we should be revisiting the days of the Raj. It is an anachronism that the notion of freedom of speech being above all liberties is

under siege in this day and age. Free expression is a product of application of sane human intellect to an issue at hand to then help enrich discourse. Today, as intellectualism itself is sought to be branded as anti-national, few are prepared to nurture the very sap that feeds the spirit of men, society and nations. R. NARAYANAN,

#### Tuesday, at The Hindu It is laudable that two

Editorial meetings a month at The Hindu will be open to readers to expand conversations and trust. ('From the Readers' Editor, "Dialogues to bridge divides", October 7). This may be the first time in the

history of leading Indian dailies that such an interactive opportunity is being given to readers. This would also help the editors understand readers and

vice-versa in terms of penning balanced editorials. THARCIUS S. FERNANDO,

MORE LETTERS ONLINE:

### **CORRECTIONS & CLARIFICATIONS:**

In "BJP's backing will help AIADMK, says L. Ganesan" (Interview, some editions, Oct. 7, 2019) the reference to Lok Sabha

by by election in Vellore should be corrected to read as election. Editing error: In "Devendra Fadnavis tightens grip on Maharashtra BJP" (Oct. 7, 2019), the blurb read: "The CM sidelined several bigwigs whose relations with him had soured of late, without the high command backing him." It was actually with the high com-

A Business page story headlined "Classic Legends to unveil 3 new Jawa variants" (Oct. 7, 2019), said the company "has been accepting bookings, though the product has been sold out *till March* 31, 2010". It should have been March 31, 2020.

In a Metro Plus article titled "The Clean Beauty alphabet soup" (Sept. 23, 2019) a part of the quotation attributed to Bhawna Kumar from Ecocert has been redacted. The redacted portion is: "For a product to be claimed organic, 96% of the ingredients

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