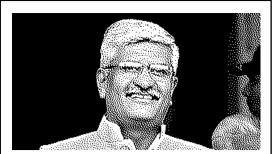
Keep family out of politics

He may be one of the most seasoned politicians in India. But Sharad Pawar of the Nationalist Congress Party feels personally hurt by the attack launched on him by the Bharatiya Janata Party (BJP) especially Prime Minister Narendra Modi. In November 2016, Modi paid him fulsome compliments: "Pawar has completed 50 years of either being an MLA or MP, which is a legacy in itself in Indian politics. I have no hesitation in accepting that Pawar held my hand and taught me to walk in my early days in Gujarat," Modi said at a function, adding, "he had shown the way to lead political life". But now, during the election campaign, Modi has been trenchant about Pawar, criticising family rule in Maharashtra. "I watched the Prime Minister's speech at Wardha. Instead of providing succour to drought-hit farmers, he was targeting my family... Mr Modi ought not to worry about my family," Pawar responded. A politician of the old school, Pawar has never believed in bringing in the personal in the cut and thrust of politics. But this is a new phase.

Mulayam's confusing signals

Samajwadi Party supremo Mulayam Singh Yadav continues to send out confusing messages. In the last sitting of the Lok Sabha, he praised Narendra Modi and said he prayed for the PM's return. Recently, he is understood to have told his supporters: "38 *mein Laal, baaki mein* Shivpal (vote for my son in the 38 seats that are in the SP's quota in the alliance; and as for the rest, which are in the BSP and RLD's quota, vote for my brother Shivpal)". This has thrown followers of the SP. Even more outraged are supporters of the BSP who were counting on the transfer of votes from the SP to the BSP.

DID THEY REALLY SAY THAT?



"Much like the Mahabharata, the two sides are standing against each other here as well. One is that of the Pandavas, who stand with the blessings of Lord Krishna and walk the road of truth. The second side is that of Dhritarashtra, blinded with putramoha (love for son) and walking on the path of adharma,"

Union Minister of State for Agriculture and Farmer Welfare and sitting BJP MP from Jodhpur Gajendra Singh Shekhawat at an election rally in Jodhpur on April 26

CHECKLIST CONSTITUENCIES TO WATCH IN HIMACHAL PRADESH

Mandi: Aashray Sharma the second son of former Bharatiya Janata Party (BJP) power minister in the state, Anil Sharma and grandson of Sukh Ram, is contesting the Mandi seat — but as a Congress candidate. Sukhram and his grandson quit the BJP and joined the Congress last month but Anil stayed behind, though he resigned from the council of ministers after many taunts from his BJP colleagues. Chief Minister Jai Ram Thakur went to the extent of warning him publicly that if he was spotted campaigning for his son he would be thrown out from the party. The question is: Will Anil Sharma campaign for his son or for the sitting MP from the BJP (his own party) who has been renominated?

Kangra: Two-term MLA Pawan Kajal will be the Congress candidate from Kangra constituency against Kishan Kapoor whom the BJP has fielded after dropping veteran leader and former chief

minister Shanta Kumar from the politically significant seat. The Kangra constituency comprises 17 assembly segments — 13 in Kangra and four in Chamba districts. Shanta Kumar has held unchallenged sway in the area. **Hamirpur:** The constituency will see a clash of sportsmen – and cultures. From the BJP there is three time MP and former Board of Cricket Control of India chief, Anurag Thakur who has, under his belt among other things, the distinction of bringing a cricket field to Dharamsala. He is criticised by his rivals for his jet set lifestyle. Facing him will be sitting MLA from the Naina Devi constituency in the Legislative Council, Ram Lal Thakur who is a kabaddi champion (he has represented his state seven times in national contests). One is 44, the other is 67. But it is a formidable contest. The Congress has won this constituency only once in 30 years.



OPINION M VENKAIAH NAIDU

Keep updating skills to create a niche for yourself

t is a pleasure to address the young graduates on this occasion of the Ninth Convocation of Vels Institute of Science, Technology and Advanced Studies (VISTAS). It gives me an opportunity to know about their aspirations, expectations and dreams for their future. And share my own with them. In the life of a student, Convocation is a milestone. It is the outcome of their hard work. It marks their transition from students to professionals, moving from one level of education to the next higher level.

I am told that today 68 PhD scholars, 145 MPhil Scholars, 363 Post-Graduates and 1,766 Graduates will be receiving their degrees. I congratulate all the students who are graduating from this university today and wish them every success in their future endeavours. I also compliment the members of the faculty and the parents for the success of these students. Teachers and parents shape the young minds and the destiny of our society. And we as a nation are ever grateful to the tireless teachers who mould the citizens of tomorrow with dedication and empathy.

It is an occasion when you will move out of the insulated life of the campus and explore the exiting new world of work. It is also the occasion when you will carry with yourself the high ideals you have imbibed during your stay in this esteemed institution.

As you move out of the campus, never let your inquisitiveness and quest for knowledge be extinguished. Dr. Babasaheb Ambedker said, "Cultivation of mind should be the ultimate aim of human existence." So please continue to expand the 'VISTAS' of your knowledge. As the treasure house of wisdom, Thirukurral says "The deeper you dig in a sandy bed, more the water flows, the deeper you learn, the greater will be your wisdom."

Upgrading your knowledge is ever more essential today as we live in a world where every technology is only transient. You are starting your professional career at a very exciting time. You are sitting on a rapidly moving knowledge cyberways. Entire new horizon of global opportunities opens up with a click of a mouse. You need to constantly update your knowledge and skills to create the niche for yourself in the global job market.

I am happy to note that even though yours is a young institution established in 2008, it is offering courses in sunrise areas. It is heartening that it has expanded both in basic sciences as well as applied science and technology like aviation and maritime studies, life sciences and pharmacy, Management and Law. Being a young institution there is a vast scope of improvement and experimentation particularly on parameters like research and professional practices as well as graduation outcomes. It is essential for the institutions of higher learning to re-invent themselves, open new horizons of knowledge and research.

I appreciate the role of your institution in making higher education inclusive. Happy to note that there are many students from socially disadvantaged groups in the under graduate programme and in Post Graduate programme.

While the Constitution recognises Right to Education a Fundamental Right and makes it incumbent upon the 'State to provide free and compulsory education to all children of the age of six to fourteen years...', higher education is equally essential 'to develop the scientific temper, humanism and the spirit of inquiry and reform' which are envisaged as the Fundamental Duties of the citizens. Therefore, quality higher education is necessary for the progress and development of our country. Before Independence in India, access to higher education was very limited and elitist. Since independence, the growth has been very impressive. More than 850 universities and more than 40,000 Colleges are offering various programmes in India.

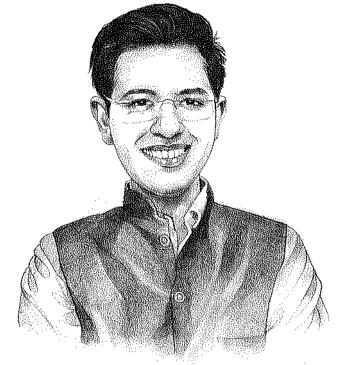
Though we have expanded the number of higher education institutions, the quality of higher professional education, remains a major concern. Various studies and surveys have raised concern over the learning outcomes and employability of Indian graduates. We must address these issues and constantly reform the system and ensure that the higher education institutions deliver high quality education. India is a young nation with 65% of our population being below 35 years. Every year almost 1 crore youth join the job market. It is the demographic dividend we as a nation can ill-afford to lose.

We are in midst of 4th Industrial revolution. The technology is changing exponentially. The new age technologies like Blockchain, Artificial Intelligence and 3D Printing, are changing the ways we live and work. You, as innovator entrepreneurs and global professionals, will be required to outpace this change. The faculty members shall have to be abreast with the latest technological developments. You must become more agile and alert to stay ahead of the knowledge curve.

With a view to making education a lifelong learning process and to expand the horizons of knowledge, the Government has launched SWAYAM online Courses. It is now providing opportunities of online higher education. I expect you to make use of these facilities. I am happy to learn that VISTAS has entered into MoU with several foreign universities and institutions. India has traditionally been open to knowledge exchange with other parts of the world.

For ages we have been the Vishwa Guru. We have shared our knowledge with the wider world and received their scholars in our Universities like Texila and Nalanda. We believed in the ancient vedic dictum "Aano Bhadrah Kritvo Yantu Vishwatah..." May the noble thoughts and wisdom come to us from all over the world. That is spirit we must infuse in our educational institutions today.

Edited excerpts from a speech by Vice President M Venkaiah Naidu at the 9th Annual Convocation of VELS Institute of Science, Technology and Advanced Studies, in Chennai on April 23, 2019



After spending over six years with the Aam Aadmi Party (AAP), 30-year-old **Raghav Chadha** is set to become the youngest candidate from among the three main parties in Delhi, which goes to the polls on May 12. **Chadha** talks to **Thirumoy Banerjee** about the party's achievements, the fight against the BJP and why an alliance with the Congress did not materialise. Edited excerpts:

'In Delhi, it's BJP versus people'

You have been with the AAP since its inception. How much do you think the party has grown over the past few years?

The AAP has become a much more organised party since the India Against Corruption days. A political party is always more organised and has more political commitment. Now, people know about our ideology. We are a robust organisation not just in the state, but also in different parts of the country. Being a party in power in the capital, we changed the lives of 1.6 million government school children, gave the education sector a complete makeover, revamped the power scenario and seriously improved the health sector.

You have been an AAP spokesperson for many years. How are you looking at your new role?

I never imagined that I would join a political party, let alone electoral politics. I am from a middle class family, and started working after becoming a chartered accountant. It was only during the Anna Hazare movement (in 2012), that I was attracted to this mission. I left my job and joined the movement, which later

turned into the AAP. I have been a part of this revolution ever since.

Recently, Congress President Rahul Gandhi said AAP Chief Arvind Kejriwal made a U-turn on an alliance in Delhi. Leaders on both sides, have spoken about an alliance and have blamed the other side for not sealing a seal. Where did it get stuck?

The AAP is of the opinion that it's important to defeat the dictatorial duo of Narendra Modi and Amit Shah to restore democracy in the country. Under their leadership, every autonomous institution in the country has been destroyed. To defeat them, we were willing to ensure that the anti-Bharatiya Janata Party (BJP) votes do not get split. But the Congress does not understand this. They are in a way looking to benefit and strengthen the BJP. They couldn't forge an alliance in UP, Bengal, Odisha or even in Kerala. They're cutting anti-BJP votes everywhere. It seems they are all out to beat the regional parties and not the BJP.

Did the seat sharing deal not work?

The Congress needs to understand where it stands right now. Instead of cutting anti-BJP votes everywhere, they should have listened to regional forces and forged an alliance. It's not just with us, it is the same story in every part of the country. Had there been no dialogue between parties, one could still have assumed that they were naive, but there was a lot of talk in the media and behind closed doors. The Congress does not seem to understand basic poll arithmetic. All this just leads to one conclusion: The Congress is playing into the hands of the BJP.

But the Congress has forged alliances in some states. Did Kejriwal bargain for more than four seats, which the Congress was willing to offer to the AAP?

All this is insignificant. From the discussions with the Congress, one thing was clear, it wasn't serious about an alliance. We were open to it. Also, if you are fighting the Lok Sabha elections, you must go with the regional forces everywhere, if you are serious about toppling a government like the one we have now. As I said, the Congress did not understand this simple thing.

But an alliance may have meant that someone like you lost out on a ticket.

I never knew that I was going to get a ticket in the first place. I just follow my leader. If Kejriwal says jump, I would never ask him how high. So, if he asked me to opt out in the eventuality of an alliance, I would have bowed down to his wisdom.

But all this conversation is hypothetical now, because the Congress is not serious about beating the BJP. And as far as Delhi is concerned, they are insignificant, irrelevant and in my constituency, even absent.

You made headlines after the Ministry of Homes Affairs (MHA) sacked you as the adviser to Manish Sisodia last year. Take us through that episode.

My appointment as an adviser to Manishji for 75 days was revoked with retrospect. So, according to the notification, I was never a part of the government. The MHA thinks that the Delhi government should be subordinate to the Union government, and the former is bound to take permission from it for every small thing. Just because in this case, no consent was sought from the Modi government, it sacked professionals who were working for the people of Delhi.

Did you have (Lieutenant Governor) Anil

Baijal's go-ahead?
Whenever a government appoints advisers, you need to intimate the governor, you don't need his permission. We intimated him. In this case, the Modi government was unhappy that educated, talented and committed people were joining the government and were working on the Budget for the Delhi government and bringing new ideas to the table. So, even though someone like me agreed to work pro bono, at a salary of ₹1 per month, it decided to sack all of us. It was a way for the BJP to get back at the

AAP, which handed Modi his first electoral

 $drubbing\ in\ the\ 2015\ Delhi\ Assembly\ elections.$

But the AAP and you became more popular after the episode. Do you think it, in a way, helped you politically?

I won't say that. But it definitely exposed the mindset and the dirty tricks of the BJP.

Did you have an idea that you could be getting a ticket from south Delhi?

Not at all. I toured parts of the capital to reach out to the people. The AAP is not a party that appears only during elections. That I got a ticket was a decision taken by the party leadership much later.

How confident are you against the BJP's sitting MP Ramesh Biduri and the Congress' Vijender Singh?



RAGHAV CHADHA
National spokesperson &
executive member, AAP

I was made the AAP in-charge of South Delhi about a year ago and I had been visiting the length and breadth of the constituency since then, trying to find out the problems people have been facing there. Even if you light a torch, you won't find a Congress leader in my constituency. In South Delhi, it will be a fight between the people, and I just happen to

the BJP and the people, and I just happen to represent the people.

Water remains one of the biggest problems of your constituency.

Both the BJP and the Congress have been unable to address the problems of the people of the constituency for the past 70 years. The Kejriwal government has worked continuously for the past four years to give people basic amenities, including piped water, health care, and electricity. We have done most of our work and whatever bit is left will be done in the next one year, before our first term ends. Regularisation of unauthorised colonies is another commitment for us.

The traders have pledged their support to Modi, and auto drivers seem to have moved away from you. How do you plan to bring them back to your fold?

We will reach out to them. We have a dedicated section on them in our manifesto.

What stands out about the AAP manifesto?

Our demand for full statehood for Delhi. Look at London, Paris, Washington, Canberra... The capital of a country like India deserves to have an independent government that has control over police, law enforcement agencies, land, etc. Barring the North Delhi Municipal Council area, the rest should be given to the Delhi government. Also, our focus is on education for all, ease in college admission and pakka makaan for everyone. We want last-mile connectivity to every corner of the capital. We want Metro to reach every part of the capital, and will work on each of these.

Any possibility of a tie-up with the mahagathbandhan after the elections?

Too early to talk about it right now. The party will take a decision on that after the elections.

Towards a gender equal world

Equal Community Foundation is working with adolescent boys to support them in becoming gender equitable adults, writes **Sneha Bhattacharjee**

ll of 16, Omkar is a bright student who takes tuition for younger boys to support them in their education. His classes though are different from the regular tuitions boys in Chandan Nagar, Pune, are used to. Apart from the regular lessons, Omkar encourages discussions on ideas of consent, human rights, gender-based violence and many other gender-related concepts that he is learning as a participant in Equal Community Foundation's (ECF) Action for Equality programme.

Sometime in 2009, when Will Muir, founder, ECF, was running a cinema business in Pune, his customers primarily were young

boys. "In order to understand how I could help young boys, I first needed to understand the issues they faced. So I rang up philanthropists and social workers in Pune. Everybody told me that they don't work with boys but instead with women and girls, who are the victims and survivors of gender-based discrimination and violence. It was at that moment that I realised that boys and men who are so often the per-

petrators of gender based violence are as yet not part of the solution," recalls Muir.

ECF was formed with the mission to raise

THE OTHER

INDIA

ECF was formed with the mission to raise every boy in India to be gender equitable. However, the foundation found two problems in this mission. First: What combination of programmes ensures that a boy's attitudes and behaviours are fully equitable. Second: How do you scale that combination of programmes

to every boy in India?

The programme, Action for Equality, has been trying to solve that problem of scale. It is a 60-week, 120-hours community-based programme where professional facilitators deliver a structured curriculum to boys aged between 13 and 15. The programme builds boys knowledge, skills in order to transform their attitudes and behaviours. Boys learn about discrimination and violence. They reflect on how these issues affect their own communities their families and how they have affected themselves.

"When boys talk about how they felt when they faced discrimination and violence, they realise that they felt sad, and angry, and hurt;

and then it was unfair. Or more accurately, it was a contravention of their human rights," says Muir. Boys are also asked to identify other people in their community who suffer from violence and discrimination. "This empathy, boys build through reflecting on their experiences is central to the programme's success," he adds.

ECF implements Action for Equality in 20 low-income communities in Pune. It has also built the capacity of 24 organisations across Maharashtra, West

Bengal and Jharkhand to engage adolescent boys. The foundation has also provided access to its resources, curriculum and tools via an online portal: www.projectraise.org.in. According to Muir, a vast majority of organisations working with women and girls have felt a need to engage boys, but they lack the capacity, resources and tools. "There is an urgent need for funders to step in to support capacity building and to provide seed funding



ECF's Action for Equality programme has managed to reach 5,339 boys while Project Raise, with the help of partners across India, has reached 5,629 boys in Pune

for organisations who are able to articulate how engaging boys will improve outcomes for women and girls," he adds.

Project Raise, another collaboration effort by ECF, seeks to convene and build the capacity of a coalition of organisations who are committed to the outcome of gender equitable boys. Since 2014, they have convened over 300 individuals and organisations and 10 per cent of them have gone on to implement programmes that raise boys to be gender equitable. Muir aims to increase the geographical and technical diversity that is represented in the coalition.

With a total staff strength of 32, ECF's Action for Equality programme has managed

to reach 5,339 boys while their Project Raise with the help of partners across India has reached 5,629 boys in Pune. However, the process to create more awareness in the community, to gather support from the community to challenge existing gender norms takes time. And thus, working with the boys with a transformative approach has been a big challenge for the foundation. One of the greatest being unravelling the knot of gender attitudes and norms woven into the fabric of society. "Even when participants are able to identify them and are motivated to take action, they face backlash from their family and friends," says Muir.

Further, at the grassroots level, community members don't see how gender programmes meet their aspirations for education, job training, a good job. As the foundation works in the age group of 13-17-year-olds, it is quite a challenge to keep their attention and interest. Therefore, they focus on sessions that are activity-based and participatory in nature.

In today's day and age where gender based violence are a norm, Muir finds ECF's role important as well as emerging. Research has shown that boys who grow up in gender-equitable households, will be less likely to be violent men. Christina Furtado, executive director, ECF, feels that gender equality is not a zero-sum game. Perhaps it is time to reflect on the role that gender norms play in one's own life and start not just changing them but also call out any gender-based violence or discrimination we see. "This will make us more aware as a citizen," says Furtado. Parents must raise children as human beings, not as 'boys' or 'girls.'

Thee-fraud conundrum

Online scams deserve urgent attention

ne of the anomalies highlighted by an Identity and Fraud report by Experian, a data analytics company, is that Indians value security over convenience and personalisation but they suffer the highest incidence of e-frauds in the Asia Pacific. As much as 68 per cent of Indian consumers place a high degree of trust in payments system providers. But of the 590 APAC businesses surveyed, 65 per cent of Indian businesses have experienced an increase in online fraud-related losses over the past 12 months. This includes account takeover attacks and fraudulent account openings. This gap between attitude and outcome is both a pointer to the journey India has to travel between historical characteristics of informal financial networks and the challenges for modern businesses operating in uncharted territory where debates over privacy and security dominate.

Before Indian businesses embraced the concept of the joint stock company, commercial relations in India largely operated on an informal system of extraordinary mutual trust, which enabled merchants to operate across national and international borders. The instrument for achieving this, the hundi, offered little more than a paper IOU (no surprise, the hundi endured for decades after India imposed foreign exchange restrictions as a means for illegally accessing scarce forex). So vibrant was this traditional system of trade and transaction that the British did not interfere with it and occasionally saw fit to avail of it in the most far-flung outposts of their continental empire.

Post-independence India remained community-driven in its financial relations. Despite bank nationalisation and cooperative banking, which were ostensibly aimed at bringing more Indians within the ambit of the formal financial system, most Indians remain unbanked, a circumstance that explains the persistence of black money, the continuing power of the moneylender and the enduring popularity of informal financial networks such as chit funds and Ponzitype schemes. Jan Dhan accounts do not appear to have altered this model significantly since most accounts remain inactive, barring the period of demonetisation. Most remarkably, the popularity of these trustdriven schemes endures despite the many

spectacular examples of fraud over the years that have wiped out households' life savings. This high tolerance for a trust-andbetrayal cycle explains the anomaly in Indians' relationship with modern online service providers.

The findings underline the need for online service providers to significantly increase their investments in consumer education exercises to avoid the frequent incidence of fraud. Indians by now may have wised up to Nigerians offering to deposit millions of dollars in their bank accounts but large numbers of even fairly educated Indians remain curiously vulnerable to fraudsters posing as legitimate bank executives demanding PIN numbers, passwords and other identification data. The report identifies identity theft as a leading contributor to fraud in India. This underlines the issues that have been raised ad nauseam by civil society around privacy and security

involving Aadhaar. Despite the Supreme Court's 2018 ruling striking down the validity of Aadhaar for most transactions, the government had pressured organisations and citizens sufficiently for the bulk of India's population to sign up for this unique identification project. Disturbing evidence of Aadhaar's poor security standards emerges with depressing regularity, and the vulnerability of an insufficiently educated population to having their data suborned remains dangerously high.

The time may have come for the government, civil society and the Reserve Bank of India to cooperate on a nation-wide campaign to inform consumers of the hazards of online fraud and how to avoid it. Our political leaders would surely do their constituents a genuine service by leveraging Twitter and WhatsApp to such purposes rather than the current trend of spreading hatred and falsehood.

Building power utilities of the future

Battery energy storage systems are poised to emerge as a key tool for facilitating clean and resilient power supplies

SANJAY BANGA

he energy sector in India is set to undergo a significant change in the coming years with the enhanced focus on integration of renewable energy into the grid. India has already laid pathways to integrate 175 gigawatts (Gw) of renewable energy into India's electricity grid by 2022. While green energy is a welcome step towards combatting the effect of greenhouse gases, it comes with its own challenges, as solar and wind power are infirm in nature and need to be supplemented in real-time through alternative options to manage the demand-supply situation without affecting the resilience and stability of the grid.

Utilities in India are struggling to balance their demand and supply on a real-time basis with a tightening of frequency bands under the new CERC regulation on deviation settlement mechanisms. Key aspects of CERC's fourth amendment of deviation settlement mechanism regulations are narrowing operating frequency band, linkage of deviation charges with market rate and, importantly, additional surcharge in the event of sustained deviation from schedule in one direction (positive or negative), resulting in additional penalty.

In such a scenario, the key challenge is to ensure a perfect balance between demand and schedule generation (power purchased). This would mean readiness on the part of utilities to manage uncertainties in both demand and supply on a real-time basis. Moreover, the solutions need to act fast so as to avoid both commercial and sta-

Taking cognizance of the above, battery energy storage systems (BESS) are gradually being recognised as a crucial tool for enabling the effective integration of renewable energy and unlocking the benefits of local generation and a clean, resilient energy supply. BESSs are increasing around the world as system costs are rapidly decreasing and as energy markets are being reformed to allow for the use of more distributed resources. BESSs hold the potential to transform the Indian power utility space in the years ahead.

BESSs would provide for fast-acting ancillary service for managing the grid drawal in contingent situations like sudden loss of generation (renewables) or high influx of the same. The commercials for the same could be based on pricing this service on two fronts — capacity charges (based on all beneficiaries and availability) and a variable charge (could be market- or frequency-based). With the growing focus on integration of electric vehicles, these are assuming further importance.

In order to do so, it is necessary to open up competitive markets for ancillary services to multiple technologies rather than only sourcing from large generators, thereby allowing storage operators to obtain additional sources of revenue for different services provided, enabling financial feasibility. Battery storage can be treated as an independent source to introduce in real-time.

Going forward, it is necessary to consider battery storage as a unique asset on the grid and allow multiple players on the grid system to install, own, and operate the system. Storage should be categorised as a fast-responding alternative with incentive mechanisms for fast response during black-outs and contingencies.

It is also necessary to encourage longer-term contracts for services from energy storage, thereby reducing risk for finance institutions. It is also necessary to introduce flexible tariff rates, allowing customers to use decentralised battery storage to reduce their electricity costs.

Another case for BESS is deferring of capital expenditure, which has a direct bearing on the consumer tariff. Utilities design their network to meet peak demand, and accordingly, capital expenditure is planned in order to build T&D infrastructure and sub-stations. Energy storage is becoming a cost-effective alternative that



Energy storage enables the deferring of capital expenditure on transmission and distribution infrastructure and sub-stations that the growing demand for power necessitates

enables deferring of capital expenditure necessary to meet growing demand.

Further, addition of distributed solar generation would ean addition of more network elements like transmis sion lines and substations. This along with peak load condition would mean utilising the network to its maximum for a few hours a day. This could be addressed by localised BESS at load centres and renewable concen-

Developed countries such as the United States have already brought in structured regulations to promote energy storage

systems

trated sub-stations. As BESS prices continue to decline, storage will increasingly be an attractive alternative to replacing conventional infrastructure or deferring invest-

Another critical support that BESS can offer to the environment is to function as an effective replacement to polluting DG sets which are owned and operated by many industrial consumers across

the country to meet demand in the absence of reliable grid power. This would help in addressing pollution levels, which have become a health hazard for all. Consumers can also leverage storage to optimise their billing by using peak and off-peak tariffs.

Developed countries such as the United States have already brought in structured regulations to promote energy storage. A Federal Energy Regulatory Commission (FERC) order opens wholesale electric markets to energy

storage resources in regional electricity markets. This rule covers all storage technologies interconnected to the transmission system, distribution system, or behind-

The majority of storage capacity in US is currently located within the fast-responding frequency regulation markets. Geographically, the wholesale markets covering 13 eastern states (PJM Interconnection) and California (CAISO) are the two largest energy storage markets in the US, making up 81 per cent of the aggregate deployment in storage. This is largely due to the increasing renewable integration in PJM's and CAISO's energy mix. Since the real-time energy output from renewable resources cannot be predicted accurately, and the availability of these resources is time-varying, the demand for fast-responding frequency regulation increases accordingly in these two markets.

The characteristics of energy markets are different in each country. The applications that storage systems will support will also depend on a number of factors, such as mix of DER, existing energy storage, power sector regulations and tariff structures for customers. However, the day is not far off when a storage obligation will be imposed on utilities and consumers similar to the current RPO mechanism to ensure that a certain portion of the demand is met through storage, making BESS a critical component of the utility of the future in India.

The writer is CEO, Tata Power-DDL

What Brexit means for the pound

SITHARAM GURUMURTHI

A ccording to FXCM: Market Insights, the June 2016 vote in favour of Brexit created utter chaos for the British pound, comparable only to the immediate aftermath of World War II or Black Wednesday (September 16, 1992, when a collapse in the pound sterling forced Britain to withdraw from the European Exchange Mechanism). Subsequently, the transition process has been a roller-coaster ride for the currency.

Crunch Time, an article published in The Economist (August 2018), pointed out that of 140-odd currencies tracked by the data provider Bloomberg, the pound sterling has depreciated against more than 120 currencies since the referendum. In the weeks following the Brexit referendum, the pound sterling lost 10 per cent of its value. On a trade-weighted basis, it lost 50 per cent of its value since April 2018. Its fall below \$1.28 on August 10, 2018 sent it to its lowest level in a year. The prospect of leaving the European Union has adversely affected sentiment for the British currency.

The protagonists of Brexit, however, hold that a cheaper pound will make British products more competitive in foreign markets. While this is reflected in a seven per cent increase in exports, The Economist argues that this is due more to a general pick-up in global trade than to greater currency competitiveness. Over the same period, G7

countries have on average witnessed Britain badly needs foreign invest-Britain, Considering that half of Britain's food requirements come from overseas, the country's import bill has gone up substantially, thanks to a weak pound. Inflation has been above the Bank of England's target of two per cent since early 2017. The purchasing power of working age benefits that have been frozen in cost terms until 2020 has fallen steeply.

Samuel Tombs of Pantheon Macroeconomics argues that in the event of no-deal Brexit, the pound will fall to \$1.15, the lowest in three decades, and advises Britain to reach a sensible agreement with the EU.

In its January 31, 2019 issue, The Economist noted in "Markets and Brexit: Squeal at No Deal" that the pound has risen whenever it looked like Brexit was being softened or postponed, and weakened when it looked like negotiations were deadlocked. On January 29, when a proposed amendment to postpone Brexit was defeated in the British

Parliament, the pound fell by a cent against the US dollar but quickly bounced back in the hope that Britain and the EU would reach some kind of deal before the deadline of March 29 set for the departure of Britain from the EU.

In the event of a no-deal Brexit, the currency markets are likely to take the biggest hit. While Adam Cole at Royal Bank of Canada anticipates a 10 per cent decline in the pound. David Page at Axa, an insurance group, expects the pound to fall to \$1.10-1.15 from its current level of \$1.31 and to parity with the euro, which is currently trading at 87.2 pence. David Owen at Jefferies, an American Bank, visualises a possible repeat of the pound's mid-1980s level of \$1.05.

While the authorities will try to limit disruption to trade that might minimise the extent of the pound's fall, slower growth and less foreign direct investment are likely to weaken the pound. A November 2018 report of the Bank of England suggests that a no-deal Brexit would lower output but raise inflationary pressures. While the Bank of England may raise interest rates to strengthen the pound if inflation were to rise,

Kallum Pickering of The pound sterling Berenberg, a German has depreciated investment against more than observes, "Raising inter-120 currencies est rates in the event of a since the hard Brexit would be the referendum. The equivalent of losing a leg prospect of leaving and deciding the best the European way to regain balance is Union has chopping off the other." adversely affected sentiment for the

British currency

Though government bonds might be risk-free. their yields will fall in the event of a no-deal Brexit.

much stronger export growth than ment to finance its current account deficit, which was 3.9 per cent of GD last year. David Owen thinks that investors are also worried about the possible risk of a Labour government under Jeremy Corbyn coming to power. A survey by Bank of America Merrill Lynch found that investors have never been so negative about the London market in the past 20 years. In the event of a no-deal Brexit British stocks could fall by 25 per cent and European stocks by 10 per cent, according to a forecast by the index group, MSCI.

Clearly, several economists are agreed that a no-deal Brexit is going to be disastrous for the pound. The British prime minister's moves to renegotiate the deal should be seen against this backdrop. Thank God Britain while joining the European Union did not adopt the euro currency in the place of the pound!

The writer was with the International Monetary Fund, Washington DC

▶ OTHER VIEWS

End of Iran sanctions waivers calls for corrective policies

India needs to diversify oil-supplier base and increase domestic sources

Only On Monday the United States announced that it would not extend beyond May 1 the 180-day waiver it had granted to eight countries, including India, to purchase oil from Iran. India imports more than 10 per cent of its crude oil from Iran, so the government faces the immediate challenge of having to find alternative suppliers to meet its huge energy needs. Even more worrying is the likely negative impact higher oil prices will have on India's current account deficit, fiscal deficit and inflation in the wider economy. The current account deficit, which narrowed to 2.5 per cent of GDP in the December quarter thanks to lower oil prices, will likely worsen going forward.

It may, however, be hard to say for sure that the jump in the price of oil this week, and over the last few months, marks a secular rise in the price of the commodity. The entry of US shale producers into the oil market has put a lid on the price of oil as freely competing shale suppliers have been happy to increase their output whenever oil prices rise significantly. If India is to protect its interests in the ever-volatile global oil market, the government will need to take steps to diversify its supplier base and also work towards increasing



domestic sources of energy supplies. Opening up the renewable energy sector for more investments will also help avoid over-dependence on oil from the global market to meet the country's ever-increasing energy needs.

The Hindu, April 26

Due process subverted

NIA pulled up for lack of evidence

The special court has rightly dismissed a plea seeking a bar on Sadhvi Pragya Singh Thakur from contesting the Lok Sabha election on the ground that elections did not come under its ambit. However, it pulled up the Investigation National Agency (NIA), which reiterated that there is insufficient evidence to prosecute Thakur in the 2008 Malegaon blast case. The court said it framed charges against Thakur and other accused because it "found some prima facie evidence in the charge-sheet filed by the ATS (Anti-Terrorism Squad) though investigation was taken over by the NIA".

The court and the NIA seem to disagree on the quality of the evidence gathered

by the ATS. The NIA, in its supplementary charge-sheet in 2017, had found the evidence weak whereas the court held it was sufficient to proceed against the accused. As if to restate its claims of her innocence, the BJP has fielded Thakur as a candidate and upheld the NIA submission as proof. Such open canvassing for an accused on bail after the court has repeatedly stated that she needs to be proceeded under the UAPA sends a message: Party and ideological interests are above considerations of law and due process. It shows how political will subverts due process. The court needs to step in to uphold it.

The Indian Express, April 26

Narendra Modi makes a point

His choice of medium can't be faulted

As a public relations as well as vote-catching move, Prime Minister Narendra Modi's interview with Bollywood star Akshay Kumar was a success. The cleverly devised "non-political" or "apolitical" tête-à-tête was one way to get past the ban on the hagiographical biopic, which just goes to prove that it is easy enough for the resourceful to prove the law is an ass. As a means of touching base with India's teeming millions, it was a brilliant operation with a willing ally in the actor.

It is moot whether the nation's chief executive should shy away from being questioned periodically on the vital national issues of the day. However, at the time when he and his party are at

Modi's choice of medium to tell his personal tale can hardly be questioned. Truth to tell, Mr Modi came through as a warm person willingly opening up on his personal life. References to his early days and a touching admission to humble beginnings — like short-sleeved shirts being handier for one not privileged enough to command a retinue of servants — has seen him score brownie points in the battle of perceptions against career politicians. Mr Modi isn't new to the art of influencing people to vote for him, and he has done so now in an innovative way in a language he is comfortable with.

the hustings, Mr Narendra

The Asian Age, April 26