WORDLY WISE

CHILDREN MUST BE TAUGHT HOW TO THINK, NOT WHAT TO THINK.

— MARGARET MEAD

The Indian EXPRESS

∽ FOUNDED BY ∽ RAMNATH GOENKA

BECAUSE THE TRUTH INVOLVES US ALL

GROWTH PANGS

Its expansion through induction of leaders from other parties could trigger important political challenges for the BJP

N ELECTIONS TO THE Sikkim legislative assembly in May, the BJP had finished at the bottom of the heap with just two per cent of the votes polled. On Tuesday, 10 MLAs of the Sikkim Democratic Front (SDF), a member of the BJP-led Northeast Democratic Alliance (NEDA), crossed over and turned the BJP into the state's main Opposition party. The SDF, which uninterruptedly ruled in Sikkim for a quarter century until May, is now left with just three legislators. Interestingly, the ruling outfit, the Sikkim Krantikari Morcha, has just 16 MLAs in the House of 32 members and its chief minister, Prem Singh Tamang alias PS Golay, is waiting for the Supreme Court to rule on his appeal against conviction in a corruption case. Sikkim is the only state in the Northeast where the BJP had no presence in government. Since 2014, the BJP has been expanding its footprint in the Northeast by inducting leaders and rebels from other parties, especially the Congress, and roping in regional parties as allies. In a region that was seen to be immune to the charms of Hindutva politics, the BJP is now in power in four states and is a partner in government in three others. In the 2019 general election, the NEDA won 18 of the 25 seats in the region.

Party hopping is not rare, especially among legislators in the restive Northeast. But what Sikkim has just witnessed is comparable only to the events in Arunachal Pradesh, where a ruling regional party split and merged with the BJP to form the government in 2016. Legislators, councillors and party functionaries have crossed over in large numbers to the BJP in Goa and poll-bound Maharashtra. Similarly, Rajya Sabha MPs from Telangana and UP have shifted loyalties. The BJP, of course, has been more than welcoming towards these leaders. With the party on the upswing and its leadership focussed on spreading its influence at all costs, the inflow of "outsiders" in the party has been steady and smooth. However, the induction of so many leaders untrained in the ideological habits of the BJP, has the potential to trigger dilemmas and frictions within. Its current expansive approach towards opportunists and careerists from elsewhere may force the party to blunt its own ideological edge to accommodate new interests. In states like UP, for instance, it has exploited the contradictions within OBC politics to form broadbased caste alliances that have helped the party in elections. But the party has so far not provided adequate representation to these new supporters in government or even in party structures. Similar contradictions could come to fore in the Northeast where the BJP's aggressive support to the citizenship amendment bill may force a realignment of allegiances.

The management of contradictions arising out of the party's own growth could turn out to be a major task for the BJP leadership in the coming days, especially in those parts where its expansion has not been organic. The biggest challenges to the BJP's consolidation of power could lie within.

OVER TO THE TEACHER

Success of Odisha's move to double teaching time for certain subjects will depend on autonomy to the educator

INCE THE PAST 10 years, the Annual Status of Education Reports (ASER) have shone the light on a worrying issue: A large number of children in the country cannot read fluently or do basic arithmetic even after attending secondary school. Other studies, including those by the NCERT, have raised questions about teaching methods in Indian schools. Pedagogical interventions in response to these studies and surveys — in Punjab, Delhi, Kerala and Himachal Pradesh, for example — have produced mixed results at best. Now, the Odisha government has attempted to address this problem by doubling the teaching time of three subjects — English, Mathematics and Science — in all government schools in the state. On Tuesday, the state announced that it has asked schools to prepare routines in such a manner that these subjects get 90 minutes of teaching time every day while other subjects will continue to get 45 minutes.

The ASER surveys and several other studies have shown that a large percentage of children in the country's primary schools — including those in Odisha — are first-generation learners. It's also well-known that the school environment and the role of the teacher are crucial in providing support to children from non-literate homes and communities. But with pedagogical methods in most schools geared towards completing the syllabus, there is scarcely any scope for addressing the needs of students who are not moving ahead at the expected pace, or those who are falling behind. The Odisha government seems to believe that this shortcoming can be overcome if "students spend more time with English, Mathematics and Science teachers and get time to clear their fundamentals". This seems problematic for several reasons. For a child acquiring foundational skills in a language which is not her mother tongue — English in the case of students in Odisha — is a complex matter. It involves a number of faculties, ranging from comprehending letter-sound correspondence to making sense of texts. Doubling the teaching time could tax the attention span of students, and may end up doing more harm than good.

Science and Mathematics education has been dogged by the longstanding bete noire of the Indian education system — rote learning. Odisha's classrooms could become harbingers of change if teachers utilise the extra teaching time to stimulate students to discover the laws of nature and Mathematics. But, for that, teachers will have to be provided the autonomy to venture beyond bookish explanations. The litmus test for the Odisha government's experiment will be the difference it makes in teaching methods.

THE HUMAN FACTOR

Driver-less cars have hit a speed-bump. Turns out people don't follow the rules

HE FUTURE IS late. Since the 1950s, futurists and science fiction writers (including though not limited to Hanna-Barbera with The Jetsons) have been promising the imminent rise of the Machine Age, automated and AI-driven. Their contemporary counterparts, tech companies, are swallowing up billions in venture capital, promising the same future — trips to the moon, colonies on Mars, smart homes, and self-driving cars. But even this climbdown from The Jetsons, which had personal jetpacks and vacuum-tubes and flying cars, appears to be an impossibility.

While companies like Google, Tesla, Uber and Lyft have had partial success with pilot tests of driver-less vehicles, they haven't overcome the most important hurdle of all the human factor. Imagine a society where no one breaks traffic rules. This dream of dictators is, of course, impossible. But machines can only account for so much imperfection, and the odd unforeseen variable can spell disaster. In the West, a far less imposing problem — jaywalking — is throwing a spanner in machine learning's ability to brake on time.

Technically, it is possible for AI-based predictive analytics to be sophisticated enough to account for rule-breakers. But such a system would require huge amounts of data to predict, for example, what possesses a particular teenager at a particular time to do a wheelie on his cycle while jumping a red light. Any system with that amount of information is at best a threat to privacy and at worst the beginning of a Terminator-like apocalypse. Some techies are suggesting "gates" at pedestrian crossings to ensure no one jumps a light. The problem is, people who can break a rule can jump over a gate to do it. The future will just have to wait.

A blunt reminder

Since 1947, New Delhi has failed to learn

anything from the past in Kashmir



THE GOVERNMENT'S PEREMPTORY actions of abrogating the special status under Article 370 and bi-furcating the state of J&K into two Union Territories, have received an enthusiastic, if conditional, welcome. This decisive step comes after 72 years of "strategic paralysis" vis a vis the J&K imbroglio. Apart from the legal wrangling that is likely to follow, the final verdict regarding the wisdom of this crucial step must await the reaction of the Valley's people.

By themselves, these two actions symbolise, merely, the attainment of a longcherished dream of the BJP, and unless underpinned by a well thought out and long-term strategy, may turn out to be futile and even counter-productive. A peep into Kashmir's history is instructive.

On October 26, it will be 72 years since Maharaja Hari Singh, faced by a Pakistani tribal invasion, signed the Instrument of Accession, bringing the state of J&K into the dominion of India. The Pakistani hordes, heading for the Srinagar airfield, providentially, lingered in Baramulla, en route, to indulge in rapine and plunder, giving the Indian military time to pull off a minor miracle by airlifting enough troops to save the Valley.

Our army and air force fought gallantly for 14 months, in difficult conditions, to push back the invasion. It was a combination of our own naiveté, coupled with the duplicity of the British military rump in the subcontinent, that gave away Gilgit, Chitral and Swat, and thwarted the Indian Army's plans for recovery of the critical Muzaffarabad-Kotli-Mirpur belt, which now constitutes the Northern Areas and PoK respectively.

Having barely reconciled himself to a "truncated and moth-eaten" Pakistan, its founder, Mohammad Ali Jinnah, was bitterly disappointed at the turn of events in Kashmir. His "two-nation theory" was debunked at the moment of Partition because there were more Muslims in India than in their putative new "homeland". Furthermore, unlike the victimised minorities in theocratic Pakistan, these Muslims were full and equal citizens of a secular democracy. And yet, for 72 years, we have allowed Pakistan to harass, intimidate and bleed us, on the specious grounds that as a Muslim-majority state, Kashmir

belongs to them.

Having grown up in small towns of the Valley during the 1950s and '60s, this writer has idyllic memories of Kashmir. While harmony prevailed between Kashmiris of Muslim, Hindu and Sikh faiths — they ate in each others' homes and celebrated festivals together — it was clearly understood that Kashmir was not India. The average Kashmiri's attitude towards India remained ambivalent. India provided huge financial assistance to J&K; food, education, clothing and medicine were either free or heavily subsidised. Kashmiris accepted the largesse, but every evening tuned in to Radio Pakistan which never failed to play on their religious sentiments, spouting propaganda about the Indian Army's "atrocities" and harping on the Bharatiya "occupation" of Kashmir. J&K flew its own flag and "Prime

Minister" Sheikh Abdullah, the state's tallest figure and Nehru's friend, was Sher-e-Kashmir. In 1953, accused of conspiring with the Americans to become "King Abdullah" of independent Kashmir, he was arrested, and the Valley erupted in violence. I recall my father, then magistrate of Baramulla, coming home, bleeding from the head. There had been "patharao", or stone-pelting, in the old town, as agitators shouted anti-India slogans. The CRPF opened fire, and many were killed, before the Valley relapsed into sullen silence. Over the decades since 1953, little seems to have changed.

Ironically, the crores that India blindly poured into Kashmir were the biggest cause for resentment amongst the common people, because up to 95 per cent of these funds went to line the pockets of politicians and compliant officials. The average Kashmiri farmer lived in abject poverty, and come winter, there would be an exodus of Kashmiri labourers all over North India. The corrupt politicians and incompetent administrators of Kashmir were perceived as Indian stooges and exploiters, and resentment mounted, as successive elections were seen to be blatantly rigged.

By simply throwing money at the problem, and backing the wrong dynasties to rule the state, New Delhi steadily alienated Kashmiris. Thus, instead of crafting a national strategy for winning over Kashmir, we

created fertile ground in which Pakistan's ISI assiduously sowed the seeds of discord and sedition, till young Kashmiris started picking up Kalashnikovs.

India's maladroitness did not end here. A succession of Pakistani-orchestrated incidents, between 1963 and 1999, demonstrated the ineptness of our intelligence agencies and the complete strategic bankruptcy of New Delhi. This depressing sequence included: The theft of Prophet Mohammad's sacred relic, kidnapping of Rubaiya Sayeed, seizure of Hazaratbal Shrine, capture and burning down of the Charar-e-Sharif shrine, persecution and expulsion of Kashmiri Pundits from the Valley, the Kargil incursions and hijacking of the IC-814. Add to this the self-inflicted wound of the rigged 1987 elections, which triggered armed militancy in Kashmir.

This historical review is a blunt reminder that the Indian state has, since 1947, failed to learn anything from the past. We have refused to admit that neither money, nor the jackboot nor bullets can convince a Kashmiri that he is an Indian. If the Pulwama bomber was, indeed, a local, we desperately need to find a way to stop the radicalisation of Kashmiri youth and their alienation from India.

Once the current restrictions in J&K are lifted, we should expect violence; from internal unrest, as well as external intervention. The state, while using all means to contain violence, has two alternatives to offer its Kashmiri citizens. Either the prospect of an inclusive, open and liberal India, on the road to economic prosperity, and as different from Pakistan as possible. Or an India which will use all the force at its disposal to quell any signs of dissent.

In these troubled times, let us remember the sacrifice of 19-year old Kashmiri hero, Maqbool Sherwani. In October 1947, Sherwani succeeded in delaying the advance of Pakistani tribals at Baramulla, giving valuable time to Indian troops landing in Srinagar. On discovering his subterfuge, the Pakistanis nailed Sherwani to a wooden cross and shot him. A grateful Indian army has erected a monument to him.

chairman of the Chiefs of Staff Committee

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By simply throwing money

The writer is a former chief of naval staff, and

AN INSPIRING LIFE

Sushma Swaraj belonged to all of us, she leaves behind a lasting legacy

MEENAKSHI ARORA AND PAYAL CHAWLA

EVERY ONCE IN a generation, there comes a leader who provides a beacon of hope. For our generation that leader was Sushma Swaraj. As women lawyers, her journey was so personally inspiring to us. But the truth is we, women, alone cannot claim her. What she represented was so much beyond gender. She truly was what we want our leaders to be, our politics aside.

She joined politics quite young, while she was only a student. For women, at the time, this was not the norm. She actively participated in Jayaprakash Narayan's Total Revolution movement, before joining the BJP. She became an MLA at a mere age of 25. Thereafter, she went on to become a seventime Member of Parliament — and three times she served as a member of the legislative assembly. She also served as Chief Minister of Delhi, Union Minister of Information and Broadcasting, Union Minister of Health and Family Welfare, Union Minister of Parliamentary Affairs and Leader of the Opposition in the Lok Sabha. But then, those are only some of her achievements.

Her final stint was as Union minister of external affairs — a role she particularly thrived in. She used social media not merely as an outreach tool. but as an effective virtual "darbar". Swaraj carried herself with grace and dignity. Her public life spanned an unblemished four decades. She will remain an inspiration for all young political aspirants that desire change through a mechanism of clean politics. "All good things come in

small packages" is a phrase she epitomised.

cusing finger at any political party, or line of

She didn't just lend her voice to Twitter — she made it the instrument for the voiceless. Working round the clock to save Indians in distress, she once famously said "I do not sleep" and "I do not let Indian envoys sleep".

Bestowed with a pleasing disposition and a humane personality, she was ever ready to help anyone on this planet or "Mars". But she could be equally combative on issues she felt strongly about — she was never afraid of the powerful.

Neither was she one to shy away from a fight, always ready to take one on the chin for the party. She agreed to take on Sonia Gandhi, in 1999, from Bellary, Karnataka. It was a seat she was widely expected to lose. While she did lose, it was not without a fight. And what a fight she put up! Losing only by a seven per cent margin, leaving a lasting imprint on the people through her public speeches which she made in Kannada.

Her powerful oratorial skills were enhanced not only by her command of the Hindi language, but also by her scholarship in Sanskrit and political science. But mostly, it was enhanced by sheer hard work and her acquired in-depth knowledge of every subject she touched upon.

Her daughter, Bansuri, at the memorial

service, said she alone could not claim Sushmaji as her mother. Bansuri's graciousness was also honest. She did indeed belong to all of us. The Wall Street Journal once described her as "India's best loved leader". But all that adulation came at a huge personal cost. Her husband, Swaraj, waited 41 years

Swaraj carried herself with grace and dignity. Her public life spanned an unblemished four decades. She will remain an inspiration for all young political aspirants that desire change through a mechanism of clean politics.

to spend just two months with her.

"All good things come in small packages" is a phrase she epitomised. The image of her standing head and shoulders above ministers from other parts of the world, at the foreign ministers meet, in Beijing, will remain her lasting legacy. It is a matter of pride that the tallest figure of Indian politics came in the form of a woman. A woman who wore her Indianness and femininity, each day and everywhere.

Arora is a senior advocate at the Supreme Court of India. Chawla is the founder of JUSCONTRACTUS, an all-women firm specialising in commercial disputes

AUGUST 15, 1979, FORTY YEARS AGO PRESIDENT'S PLEA political thinking "for the tensions under



which we all live and work today". AN IMPASSIONED PLEA for national reconciliation and a suggestion that the time had PM's GAG ORDER come to make a review of the provisions of the Constitution marked the President's RAMAKRISHNA HEGDE, general secretary of broadcast to the nation on the eve of the Janata Party, criticised Prime Minister Independence day. This is no time for mu-Charan Singh for issuing a directive to his tual recrimination or equally barren destrucministers to not make public pronouncements on policy matters. Hegde described tive criticism, said Neelam Sanjiva Reddy, re-Charan Singh's directive as a "gag order". S He flecting over the current situation, "Indeed, this is the time and opportunity for national also criticised Charan Singh and his coalition reconciliation". The President did not hide partner, the Congress, for not having come his anxiety over what he described as "the out with any agreed common programme. crisis of character" afflicting the nation but he added that he did not wish to point an ac-

BANGLADESH MARCH THE MUCH PUBLICISED "long march" to

Pakistan by non-Bengali Muslims of Bangladesh through India did not come off because of tough security measures taken by the Bangladesh Rifles and the Indian Border Security Force. The Bangladesh Rifles informed K K Tiwari, DIG, BSF (northern range) that it had pushed the refugees out of Dinajpur town where they had gathered last week for the march. The BSF will, however, continue the vigil for two to three days before reducing the strength of its force on the north Bengal border, according to a top official. N C Pal, inspector general of BSF told UNI that there was no indication of any long march at any point along the 2,000 km India-Bangladesh border.

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WHAT THE OTHERS SAY

"Territorial, ethnic and religious disputes are concentrated in Kashmir. It is not India's internal territory... New and old hatred toward New Delhi's unilateral decision will plant traps in the road ahead for the nation."

- GLOBAL TIMES, CHINA

Let's draw lines in water

Reducing its use in agriculture is the most effective way of solving India's water problem



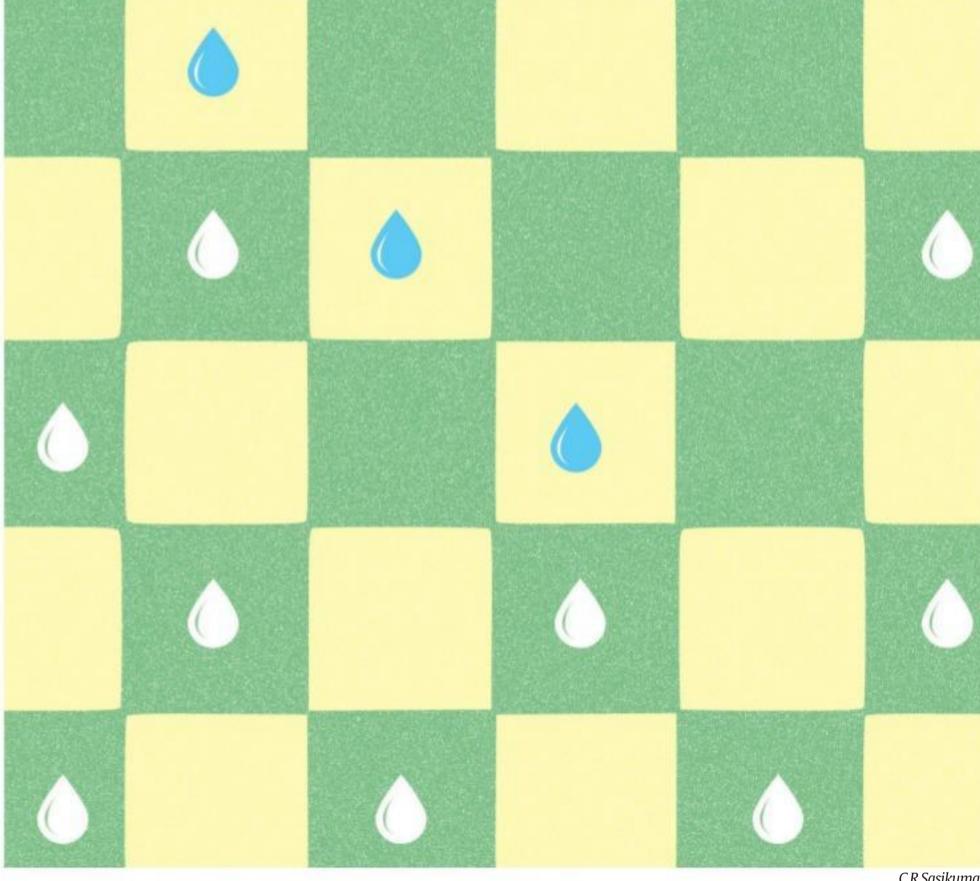
SPIRITUAL TEACHERS TELL us that if we stay calm in the face of a crisis, our response is more likely to be meaningful, effective and sustainable. Like good scientists, they also advise us to maintain a clear and steady view of the facts of the situation, and then act accordingly. Those trying to solve India's water crisis would do well to keep these pieces of wisdom in mind. That will help avoid resorting to gigantic Stalinist projects like the interlinking of rivers or needlessly expensive options like desalination. For there is no future in desperately and endlessly trying to increase the supply of water. Luckily, there are simple solutions on the demand side, which have not even been looked at. The formation of the Jal Shakti ministry is, indeed, a promising step in the right direction. Hopefully, the prime minister will provide greater substance to this initiative in his Independence Day speech.

The single largest fact about India's water is that 90 per cent of it is consumed in farming. And that 80 per cent of this irrigation is for water-guzzling crops — rice, wheat and sugarcane. Reducing this number is the most effective way of solving India's water problem. But can we do this without hurting our farmers, who are already in so much distress? Yes, we can. Indeed, it turns out that the solutions to India's water crisis and that of the farmers, lie in the very same direction. India's farmers, even in drought-prone ar-

eas, grow these water-intensive crops because these are the crops that have a steady demand. Governments, over the past 50 years, have primarily procured wheat and rice. And, sugarcane is bought by sugar factories. If we diversify our procurement operations, to include less water-intensive crops, like millets, pulses and oilseeds, especially in India's drylands, farmers would have the incentive to grow them. But what will we do with these crops after procurement? Again, there is a simple answer: Introduce them in the mid-day meal scheme and the integrated child development services, which are the largest child nutrition programmes in human history. This would create an enormous and steady demand for these crops and farmers in the regions where it is ecologically appropriate to grow them would be incentivised to shift away from water-intensive crops.

Official estimates indicate that around 3,00,000 farmers have committed suicide over the past 30 years. Although there is no doubt that the Green Revolution played a key role in India's food security in the 1970s and 1980s, in the 21st century, the returns from chemical fertilisers and pesticides have steadily fallen. Meanwhile, the costs of cultivation have risen steeply. This has sometimes resulted in even negative net incomes.

Responding to this situation by raising minimum support prices for these very same crops or through loan waivers or cash transfers completely sidesteps the deeper crisis of farming in India. It was heartening to see the finance minister, in her maiden budget speech, showing the courage to at least speak of the need to move towards nature-based farming, even though this was not backed up by any change in the budgetary allocations, which continue to flow in support of chemical agriculture with a whopping Rs 80,000



C R Sasikumar

The paradigm shift I am proposing would help secure multiple win-wins: Improvement in soil and water quality, higher and more stable net incomes for farmers, reduced malnutrition and obesity, and a simple solution to India's water problem through a huge reduction in the use of water in agriculture. As we diversify the cropping pattern, aligning it more closely with India's agro-bio-geo-ecological diversity, voluminous quantities of water would be released for meeting the drinking water needs in both rural and urban areas, and the demands of industry. As we move towards nonchemical agriculture, the dependence of farmers on high cost external inputs will decline and even if there is a slight drop in pro-The single largest fact of ductivity in the transition phase, this would India's water is that 90 per be more than made up by the reduced cost of cultivation and the steady demand for these cent of it is consumed in crops through government procurement opfarming. And that 80 per

crore fertiliser subsidy.

What is more, if our children were to eat these "nutri-cereals" with much higher protein, iron and fibre, with a significantly lower glycemic index, we would be better placed to solve our twin problems of malnutrition and obesity. Diabetes has increased in every Indian state between 1990 and 2016, even among the poor, rising from 26 million in 1990 to 65 million in 2016. This number is projected to double by 2030. A major contributor to this epidemic is the displacement of whole foods in our diets by energy dense and nutrient-poor, ultra-processed food

This has a clear relationship with the monoculture we adopted after the Green Revolution where farmers mainly grew stock market) demands crop (portfolio) diversification. But we have subjected our farmers to exactly the opposite by creating incentives against diversification. This has broken the back of Indian farming, even as it has engineered an artificial water crisis in a land where water is aplenty, if only we were to use it judiciously. Allied to this paradigm shift in farming, we need to democratise water. Water, by its

very nature, is a shared resource, which can only be nourished through participatory governance. Whether it is our rivers or India's most important resource – groundwater – we can protect them only if we recognise the integral inter-connectedness of catchment areas, rivers and rural and urban aquifers. Here again, there are countless examples all over India where stakeholders have come together to form democratic associations to manage their shared resource collectively, equitably and sustainably.

wheat and rice. In an intensely risky enter-

prise such as farming, it makes no sense

whatsoever to adopt monoculture. With high

weather and market risks, resilience (as in the

It is now for the government to take the necessary steps to learn from these pioneers and upscale their efforts through a respectful partnership with the primary custodians. This might be the hard part as governments tend not to find it easy to either respect, listen to or learn from practitioners on the ground. But, as a people, we have no choice left in the matter. Only a jan andolan on water can save us now.

The writer is former member, Planning Commission. He has worked on water and livelihood issues for three decades

Curing the system India needs more doctors. National Medical

Commission will address the issue, transform medical education



AMITABH KANT

PARLIAMENT HAS JUST passed the National Medical Commission (NMC) Bill to replace the Medical Council of India (MCI), a body that has been held responsible for the short supply and inefficiency in medical education. It is also widely accepted that MCI has been unsuccessful in maintaining and enforcing uniform standards in medical education. With the passage of the NMC Bill, we can hope to see a significant transformation in the medical education system.

With around 70 per cent of the 100plus-strong MCI comprising of elected members, the body has been afflicted with an inherent conflict of interest. Those being regulated would elect their regulators, with professionals who might have been better suited for the job often staying away. In contrast, the 25-member NMC will consist of doctors and experts from associated fields who can guide medical education in the country towards global excellence.

Moreover, several checks and balances will be put in place to ensure that the NMC functions in an objective, transparent and ethical manner. For instance, it will not be possible for the chairperson and other members nominated by the Centre to be re-nominated. Further, while in the MCI. the presence of merely 15 out of 100 plus members was adequate to make the decisions of a meeting valid, the NMC Bill necessitates the agreement of 13 out of 25 members for a decision to be taken. The NMC will also meet every quarter as opposed to a minimum of once a year for the MCI. Members of the NMC will be required to declare their assets and liabilities as well as any conflicts of interest.

The MCI assessed institutions on the basis of their adherence to a set of pre-defined criteria that focused overwhelmingly on inputs such as infrastructure and teacher salaries. There was little emphasis on ensuring the quality of teaching in medical colleges and delivering world-class learning outcomes. Under the NMC, the Medical $Assessment\, and\, Rating\, Board\, (MARB)\, will$ develop a system for the assessment and ranking of medical colleges. MARB will also be responsible for granting permission for setting up new medical colleges and starting postgraduate courses.

A key feature of the NMC Bill is an all-India final-year MBBS examination that will test for common standards of knowledge and skills among doctors. This is crucial because only a common exam can ensure that doctors across the country have a shared minimum level of skills. The National Exit Test (NEXT) will serve as an entrance test for postgraduate courses as well as screening mechanism for foreign medical graduates. The composition of the NMC (75 per cent doctors representing central and state institutions and health universities) will ensure that adequate weightage is given to theoretical and clinical skills in NEXT. There is a three-year timeframe for operationalising NEXT, which provides ample opportunities to define the precise contours of the

India has a doctor-population ratio of 1:1,655; the World Health Organisation standard is 1:1,000. Moreover, there is a considerable skew in the distribution of doctors, with the urban to rural doctor density ratio being 3.8:1. We are finding it impossible to engage doctors and specialists in Aspirational Districts.

The capital cost of setting up a new medical college is almost Rs 5 crore per bed. This is mostly because of extensive land and infrastructure requirements. The Minimum Standard Requirements mandated by MCI are irrational and have proved to be the biggest impediment in the establishment and expansion of medical colleges. The existing norms for infrastructure need to be rationalised to give an impetus to opening new medical colleges based on existing infrastructure. Further, we need to review the compliance requirements for establishing and operating medical colleges. A comparison with international benchmarks reveals that stipulations such as maximum number of medical seats allowed per medical college, OPD and IPD requirements as well as faculty norms are too rigorous in India.

The NMC Bill includes several pathbreaking recommendations to provide greater flexibility to medical institutions, increasing the number of doctors while ensuring quality. For instance, a one-time permission will be required by medical colleges for establishment. It will also be possible for them to increase the number of seats on their own up to a cap of 250 and start postgraduate courses.

For expanding the number of private medical seats while balancing the interests of meritorious students who cannot afford the fees, the NMC will regulate fees for 50 per cent of seats in all private and deemed universities. In parallel, efforts to create more medical seats in the government sector will continue. Over the last five years, the government has invested more than Rs 10,000 crore in medical education and 21 new AIIMS are being established at a cost of Rs 30,000 crore.

Despite the best efforts, it could take up to 20 years to ramp up the supply of doctors. Currently, most of our rural and poor population is denied quality care, leaving them in the clutches of quacks. Self-styled doctors without formal training provide up to 75 per cent of primary care visits. Moreover, at present, 57.3 per cent of personnel practicing allopathic medicine do not have a medical qualification.

In this context, it is noteworthy that the NMC will have the authority to grant a limited licence to Community Health Providers (CHPs) who can deliver preventive and primary health services. Thailand, the UK and China permit CHPs to deliver health services, thereby reducing the burden on specialists and improving health outcomes. Similar results have been achieved in Chhattisgarh and Assam. Of course, the quality of CHPs will be regu-

lated tightly. Undoubtedly, the passage of the NMC Bill will prove to be a landmark moment in the process of fixing the flawed medical education system. Most importantly, its implementation will go a long way in augmenting the supply side for quality human resources in the health sector.

Kant is CEO, Niti Aayog. Views are personal



The river must flow

Ascribing legal rights to rivers helps counter pollution, may revive water bodies

cent of this irrigation is for

water-guzzling crops - rice,

Reducing this number is the

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Yes, we can. Indeed, it turns

India's water crisis and that

of the farmers, lie in the very

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same direction.

wheat and sugarcane.

BIBEK DEBROY

AT THE time of taking a bath, many people still recite a shloka. Without using diacritical marks, rendering a shloka in Roman is difficult. Nevertheless: "Gange cha Yamune chaiva Godavari Sarasvati Narmade Sindhu Kaveri jale asmin sannidhim kuru." "O Ganga, Yamuna, Godavari, Sarasvati, Narmada, Sindhu, Kaveri! Please be present in this water." Eric Newby's *Slowly Down the Ganges* also quotes this, with the comment: "Prayer to the Seven Sacred Rivers recited by every devout Hindu at the time of taking his bath". There are many more than seven rivers in India. How many? Since there is no proper definition of a river, it is impossible to answer this question. One way to list is in terms of river basins, so that the main river and its tributaries are both included. For Himalayan rivers, one will then list the Indus basin, Ganga basin, Brahmaputra basin, Barak basin and so on. Similarly, in the south, one will list the basins of the rivers flowing east (Godavari, Krishna, Kaveri, Mahanadi) and those flowing west (Narmada, Tapti). This still leaves some loose ends — minor rivers along the coast and rivers that don't drain into oceans. Depending on what is included, there can be more than 100 river basins and more than 600 rivers in the listing.

Rivers now have legal rights. In a way, it started with some rivers in Victoria. Then, in 2017, we had the Whanganui river in New Zealand, and the Ganga and Yamuna.

ess.com

Because of news reports, most people know what Uttarakhand High Court said in March 2017, though there is now a stay because of an appeal before the Supreme Court: "All the Hindus have deep Astha in rivers Ganga and Yamuna and they collectively connect with these rivers. Accordingly, while exercising the parens patrie jurisdiction, the Rivers Ganga and Yamuna, all their tributaries, streams, every natural water flowing with flow continuously or intermittently of these rivers, are declared as juristic/legal persons/living entities having the status of a legal person with all corresponding rights, duties and liabilities of a living person in order to preserve and conserve river Ganga and Yamuna. The Director NAMAMI Gange, the Chief Secretary of the State of Uttarakhand and the Advocate General of the State of Uttarakhand are hereby declared persons in loco parentis as the human face to protect, conserve and preserve Rivers Ganga and Yamuna and their tributaries. These Officers are bound to uphold the status of Rivers Ganges and Yamuna and also to promote the health and well-being of these rivers." The Ganga and Yamuna obtained legal rights, but as minors: They needed guardians. Granting legal rights to rivers (and water-bodies) opens up a new area of environmental jurisprudence.

Why did the Ganga and Yamuna need legal rights? The core issue is pollution. The Central Pollution Control Board (CPCB) brings out reports on water quality in our rivers. Strictly speaking, these are measures of water quality along stretches of rivers. There is actually a hierarchy of pollution, based on levels of BOD (biochemical oxygen demand). However, one can legitimately argue that BOD is, at best, a partial indicator. There are other measures of a river's wellbeing. If BOD values exceed eight milligrammes per litre, the river will be regarded as severely polluted. Between Wazirabad and Okhla, Yamuna has a BOD level of 32, 55 and 70, at three different places. Between Kala Amb and Narayan Garh, the Markanda river in Haryana has a BOD value of 590.

Lists float around of the most polluted rivers in the world, and the Ganga and Yamuna will invariably figure on these lists. Without contesting pollution in the Ganga and Yamuna, one should be sceptical of lists and rankings, both because of data problems (there are good data only for OECD) and because of the way numbers are used. Similarly, there are also lists of most polluted rivers in India and these lists will typically include the Ganga, Yamuna, Sabarmati and Damodar. More often than not, these lists are based on CPCB findings and, therefore, mean stretches of rivers, not entire rivers. Somewhat more rarely, there are also lists of cleanest rivers in the world and cleanest rivers in India. For instance, stretches of the Chambal, Narmada, Brahmaputra, Umngot,

Teesta and Tuipui are remarkably clean.

Ill-being of rivers is primarily due to raw sewage and industrial waste. Neither problem is new. In Britain, a Royal Commission on Sewage Disposal was established in 1898. Between 1901 and 1915, this produced ten reports. For decades, these reports were used to frame policy in Britain.

People may know of this Royal Commission. I suspect not too many have heard of Kashi Ganga Prasadini Sabha, established by concerned citizens of Varanasi in 1886. Its objective was to introduce drainage and clean up the river. The Royal Commission and Namami Gange are primarily about what the government does (though Namami Gange does have a public awareness component). But the Sabha was about what citizens did because in addition to the government bit, the citizen bit is also needed. Today, the Thames is listed among the world's cleanest rivers. "The appearance and the smell of the water forced themselves at once upon my attention. The whole of the river was an opaque, pale brown fluid." This is from a letter Michael Faraday wrote to The Times in 1855. More than a century later, in 1957, the Natural History Museum declared the Thames biologically dead: The story of its rebirth dates to the late 1960s, not earlier. Similar to the Rhine time-line.

The writer is chairman, Economic Advisory Council to the PM. Views are personal

LETTERS TO THE EDITOR

CHINA'S COERCION

THIS REFERS TO the editorial, 'In China's court' (IE, August 14). China's communist leadership rules the country with an iron hand, but, can it afford to unleash force on the Hong Kong protesters? Frequent infringement of the island's autonomy has made Hong Kong's residents sceptical of China's intentions. China will have to diplomatically defuse the tension in Hong Kong.

Vijai Pant, Hempur

NOT BY RULEBOOK

THIS REFERS TO the article, 'The Constitution test'(IE August, 14). The central government, while dividing the state of Jammu and Kashmir, has undermined the will of the people by not listening to their elected representatives. The Presidents prompt approval and the apex court's stoic attitude are only helping the current regime compromise on some of the basic features of the Constitution.

Abhinaba Mitra, *Kolkata*

Jal Shakti's tasks

THIS REFERS TO the editorial. 'Face the deluge' (IE, August 14). In June, the government created an integrated Ministry of Jal Shakti. The prime minister has written to gram pradhans requesting them to conserve rainwater during the monsoon. Some states have received

LETTER OF THE WEEK AWARD

To encourage quality reader intervention, The Indian Express offers the Letter of the Week award. The letter adjudged the best for the week is published every Saturday. Letters may be e-mailed to

or sent to The Indian Express, B-1/B, Sector 10, Noida-UP 201301. Letter writers should mention their postal address and phone number.

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less rainfall while others face a deluge. Both the situations have to be addressed and any delay in decision making will have serious consequences. The Jal Shakti ministry should intervene in situations such as the one between Maharashtra and Karnataka. A lot of damage could have been avoided if the two states had agreed to a timely discharge of waters from the Almatti dam. Krishan Chugh, Delhi 68,458

77,908

64,116

64,687

60,394

1,70,581

71,565

65,028

60,394

58,520

#ExpressExplained

WHAT THE KEY INDICATORS SHOW

61

Jun'07

Jun '10

INDIA TRADE VOLUME

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

GLOBAL CAPITAL GOODS IMPORTS*

*in per cent, 3

month moving

TELLING NUMBERS

Over 60,000 Indians get US green cards every year

2013

2014

Mexico

China

Cuba

India

Dominican 🖥

Republic

GREEN CARDS TO INDIANS

GREEN CARDS IN 2017,

BY COUNTRY OF BIRTH

Indian citizens visiting the US, including tourists and business travellers,

students and exchange visitors, tem-

porary workers and families, diplo-

mats and other representatives,

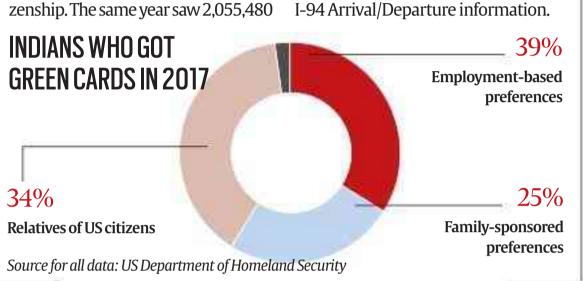
among other classes, as per the

Department of Homeland Security's

ON MONDAY, the US government announced that it would make green card regulations more stringent, a move that will impact applicants from around the world, including from India. India-born immigrants in the US got the fourth highest number of green cards in 2017, government data show. Indians were behind applicants from Mexico, China, and Cuba in terms of number of green cards (lawful permanent resident status) obtained, according the '2017 Yearbook of Immigration Statistics', the latest available on the website of the US Department of Homeland Security. In 2017, 60,394 persons born in

India obtained permanent resident status, of whom a third (20,549) were immediate relatives of US citizens, a fourth (14,962) were family sponsored, and over a third (23,569) were employed in the US. The remainder were given this status under the Diversity Immigrant Visa, refugee, asylee and other categories.

Also in 2017, 50,802 Indian-born US residents acquired American citizenship. The same year saw 2,055,480



THIS WORD MEANS

NOTIFIABLE DISEASE

Malaria set to be classified as one in Delhi. Who notifies a disease, and how does it help?

A MONTH after Union Health Minister Dr Harsh Vardhan asked the Delhi government to make malaria and dengue notifiable diseases, the South Delhi Municipal Corporation (SDMC) has initiated the work to notify malaria in the capital (The *Indian Express*, August 14).

A notifiable disease is any disease that is required by law to be reported to government authorities. The collation of information allows the authorities to monitor the disease, and provides early warning of possible outbreaks. The World Health Organization's International Health Regulations, 1969 require disease reporting to the WHO in order to help with its global surveillance and advisory role. Making a disease legally notifiable by

doctors and health professionals allows for intervention to control the spread of highly infectious diseases. Registered medical practitioners need to notify such diseases in a proper form within three days, or notify verbally via phone within 24 hours depending on the urgency of the situation. This means every government hospital, private hospital, laboratories, and clinics will have to report cases of the disease to the government.



The process helps the government keep track and formulate a plan for elimination and control. In less infectious conditions, it improves information about the burden and distribution of disease.

The Centre has notified several diseases such as cholera, diphtheria, encephalitis, leprosy, meningitis, pertussis (whooping cough), plague, tuberculosis, AIDS, hepatitis, measles, yellow fever, malaria dengue, etc. The onus of notifying any disease and the implementation lies with the state government.

Any failure to report a notifiable disease is a criminal offence and the state government can take necessary actions against defaulters.

ASTHA SAXENA

SIMPLY PUT QUESTION & ANSWER

What's behind recession fears

Trade and geopolitical uncertainties have hit all major economies. Is a global recession upon us? Where does India stand, and what can it do to insulate itself at this time?

Base case without more tariff hikes

MS Forecast

*3 month

2

Jul'18

China

Dec'18

moving average

GLOBAL REAL GDP GROWTH (%)

2003 2005 2007 2009 2011 2013 2015 2017 2019

MANUFACTURING PMI*

May '18

DM ex US-RHS

6.0%

5.5%

5.0%

4.5%

4.0%

3.5%

3.0%

2.5%

2.0%

1.5%

50

Mar'17

V Long term average

Recession Threshold

UDIT MISRA NEW DELHI, AUGUST 14

THE GLOBAL economy continues to be hit by bad news as one big economy after another falters on economic growth. On Wednesday, data from Germany, the world's fourthbiggest economy, showed that its GDP contracted by 0.1% in the April-June quarter (Q2). Ongoing trade tensions between the US and China, and the uncertainty due to Brexit have impacted German exports badly. Germany is the world's third-biggest trader after the US and China.

The two biggest economies are already in some trouble. The US has grown by just 2.1% in Q2 of 2019 as against 3.2% in Q1. China's growth has been decelerating for longer. According to The Wall Street Journal, the unemployment rate in Chinese cities is now at the highest recorded level, and other key metrics such as factory production (which is the lowest since the 2008 financial crisis) have worsened. The Japanese economy may have surprised everyone by growing at an annualised rate of 1.8% in Q2, but it, too, is fighting to ward off a recession.

Investor sentiment is so bad that even the decision by the Trump administration to defer imposing a new set of tariffs on Chinese imports from September to December could not hold back the US bond (Treasury) yields from plummeting. The 30-year bond yield fell to its historic low as US markets opened Wednesday, even as the 10-year bond yields fell below the two-year bond yields. An inversion in bond yields such as this points to the likelihood of a recession in the near future. Simply put, investors are looking for safe options, and since US bonds are one of the safest bets, more of those are being bought. This has led to a spike in their prices, and a fall in their yields.

So, is a global recession likely?

Earlier this month, researchers at Morgan Stanley, a leading investment bank, warned that if the US and China continue to raise tariff and non-tariff barriers over the next four to six months, the global economic growth rate will fall to a seven-year low of 2.8% (chart 1), and worse still, the world economy could enter a recession within the next three quarters (that is, nine months). The last massive downward spiral in the global economy happened in the wake of the great financial crisis of 2008, and continued until 2010.

What is a global recession?

In an economy, a recession happens when output declines for two successive quarters (that is, six months). However, for a global recession, institutions such as the International Monetary Fund tend to look at more than just a weakness in the economic growth rate; instead, they look at a widespread impact in terms of employment or

demand for oil, etc. The long-term global growth average is 3.5%. The recession threshold is 2.5%.

Oct '17

EM ex China

What has triggered the alarm?

Earlier this month, the US declared China a "currency manipulator". In other words, Washington accused Beijing of deliberately weakening the yuan to make Chinese exports to the US more attractive and undercut the effect of increased US tariffs.

The intensifying trade war between the two has the potential to derail already weak global growth, and the signs are evident. For instance, the global manufacturing Purchasing Managers' Index (chart 2) and new orders sub-index have contracted for the second consecutive month in July; they are already at a seven-year low. Further, the global capital expenditure cycle has "ground to a halt" (chart 3); since the start of 2018, there's been a sharp fall-off in nominal capital goods imports growth. (That is, there's a

decline in capital investment in anticipation of reduced demand.)

20%

10%

0%

-20%

Source: Morgan Stanley (MS)

How can this lead to a global recession? The German slowdown is a very good ex-

ample. The absolute volume of global trade has stagnated and, in terms of percentage change, trade is contracting. What is worse is the composition of trade that is being hit — and is likely to be hit further. According to Morgan Stanley, two-thirds of the goods being lined up for increased tariffs are consumer goods. Higher tariffs are not only likely to douse demand but, crucially, hit business confidence. The apprehension is global trade uncertainties could start a negative cycle, wherein businesses do not feel confident enough to invest more, given the lower demand for consumer goods. Reduced capital investment would reflect in fewer jobs, which, in turn, will show up in reduced wages and, eventually, lower aggregate demand in the world.

What makes this scenario trickier is the

fact that monetary policy is already loose that is, borrowing money is cheap. A recession now will be more difficult to salvage.

Jun '17

Jun'19

What about India?

Jun '15

As chart 4 shows, India's trade is already suffering, and jobs are being lost. For an economy that is struggling to find a domestic growth lever – government and businesses are overextended and household (that is, private family-level) consumption is down exports could have provided a respite.

What can India do to boost exports? A 2016 analysis by HSBC global research

showed that domestic bottlenecks were more responsible for India's lack of competitiveness in exports than the lack of global demand and the overvalued rupee put together. In other words, addressing bottlenecks such as better roads, more electricity, easier rules of doing business etc., will go a long way in boosting exports.

Tea at Rs 75,000/kg: How is it valued, sold?

EXPRESS NEWS SERVICE GUWAHATI, AUGUST 14

ON TUESDAY, a kilogram of 'Golden Butterfly', a specialty tea from Assam's Dikom Tea Estate, sold for Rs 75,000 at the Guwahati Tea Auction Centre (GTAC) — a record Indian price for tea, according to Dinesh Bihani, Secretary of the Guwahati Tea Auction Buvers' Association.

RECORDS have been set and broken rapidly at the GTAC of late. Only days previously, on July 31, a variety of Assam tea known as 'Maijan Golden Tips' had sold for Rs 70,501 per kg. And on the day previous to that, Manohari Gold Special tea was auctioned for

In July 2018, the same Manohari Gold Special tea was auctioned for Rs 39,001/kg; GTAC had then said that the price — more than twice the previous record of Rs 18,801/kg held by a garden in Arunachal Pradesh — was a new record for Indian tea. However, in August itself, a variety from Arunachal went for Rs 40,000/kg.

WHAT'S SPECIAL about these teas? According to the growers of Golden Butterfly, only "the soft golden tips go into making this exceptionally rare and special tea". Lalit Kumar Jalan, the owner of Assam Tea Traders, one of the oldest tea shops in Guwahati, which paid the record price for Golden Butterfly, said that the tea has an "ex-

TEA IS AUCTIONED in India at six tea shop or godown.

auction centres — Kolkata, Guwahati, Siliguri, Kochi, Coimbatore, and Coonoor. Kolkata is the oldest centre, set up by the British in 1861; the Guwahati centre has been functioning since 1970. Auctioning is considered the best way to know the value of a tea.

Assam accounts for nearly 55% of India's tea production. The GTAC has 665 sellers, 247 buyers, nine brokers, and 34 warehouses registered with it. Auctions are normally held on Tuesdays and Wednesdays. The GTAC has an auction hall, but the entire process has been online for close to a decade now.

BUYERS LOOK AT indicators such as appearance, quality/strength of the liquid form, aroma and "keeping quality" – i.e., how well tremely mellow and sweet caramel flavour". the tea will keep if stored for a long time in a taken from the garden to the warehouse, where brokers do tasting and sampling. Their valuation data is then entered on the Tea Board of India's auction website. **IN CHINA**, where drinking tea has been

The auction process consists of tea being

considered an art for some 1,500 years, a system of classification of the leaf exists that is elaborate enough to put French hauteur about wine to shame. In a sale that was considered astonishing at the time it was concluded in 2002, a buyer had paid RMB 180,000 for 20 g of China's legendary Da Hong Pao tea, which works out to around Rs 18.3 lakh in today's money. The price gold in India was under Rs 38,000 for 10 g on Wednesday; however, not all varieties of Da Hong Pao tea are that expensive.

Who are protesting in Hong Kong? The young, highly educated middle class

EXPRESS NEWS SERVICE NEW DELHI, AUGUST 14

SINCE JUNE, Hong Kong has witnessed an unprecedented series of protests in opposition to a Bill that allows extradition to mainland China. What is the profile of these protesters?

They are young, generally in their twenties, concludes a study that has sought to profile the participants of 12 protests between June 9 and August 12. Most of them have had a higher education, and those who identify themselves as "middle class" outnumber those who call themselves "lower class".

led by researchers from the Chinese University of Hong Kong, Lingnan University, the Hang Seng University of Hong Kong and Hong Kong Baptist University. The 12 surveys covered 6,688 respondents; the percentage of male respon-

dents (50.5 to 64.2 per cent) was generally higher than that of female ones, except on June 26 (42.6 per cent male respondents).

Age: majority in 20s

In general, the majority of respondents belonged to the age group 20-29. The proportion aged 20-24 ranged from 16.3 per cent to 54.2 per cent, and the proportion aged 25-29 ranged from 11.6 to 34.2 per cent across the surveys. There were also younger respondents aged 19 or below, ranging between 6.0 and 15.6 per cent.

The paper divides the protests into mass rallies, fluid demonstrations and static demonstrations, and looks at the age pro-The study, which is available online, was file of participants in each. In mass rallies, protesters were more evenly distributed across age groups — these often featured higher participation rates of those aged 30 or above (between 43.1 and 57.3 per cent). However, in fluid demonstrations, which often involved more confrontations, the



A participant at a protest held in Hong Kong on August 8. The survey covered 12 such protests since June 9. AP

MOSTLYBETWEEN 20 & 29

Date	U-20	20-24	24-29	30-34
June 9	10.5%	20.7%	11.6%	8.4%
June 12	6.3%	27.9%	34.2%	19.0%
June 16	15.6%	16.3%	18.3%	12.9%
June 17	15.5%	33.0%	25.8%	11.4%
June 21	14.6%	54.2%	16.4%	8.6%
June 26	11.2%	40.9%	23.7%	12.7%
July 1	12.9%	18.6%	18.3%	11.0%
July 14	7.3%	23.9%	18.5%	12.3%
July 21	11.9%	23.3%	17.5%	10.6%
July 27	6.0%	26.0%	19.6%	18.3%
Aug 4*	8.6%	27.9%	20.5%	10.5%
Aug 4*	6.8%	28.7%	21.4%	11.4%

* Two protests on same date

Source: 'Onsite Survey Findings in Hong Kong's Anti-Extradition Bill Protests', Centre for Communication and Public Opinion Survey, Chinese University of Hong Kong

proportion of protesters aged 30 or above significantly dropped (between 13.8 and 30.4 per cent). "That is to say, fluid demonstrations were mostly dominated by young people under the age of 30," the paper said. In static demonstrations, around 23 to 43 per cent of participants were 30 or above.

Education: generally high

While the education level of survey respondents was generally high, there were some variations among the types of protests. Participants of mass rallies were relatively less highly educated, but even in these protests, 68.2 to 76.8 per cent had completed tertiary education. For static demonstrations and fluid demonstrations, however, participants on average were more highly educated. More than 80 per cent of them reported to have received tertiary education.

Socio-economic status

Mindful of the likelihood that respon-