



Smoke of the vaper

The ban on e-cigarettes will require rigorous implementation to be effective

When alternatives are peddled as ‘the lesser evil’, virtue is artificially added as a measure of degrees. The evil is often clear and present, as in the case of electronic cigarettes, in all forms – Electronic Nicotine Delivery System (ENDS), vapes, and e-hookahs. The Centre’s move to ban these products shows a welcome intolerance of anything that impacts negatively on the health and wellness of the people of the country. The Cabinet recently cleared the Prohibition of Electronic Cigarettes Ordinance, 2019. Now, any production, import, export, sale (including online), distribution or advertisement, and storage of e-cigarettes is a cognisable offence punishable with imprisonment or fine, or both. E-cigarettes, which were to aid smokers kick their habit, do not burn tobacco leaves. Instead these battery-operated devices produce aerosol by heating a solution containing among other things, nicotine. Nicotine is an addictive substance that may, according to studies, function as a “tumour promoter” and aid neuro-degeneration. Some other compounds in the aerosol are toxic substances that have known deleterious effects, and might just be less harmful than cigarettes, but not harmless. Seven deaths have been recorded in the U.S. – the largest consumer of e-cigarettes in the world – where, New York recently banned the sale of flavoured e-cigarettes.

There is ample evidence on the harm of nicotine addiction – the reason that it is only approved under the Drugs and Cosmetics Act for use only in nicotine gums and patches. As the WHO’s Framework Convention on Tobacco Control (FCTC) outlines, these devices can only be believed to succeed if smokers have moved on to an alternative nicotine source, and then stopped using that too; and the recruitment of minors into nicotine dependence eventually wanes to zero. There is evidence now that vaping, dangled as a cool, fun, activity, lures youngsters, and ironically, serves to introduce them to smoking. The FCTC also records that e-cigarettes are unlikely to be harmless, and long-term use is expected to increase the risk of chronic obstructive pulmonary disease, lung cancer, and possibly cardiovascular disease and other diseases also associated with smoking. The urgency to act on this front is also justified by the number of users. As per figures submitted to Parliament earlier this year, e-cigarettes and accessories valued at about \$1,91,780 were imported to India between 2016 and 2019. The government, already on the right path, must go all out to ensure that its ban is implemented earnestly in letter and spirit, unlike the patchy execution of the Cigarettes and Other Tobacco Products Act. It is essential to ensure this progressive ordinance does not go up in smoke.

Israel undecided

Netanyahu must step aside to allow Israel to get a new stable government

Once again, Israel is poised for protracted coalition talks between the country’s two main parties. Tuesday’s election, the second this year, is shaping to be as inconclusive as the poll in April. The ambition to win a fifth term in office could elude Prime Minister Benjamin Netanyahu of the conservative Likud party. If anything, his appeal to hard-line Jewish parties to the right helped Israeli Arabs, under the rubric of the Arab Joint List, to coalesce as a more cohesive force ahead of the polls. Mr. Netanyahu also burned his bridges with potential centrist allies in recent months. With about 96.5% of the ballots counted, Israeli media says the Likud party has won 31 seats. Blue and White, the Opposition of former Army chief Benny Gantz, has reportedly won 33 seats. In the 120-seat Knesset, neither is thus anywhere near securing a clean majority. Between the two of them, Mr. Netanyahu’s position appears more precarious. Having failed to forge a right-wing coalition after the inconclusive April election, he opted to return to the people rather than allow Mr. Gantz to try and break the deadlock. Predictably, the latter has offered to establish a unity government with Likud, but without Mr. Netanyahu at the helm. Israel’s longest serving Prime Minister could not even contemplate such a scenario, as the country’s chief prosecutor is scheduled to begin a probe within weeks into bribery and fraud against him.

Reports indicate that given Mr. Gantz’s openness to work with other parties, Israel’s President Reuven Rivlin may be inclined to invite him first to form a government. The other dilemma Mr. Netanyahu faces is from the Israel Our Home party, headed by his former Defence Minister, Avigdor Lieberman, who has relentlessly campaigned to remove the exemption of ultra-orthodox Jewish communities from enlisting in the armed forces. The issue was a major obstacle to the two parties coming together earlier this year. Israel Our Home and the Arab Joint List are expected to improve on their tally in this election. But to anticipate a working arrangement between them and the Blue and White Opposition may be stretching optimism too far. After all, Mr. Gantz has resorted no less to the rhetoric about expanding Israel’s borders deep into the Palestinian territory. But in Israel’s increasingly fragmented polity, the imperatives of forming a government oblige parties to strike compromises. That endeavour ought to be underpinned by a recognition of the two-state solution as the only viable course to accord dignity and sovereignty to the Palestinian people. Foremost, Tel Aviv needs a government. Mr. Netanyahu could facilitate the process by stepping aside. That would be the statesmanly act.

Over the hills and far, far away

Integration of the mountains with the mainstream is unlikely under a unitary dispensation that promises a ‘green bonus’



ANIKET ALAM

In the last week of July this year, 11 Himalayan States of India met in Dehradun demanding a “green bonus”, or a payment for environmental services they provide to the nation. Finance minister Nirmala Sitharaman, 15th Finance Commission Chair N.K. Singh and Niti Aayog Deputy Chairman Rajiv Kumar were present. The assembled Chief Ministers argued that the Himalayan States, stretching from Jammu and Kashmir (which was still a State then) to Tripura (which most people would not really include in the Himalayan region) paid a developmental price for maintaining forests, rivers, and other environmental goods which helped the rest of the country.

This meet was organised with much fanfare, and was meant to showcase the Bharatiya Janata Party (BJP)’s commitment to its general election manifesto which had promised a financial package to address the special developmental needs of the Himalayan States. The States asked for help to develop hydropower resources, subsidies for their environmental protection measures which deny them normal ‘development models’, and recognition of their efforts to meet human development parameters.

Unique needs

There was perhaps nothing exceptional about much of this, and within a week, the meagre media attention this received was overshadowed by the abrogation of J&K’s special status under Article 370 and the massive clampdown on civilian life in the Kashmir valley.

However banal the demands of the Himalayan States seem in comparison to what has been happening in Kashmir since August 5, both are actually part of the same problem that India has historically had: its inability to come to terms with the specificity of the Himalayan region, whether political, social, or ecological-economic.

The problem of integrating the northern mountains to the national mainstream is not specific to India. If one takes a look at the entire mountain zone stretching from Balochistan, through Khyber Pakhtunkhwa, J&K, Ladakh, Himachal Pradesh, Uttarakhand, Nepal, Sikkim and Gorkhaland, to Arunachal Pradesh, Meghalaya, Nagaland, Manipur, Mizoram and the Chittagong Hill Tracts, it is easy to see that each of these regions has had problems when it comes to integration of the hilly regions with the nation states that are primarily anchored in the plains. (Himachal Pradesh is the only exception, which perhaps proves the rule.)

One could also further argue that this ‘integration problem’ is not just a South Asian phenomenon – China is struggling to integrate its mountain people and their homelands with its national mainstream, as are Myanmar, Thailand, and other countries.

Scholars have for long been acutely aware of this problem. Seventy and more years ago, Owen Latimore wrote extensively about the exceptionalism of the “Inner Asian Frontiers of China” and, a decade back, James C. Scott argued persuasively about “Zomia” as the mountain zone of South-East Asia (and South Asia) which deliberately kept itself independent of the plains. Scholars in India too, from Verrier Elwin to D.N. Majumdar and Y.S. Parmar, Gerald Berreman and Ramachandra Guha, have written, even if in less ambitious terms, about how structurally different are the Himalayan



The Kalka-Shimla highway in Himachal Pradesh. ■AKHILESH KUMAR

regions from the Indian mainstream in terms of their social and economic structure. Yet, this research has not really percolated to political understanding, whether at the level of policy formulation or popular conceptions.

Legacy of the colonial era

To appreciate this point, we need to move back by a couple of centuries when the geography of the colonial state was being made. There is a long, complex and surprisingly unpredictable history to the establishment of Pax Britannica’s border lines along India’s northern mountains. For most regions in the Himalayas, this was the first time that a ‘nation state’, anchored in the society and political economy of the plains, was able to reach so deep into the Himalayas and control them in a way which was historically unprecedented. In brief, the Himalayas successfully provided a barrier to Russian colonial expansion but were unsuccessful in providing a trade route into China.

By the end of the 19th century, keeping the mountains politically quiet and socially peaceful was both a desirable aim and a hopeful description. The idyll of the ‘hill station’ and the war-like strategies towards the northern tribesmen were both creations of this policy.

The postcolonial nation states of Asia, be it India, Pakistan, China or Myanmar, have not been able to break out of this difficult relation with their mountain regions. These independent nation states have all imagined themselves to be the inheritors, in the high Himalayas, of the geopolitical stakes of their colonial predecessors.

Even their national imageries have been framed – despite all their other variations – on the social, political and economic specificities of the communities based in the riverine plains. It is the village or town of the Ganga plains, or along the Narmada or Krishna and Cauvery rivers, which has defined what it means to be ‘Indian’. The norms of what an ‘Indian village’ is, how its society is structured, how its economy is backward or in what ways does its political life work make no reference to the specificities of the mountain regions. These are at best imagined by the national mainstream as idyllic ‘hill stations’ peopled by ‘noble savages’, or, at worst, as wild regions inhabited by irrational blood-thirsty tribesmen.

This is not only a social-psychological feature but has direct practical consequences as policies and programmes are devised with the ‘national norm’ in mind, which almost always have unintended con-

sequences on the hilly regions. The mountains are in a permanent state of exception.

Resources as commodities

Seen in this light, there is a direct, and short, link between the demands of the Himalayan States seeking a special “green bonus” – which the BJP supports – and the autonomy incorporated in the late, lamented Article 370 – which the BJP opposes. In India, specifically, the massive expansion of the national economy over the past three decades now allows for commodification of mountain resources (forests, water, labour, tourism, horticulture and even agriculture) in ways that are unprecedented. It has led to changes in the class structure and the emergence of a new middle class with national aspirations that finds the geographical specificity of the Himalayas at once a hindrance and the main commodity in its exchanges with the nation state. Thus, the variation from secessionist movements in J&K and Nagaland to active integrationist movements in Himachal Pradesh, Arunachal Pradesh and Manipur expresses the same conundrum – how do these regions and people reach a fair pact with the Indian nation state and become part of the national imagination?

History tells us that almost all Asian nation states have found such a coming together very difficult, if not impossible. With its ideological militarism, ethnic sectarianism and a rapidly shrinking economic base, the present dispensation in New Delhi may well be able to throw a few crumbs but seems unlikely to be able to find a way to meet the special demands of the Himalayan people. A “green bonus” will remain a charade.

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Maths helped Einstein; it can help the economy too

The theory of relativity is regarded as the pinnacle of mathematical elegance, more than a century since its formulation



PARAMESWARAN AJITH

Can policymakers plan to make India a \$5 trillion economy in five years without worrying about the basic mathematics of economic growth? Some of our leaders seem to think that wishful thinking can take us there. Albert Einstein’s discovery of gravity has been invoked as a successful example for achieving seemingly unattainable goals through “out-of-the-box” thinking. Two obvious questions arise. First, did Einstein indeed explain relativity sans any inputs from mathematics? And, two, can economic growth models be devoid of mathematics?

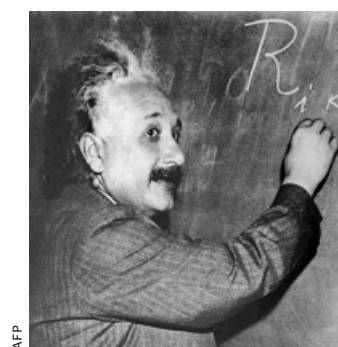
Einstein’s general theory of relativity is the most accurate theory of gravity available to us at present. True, Einstein was certainly not the first one to make contributions to our understanding of gravity. More than two centuries prior to him, Isaac Newton had proposed a universal law of gravitation. However, Newtonian theory of gravity, though remarkably ac-

curate most of the times, had its limitations. When gravity was extremely strong or when the motions involved were extremely fast, the calculations became imprecise. For example, the theoretical calculation of the orbit of Mercury – the planet closest to the Sun – turned out to have a small disagreement with the actual observations of Mercury’s motion. Einstein’s theory not only predicted the orbit of Mercury accurately, but also predicted a number of interesting phenomena not anticipated earlier.

A theory of ‘space-time’

Einstein’s description of gravity was radically different from that of Newton. Newton assumed the existence of an absolute space and universal time. According to Einstein, space and time are part of a single entity called ‘space-time’. What we identify as space or time heavily depend on the frame of reference of the observer. However, space-time is universal. And gravity is the manifestation of curved space-time. Any massive object would curve the space-time around it.

It is hard to imagine a curved space-time, an entity that spans four dimensions – three spatial dimensions and the time. Typically



we can see the curvature of a surface when we have access to a higher dimension. For example, we see the curvature of the surface of a football because we have access to a third spatial dimension. It is impossible to directly observe the curvature of the space-time since we don’t have access to a fifth dimension. However, it is possible to infer the curvature of a space without accessing extra dimensions. All the familiar axioms of Euclidean geometry cease to be valid on curved spaces. For example, according to Euclidean geometry, two parallel lines always remain parallel. However, this is not true, for example, on the Earth’s surface. Consider lines of constant longitude: on the equator, meridians are parallel to each other; but on the poles all of them meet.

Thus, one could do a measurement to check whether lines that are originally parallel remain parallel. If they don’t, this is an evidence that the space-time is curved. Several astronomical observations conducted in the last century confirm that space-time is indeed curved in the presence of massive objects.

Einstein himself was not well-versed in the geometry of curved spaces. Here, Einstein turned to his friend, mathematician Marcel Grossmann, to master the necessary techniques and tools. Armed with these tools, and driven by some unique physical insights which are marks of a genius, Einstein was able to construct an elegant mathematical theory of space-time.

However, mathematical elegance is not the primary touchstone of a theory of nature. The key yardstick of success is the theory’s ability to describe the natural phenomenon that it seeks to describe – in this case, gravity. General relativity remained inaccessible to most of the scientists during its initial years. However, Einstein and many others were able to extract specific observable consequences of the curved nature of space-time by mathematically solving the equations. Even

though space-time itself is not directly observable, all of these observable predictions were verified by a variety of astronomical observations and laboratory tests.

Is math useful?

Not all areas of sciences are able to construct theories or models that have the level of mathematical rigour that theories of physics enjoy. This is due to the highly complex nature of the phenomena they seek to describe. Most of the social sciences are in this end of the spectrum, due to obvious reasons. However, economics is probably one notable exception, where models and techniques employing higher mathematics have proven to be highly fruitful.

However, “math” is also commonly used as shorthand for quantitative reasoning, which is the backbone of all scientific enquiry. Ideally, planning and policy should be largely informed by quantitative reasoning, including the purported goal of doubling the size of Indian economy in five years. Wishful thinking and ideological propaganda are poor substitutes to quantitative reasoning.

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

Ban on e-cigarettes

The Central government’s concern is commendable but one wonders why e-cigarettes alone are prohibited; why not ban normal cigarettes, other tobacco products and alcohol? (Front page, “Cabinet approves ban on e-cigarettes,” Sept. 19). Neither are e-cigarettes as widely available as the conventional tobacco products nor are they consumed as much. If the government is really concerned about public health, it should ban cigarettes and beedis. Failing that, the present ban will serve more as a token measure and could even end up boosting the sales figures of the country’s tobacco industry. KSHIRASAGARA BALAJI RAO, Hyderabad

Smokers have a wrong perception that e-cigarettes are a less-harmful alternative to cigarettes. On the contrary, test results have shown that they could cause potential health problems, including cancer, as they contain chemicals and toxins that are addictive. When you stop using them, you could feel depressed, and incorrigibly techie. Research has also proved that the use of Electronic Nicotine Delivery Systems (ENDS) has not been effective in stopping smoking. Tobacco-related toxins have also been found in the aerosol vapour of ENDS products. There is also evidence that inhaled nicotine from ENDS damages lung tissues and lowers the body’s natural resistance to infections and to cancers. In fact, research suggests that youngsters who use ENDS

are more likely to start smoking conventional cigarettes. R. SIVAKUMAR, Chennai

A costly withdrawal

U.S. President Donald Trump’s withdrawal from the Iran nuclear deal was a big mistake which has taken West Asia to a dangerous situation. The Gulf is bearing the brunt of Mr. Trump’s ill-thought-out decision. In spite of, until recently, complying fully with the nuclear deal, Iran was unfairly squeezed by economic sanctions with “maximum pressure”. Now, other parties of the nuclear deal should come ahead to bring the U.S. and Iran back to the negotiating table. Otherwise, the imminent threat of “lose-win” war will loom large in the region. The

Aramco attack could be followed by further breach of the terms of nuclear deal if sanctions against Tehran are not relaxed (Editorial page, “Obama was right about Iran,” Sept. 19). MD. EHTESHAMULLAH, Malappuram, Kerala

Afghan peace process

The collapse of talks between U.S. and Taliban marks a new phase in the Afghan crisis with the ground situation deteriorating further and attacks on civilians becoming more frequent (Editorial, “The Taliban problem,” Sept. 19). Unfortunately, this phase coincides with the campaigning period for the upcoming presidential elections in Afghanistan and people attending the campaign rallies could become easy targets for the

insurgents. U.S. should temporarily place on hold its plans for complete troop withdrawal to enable peaceful conduct of the elections and to force the Taliban to return to the table for talks. This time, Washington needs to make the talks more broad-based and give the Afghan government its rightful place at the negotiating table. India and other regional players can play a significant role in the peace process. KOSARAJU CHANDRAMOULI, Hyderabad

Language parity

The belated clarifications by Shah on Hindi are short on the question of English continuing as an associate official language at the Centre, between the Centre and the States and between the States. It is now necessary to amend the Constitution to provide a level-playing field for all the languages in the country and ensure parity. V. PADMANABHAN, Bengaluru
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CORRECTIONS & CLARIFICATIONS: >>The entry corresponding to “A hundred years ago” – “Help the Punjab: An appeal”, (“From the archives” column, early editions, Sept. 19, 2019) had been erroneously dated Sept. 19, 2019. It should have been Sept. 19, 1919. >>The headline of the lead story (Sept. 18, 2019) “Government to peg MGNREGA wages to inflation in bid to hike incomes” should have instead read: “Government to update inflation index linked to MGNREGA wages in bid to hike incomes”.

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