Opinion

THURSDAY, JUNE 20, 2019

FIRST ADDRESS

New Speaker of Lok Sabha, Om Birla

"This is a country that believes in democracy and in the transparent manner people have voted during the recent elections braving scorching heat only shows that the people have immense faith in all of us"

Nal se Jal needs getting *jal* right

Else, the "piped water for every household" vision could end up a pipe dream

THE FIRST SIGN that the new government would treat equitable access to water and sustainable harnessing of ground and surface water resources in India as a priority was the creation of the new Jal Shakti ministry. Now, the prime minister has outlined a vision of giving every Indian household access to piped drinking water by 2024—christened a catchy Nal se Jal. With the country having just 4% of the world's potable water resources, ensuring equitable access for such a large population seems virtually unachievable. At the moment, 75% of the country's households don't have access to drinking water in their premises, and close to 90% of rural households have no access to piped water. Nevertheless, the goal is an important one, given how the health of the nation rests on universal access to clean drinking water. Nearly 40 million Indians suffer from waterborne diseases annually, 200,000 die, while 73 million working days are lost due to these diseases, leading to an economic loss of $600 million a year. Nal se Jal, if it fructifies, will build on the impressive toilet coverage under Swacch Bharat Mission, in improving sanitation in the country. But, getting to universalisation of piped access water may be harder than it seems because it means the pressure on scant resources, already-high, will shoot up.

India, thanks largely to poor agricultural strategy, today is the largest groundwater extractor in the world, pumping out nearly 25% of the global groundwater used annually. As a result, over half of India's groundwater wells are running dry, and NITI Aayog estimates, by as early as next year, 21 Indian cities, including some of the biggest ones, would have entirely run out of groundwater. The 600 million in the country facing high to extreme water stress will, thus, become a larger tribe soon. At the same time, with monsoon held to ransom by climate change effects, and its nature, thus, being drastically altered, India's problem will become one of simultaneous inundation and spreading desertification—according to government data, nearly 30% of India is degraded or facing desertification, with 26 of 29 states reporting an increase in area threatened by desertification in the past decade. Water wars are now erupting within the boundaries of some states, let alone the water wars between states. Against such a backdrop, how much of Nal se Jal will be realised remains to be seen. Water is a state issue, and the government has already prefaced the Nal se Jal vision with the caveat that "the scope of the Centre's intervention is limited". Even so, if the Centre were to concentrate on key points that leave India so water-stressed, there is hope yet. For a start, the Union government must look at creating more capacity to store a larger volume of the precipitation India receives—while the usage demand is less than half of the annual precipitation India receives, after discounting for evaporation losses, the reservoir capacity is less than a quarter of the usage demand volume. At the same time, government policies on pricing and procurement for agriculture have ensured unsustainable use of water in agriculture—from Maharashtra's water-guzzling sugarcane farming to Punjab's and Tamil Nadu's water-intensive rice cultivation. Adding to the agriculture-burden on water resources are subsidies on power and fertilisers that, respectively, have allowed draining of groundwater and affect soil's water-demand by changing soil chemistry. In urban areas, water is still vastly subsidised for the well-off by the states, while the poorer sections in a city like Delhi/Bengaluru have to fork out large sums for illegal supply by the tanker mafia. The Centre and states must together identify both wasteful usage and inadequate storage before the pipeline network is laid out.

Bihar failed its children

Blame state apathy for the rise in encephalitis toll this year

THE CONFUSION OVER what has killed over 100 children in Bihar is a symptom of the gangrenous rot in public healthcare in India. While even doctors are casually bandying about the term Acute Encephalitis Syndrome (AES) to talk about the disease that has repeatedly struck one of the poorest regions in the country, the fact is untrained health workers may use the term AES to talk about an undiagnosed brain disease which manifests symptoms like convulsions, loss of consciousness, etc. But when doctors use the phrase after a 100 deaths, it is a worrying sign—the doctors themselves are not sure of what they are dealing with. No wonder many explanations are being forwarded to explain the current crisis. While experts agree that a host of diseases and ingestion of certain toxins exhibit the symptoms seen in the current outbreak in Bihar, the fact that over 300 children have been hospitalised should have immediately pointed at lines of investigation to ascertain cause. Instead, there is now confusion, with senior doctors at one of the major treatment hospitals in Bihar calling it a case of heat-wave related morbidity while a set of researchers who studied past outbreaks in the region believe it to be litchi-toxicity related critical hypoglycemia. Overextended public healthcare infrastructure—it is only on Tuesday that the state government announced that something as basic as bed capacity was being added—has been made worse by the local and state administration sleeping over both prevention and containment.

The Bihar health minister asking about cricket scores at a press conference where the Union health minister was present is a telling sign of official apathy. While the Centre had announced a 100-bed superspeciality hospital in the district in 2014, after 379 children died in a similar outbreak, the facility is yet to be completed. A 10-bed facility exclusively for children, also announced in 2014, is yet to see the light of day. A chronic deficit of basic healthcare infrastructure and human resource in Bihar—it has the worst doctor-patient ratio in the country and one of the largest radial distance covered by a primary healthcare centre—is likely to have made the problem worse, with patients in far-flung areas of the epicentre district, Muzaffarpur (a major litchi cultivation centre), and adjoining ones unable to access care. Local activists have claimed that neither the state government nor the Centre have carried out any awareness drive in Muzaffarpur and districts bordering it. While the Bihar government laid down a standard operating procedure (SOP) in 2015 that mandates grassroots health workers checking with households if any child has shown symptoms of AES, the fact that mortality climbed rapidly this year after having fallen to 33 in 2018, from over 400 in 2012, indicates that there were lapses in implementation of the SOP. Besides, litchi-related hypoglycemic encephalitis being suspected is an indicator of lingering protein-energy malnutrition in children in the area as well.

Uttar Pradesh, after 500 children died in the 2017 outbreak of Japanese encephalitis (JE), launched a vaccination drive against JE, and intensive health awareness and sanitation coverage (JE is spread by mosquitoes)—in 2018, cases dropped to a third of that reported in 2017. If Bihar has failed to learn from UP's example, then the blame for this year's toll rests squarely on the state government.

BleedingGREEN

Environment reporting—second only to conflict reporting—carries the greatest degree of threat to the scribe's life

A COMPILATION OF data on crimes against journalists by the Committee to Protect Journalists (CPJ)—brought out by *The Guardian* and *Forbidden Stories*—says environmental journalists face a great deal of hostility in their line of work, and are even killed sometimes. Environmental journalists and activists in India—often there is a very thin line between the two, with the latter doubling up as stringers in smaller cities—face intimidation and harassment. This is especially true of those working on issues such as land grabbing and illegal sand mining. The CPJ found 13 instances of investigative environmnent reporters killed in their line of work globally since 2009, three of which—Sai Reddy, Jagendra Singh, and Karun Misra, killed in 2013, 2015, and 2016 respectively—came from India. However, local coverage paints a grimmer picture. A report by FORUM-ASIA, for instance, documents 17 cases of harassment, intimidation and physical violence, including murder, against defenders of land and environment rights in India between January 2017 and December 2018.

While issues of land grabbing and illegal mineral mining are not new, the centrality of sustainable use of natural resources to both, mitigating climate change and meeting the goals set under Agenda 2030 has conferred them with greater import. Therefore, the work that environment activists and reporters do has more significance now than ever before, and must be protected. At the same time, the government needs to look at instances where draconian environmental laws spur illegal extraction, even when the extraction itself may not be environmentally damaging, and adopt liberal regulation.

GROWTH NUMBERS

REVISING GDP SERIES ISN'T UNUSUAL. NOR SHOULD ONE ASCRIBE A MALIGNANT MOTIVE TO A CONTINUOUS AND EVOLVING PROCESS

What has been said on GDP revisions

BIBEK DEBROY

Chairman of the Economic Advisory Council to the PM *Views are perosnal*

I AM GOING TO take a different tack in this column. I will remain in the background and let quotes of others do the talking for me.

"Is there a problem of mis-estimation of GDP growth after 2011? What is the likely magnitude? What is its potential cause, and in particular, how might the revisions in methodology have contributed to the over-estimation?" This quote is from Arvind Subramanian's working paper on India's GDP mis-estimation. India's GDP series underwent revisions in January 2015. As I mentioned in an earlier column (*FE*, 14 June 2019), revising GDP series isn't unusual. Nor should one ascribe a malignant motive to a continuous and evolving process. (In fairness, the former CEA hasn't ascribed malignant motives, but others have.) System of National Accounts (SNA) is an international statistical standard for national accounts, adopted by UN Statistical Commission and the latest version is SNA 2008. This is a 720 page long document and I will skip details of how SNA 2008 is an improvement over the earlier SNA 1993. A country's statistical system doesn't have to conform exactly with SNA, but most countries follow its template, more or less. First, note all OECD countries changed their systems of national accounts after SNA 2008 was adopted. Most did so by December 2014. Turkey followed in 2015, and Chile and Japan in 2016. I mentioned OECD countries; this doesn't mean other countries didn't change their systems of national accounts. So did they, but OECD sources document changes better. Therefore, India is no outlier. Had India not changed its system, it would have been an outlier and would no doubt have been crucified by critics.

Second, there have been criticisms in other countries too. Let me give you a quote from a February 2015 OECD "Statistics Brief". "National accounts also increasingly have become the object of criticism in media and academic research, the most notable recent examples being the measurement of financial services and the treatment of illegal activities. Sometimes these critiques are justified and call for further investigation. In other instances the comments and remarks simply show a certain ignorance of the standards and what they intend to measure, and call for enhanced communication from the national accounts community." Notice what it says about ignorance and the points made are equally valid for India. But yes, India is an outlier. In no other country that I know of has criticism of SNA 2008 been reduced to the fine art of questioning veracity of data and undermining credibility of the national income accounting system. Third, the switch led to increases in GDP in some OECD countries, reductions in others. On balance, more countries had increases than decreases. For example, on an average for OECD countries, there was increase in real GDP of 0.7%. If there has been an increase in a country, that doesn't mean GDP numbers are false and untrustworthy. At least, that hasn't been the logic followed in OECD. In the cause of being argumentative, we are of course entitled to our norms of logic.

Fourth, if methodology and sources change, it's perfectly understandable that one won't be able to construct a perfect back-series. Let me quote from a 2008 note by Inter-Secretariat Working Group on National Accounts (ISWGNA), part of UNSD (United Nations Statistics Division). "It is expected that as countries adopt the new SNA, they will make estimates on both the old and new bases for an overlap period, but it is unlikely that countries will continue to compile "old" and "new" estimates in parallel for subsequent periods. This means that there will be a reduction in comparability for a number of years." Clearly, compared to comments by Indian columnists, UN makes less stringent demands of national statistical systems. UN does not think lack of a back-series undermines credibility. Just as large swathes of India identify with Bollywood, chunks of USA identify with Hollywood. I wonder how many Indian GDP critics know that in 2013, consequent to the SNA 2008 change, USA went through what has been called the Hollywood makeover and that this added anything between 2.5% and 3% to US GDP growth. The relevant entity in USA is Bureau of Economic Analysis (BEA). I will now quote from what BEA did in 2013. "Recognize expenditures by business, government, and non-profit institutions serving households (NPISH) on research and development as fixed investment; Recognize expenditures by business and NPISH on entertainment, literary, and other artistic originals as fixed investment."

> **In no other country that I know of has criticism of SNA 2008 been reduced to the fine art of questioning veracity of data and undermining credibility**

In case this isn't clear, in 2009, USA made major changes by including computer software in GDP. In 2013 it went one step further and started to include royalties from television, movies, songs and revenues from scientific research and development, aspects of intellectual property rights (IPR). These may be difficult to value, but that doesn't mean they aren't value-adds in service segments of GDP. Hence, they should be included in GDP calculations, as SNA 2008 indicated. To quote again from the BEA explanation, "Investment in R&D will be presented along with investment in software and in entertainment, literary, and artistic originals in a new asset category entitled "intellectual property products," beginning with 1929...Some entertainment, literary, and other artistic originals are designed to generate mass reproductions for sale to the general public and to have a useful lifespan of more than one year. For 1929 forward, BEA will capitalize these items, which include theatrical movies, long-lived television programs, books, music, and "other" miscellaneous entertainment. This change will expand BEA's measures of intangible assets." This needs to be read twice for comprehension to sink in. The revisions haven't been done only prospectively, the series has been dragged back, all the way to 1929. All the economic historians who wrote papers on the basis of historical US GDP data will now have to revise their papers. Why not drag it even further back in history? I suspect because the reliable Simon Kuznets estimates were for 1929, not before that. I haven't seen any papers questioning veracity of BEA's measurements, though scepticism about intangibles like IPR is understandable. Nor have I seen anyone plot correlations, run regressions, and suggest nefarious plots and regressive practices.

"The valuable capacity of the human mind to simplify a complex situation in a compact characterization becomes dangerous when not controlled in terms of definitely stated criteria. With quantitative measurements especially, the definiteness of the result suggests, often misleadingly, a precision and simplicity in the outlines of the object measured. Measurements of national income are subject to this type of illusion and resulting abuse, especially since they deal with matters that are the centre of conflict of opposing social groups where the effectiveness of an argument is often contingent upon oversimplification...The abuses of national income estimates arise largely from a failure to take into account the precise definition of income and the methods of its evaluation which the estimator assumes in arriving at his final figures." No prizes for guessing where this quote is from. It is from the 1934 Simon Kuznets report on US national income for the period 1929 to 1932. To understand national income accounting, Simon Kuznets is a good place to start. I believe it was Elvis Presley who said, "Don't criticise what you don't understand, son."

Last of a multi-part series

Healthy life can't prevent cancer

Recognising the role of randomness—or "bad luck"—in cancer could help save lives by making individuals more vigilant

FAYE FLAM

Bloomberg

RECENT NEWS THAT random bad luck plays a big role in cancer has been misinterpreted as bad news, when it's actually very useful in helping humanity understand what cancer is and what can be done to prevent it.

New experiments attempt to quantify findings from 2015 and 2017 that showed random "bad luck" was a major factor in the development of cancer—along with inherited genetic predispositions and environmental carcinogens. An independent team this month showed that normal tissue is roiling with clusters of mutated cells, some of which have genetic errors common in cancer. This fits well with the current understanding that cancer starts when cells acquire a combination of genetic mutations that allows them to grow out of control.

The reaction to the "bad luck" claim has been more moralistic than scientific. *StatNews* reported that the results might imply "that preventive efforts from smoking cessation to environmental cleanups were largely pointless." A news story in *Science Magazine* said: "Many scientists took issue with the paper ... because they felt it overemphasized the randomness of cancer and downplayed the value of trying to prevent it."

That defeatist view is a bit like not wearing a seat belt because driving is never 100% safe. There's a more constructive way of thinking about randomness: not as a reason to give up on minimising risk, but as a reason for vigilance and research.

Knowing the role of randomness, maybe more of us would have a doctor look at that little lump, or spot between our toes that looks weird even though it's on skin that never sees the sun. I don't smoke, but because I have learned that 15% of lung cancer cases occur in people who never smoked, I am more likely to take seriously a persistent chest pain or cough, which really could be lung cancer. Recognising the random factor might save some lives.

> **There's a more constructive way of thinking about randomness: not as a reason to give up on minimising risk, but as a reason for vigilance and research**

In the latest research, published this month in the journal *Science*, it's hard to tell whether the mutations in healthy tissue were caused in part by environmental factors or are primarily random copying errors, but these results do suggest that the mere act of getting older is a major risk factor. As one of the studies' authors put it back in 2015: The longer the trip, the greater the odds of an accident, even if you wear your seat belt.

The findings offer both hope and caution for the promise of early detection. Proponents of mass screening were set back in recent years by scandals showing that screening programs for prostate and breast cancer have led many people to get harsh, life-changing treatments for tumors that were unlikely to spread.

The fact that cancer-associated mutations exist in normal tissue could complicate the quest to offer simple blood tests to detect other kinds of cancer. It's no longer obvious what to consider normal. Perhaps it really is normal to gradually progress toward cancer.

If so, there isn't much you can do about it. But there's a lot more that medical technology might do. Early intervention might help. Think of the success of colonoscopies, in which doctors can remove potentially dangerous polyps and nobody misses them. Same for the removal of pre-cancerous skin lesions.

In animals with unusually low cancer incidence, random mutations happen, but evolution has found ways to fix them. Elephants carry extra copies of a gene called p53, for example, which codes for a system of DNA repair, so elephants have to get very unlucky to get cancer. Someday scientists may harness this superpower for us.

The random misfortune of cancer will be vulnerable to medical advances like that, which means humans can make their own luck.

This column does not necessarily reflect the opinion of the editorial board of Bloomberg LP and its owners

LETTERS TO THE EDITOR

Chennai water crisis

The water crisis in Chennai is for real. Ministers denying water scarcity must keep their eyes wide open to see queues of women with empty water pots awaiting, in blistering heat, the arrival of water tankers. The cost of water has become exorbitantly high in the city. People with low incomes are the worst hit. The task of fetching water occupies much of their time and entails less time to earn their livelihoods. Residents of Chennai are now experiencing what life is like without water to drink, cook, bath and wash clothes. Imagine schools, colleges, hospitals and hostels going without water. Clogged public toilets stink of urine and faeces. This is a far cry from the actualisation of the right to water. The problem has become so acute that thousands of people from other parts of Tamil Nadu staying in Chennai to earn their bread have left for their native places. Obviously drought and deficient rain have engendered water scarcity. But the human factor in the making of the crisis cannot be denied or overlooked. The encroachment, pollution and neglect of water bodies and reckless exploitation of groundwater for commercial purposes depleting the water table are to cite two human activities contributing to the crisis. Better water conservation and management efforts would have eased the city's water stress to a certain extent. The situation is so grim that the CM had to tell people that they have to wait till monsoon.
— G David Milton, Maruthancode

●Write to us at feletters@expressindia.com

R.N.I. Reg. No. 6188/61 Printed for the proprietors, The Indian Express (P) Ltd by Vaidehi Chintaman Thakar at The Indian Express (P) Ltd Press, Plot No. EL-208, TTC Industrial Area, Mahape, Navi Mumbai-400 710 and published from Express Towers, Nariman Point, Mumbai-400 021. Editorial & Administrative Offices: Express Towers, Nariman Point, Mumbai-400 021. Phone: 22022627/67440000. Fax: 022-22856323.
Chairman of the Board: Viveck Goenka, Managing Editor: Sunil Jain, Deputy Managing Editor: Shobhana Subramanian* (*Responsible for selection of news under the PRB Act)

ILLUSTRATION: ROHNIT PHORE

ATISHA KUMAR

The author is a research scholar at Columbia University. Views are personal

On the path to good jobs

There are no easy answers on how to create quality jobs for India's population. The recent PLFS data provide an opportunity to understand the nuances of India's labour market, identify constraints to creating formal, well-paid jobs, and design appropriate policies to address these challenges

AS EARLY AS 380BC, the noted Greek philosopher Plato cautioned that politicians seeking elections take advantage of citizens' desire for easy answers. The warning held true in India in the context of the leaked Periodic Labour Force Survey (PLFS) ahead of the 2019 general elections. During the elections, the headline unemployment rate of 6.1% from the survey dominated the discourse on jobs, but it did not capture the complexities of India's labour market.

The PLFS report was released on May 31. The availability of the data is, in itself, a huge boon for policymakers and researchers. Until now, the latest official employment data being used were from as long ago as 2011-12. Policy-makers relied on outdated labour market parameters.

The unemployment rate of 6.1%, while a significant increase over that in 2011-12, remains well below that in some other emerging economies. For instance, in 2018, as much as 12.3% of Brazil's labour force was unemployed. In South Africa, unemployment was a whopping 26.9%. Advanced economies such as the US and Germany also had unemployment rates close to 4%. Yet it is important to note that the unemployment rate is but one indicator of India's jobs situation. To understand the nature of India's employment challenge, we must also look at indicators of the quality of jobs, their distribution across sectors, and their firm size distribution.

Progress, but not enough

While the quality of jobs is improving, there is significant work to be done. First, the informal sector's share in the economy has shrunken. The share of workers employed in informal enterprises in industry and services, and non-crop producing agriculture, has dropped to 68.4% in 2017-18 from 72.5% in 2011-12. While a four-percentage-point decrease is not trivial, in absolute terms the informal sector still accounts for more than two-thirds of all the employment. Furthermore, about 38% of workers did not have a written contract, and were not eligible for paid leave and social security.

While workers are moving away from agriculture into industry and services, it's happening at a slow pace. Also, wages are rising, but not at the pace that is required for double-digit growth

Second, in a similar vein, workers are moving away from agriculture into industry and services, but this movement is happening at a slow pace. The share of workers engaged in the agricultural sector has declined by about five percentage points, from 48.9% in 2011-12 to 44.1% in 2017-18. However, the pace of this migration remains slow relative to that in other countries.

For example, in 1991, India and China employed about 64.6% and 60% of their respective workforces in the agricultural sector. In 2018, less than a third of China's total employment remained in agriculture, while the majority of India's employment was concentrated in this sector. In Brazil, Russia and South Africa, less than 10% of the employment is in agriculture. To sustain robust economic growth, India must increase the speed at which it absorbs the country's agricultural workers into other sectors.

Third, wages are rising across the country, but not at the pace that is required for double-digit growth. As an example, the average daily wage for casual labourers engaged in non-public works in 2017-18 was ₹256, or about $3.7, almost a 75% increase from the inflation-adjusted wage that the same category of workers received in the 2011-12 NSSO survey. Data from other sources corroborates this trend. In fact, between March 2014 and 2018, the average rural wages increased by about 20% for non-agricultural male labourers in 20 Indian states, according to data reported by the Reserve Bank of India (RBI). While there is no doubt that this is a considerable improvement, in terms of per capita income India remains a lower middle-income country, with a per capita income of $1,979 in 2017. Further wage increases, therefore, are needed to enhance farmers' livelihoods. These wage increases will only be possible with increases in agricultural productivity.

Achieving size and scale

So, how can we increase wages, create formal employment and enhance the pace at which jobs shift out of agriculture into industry and services? Here, size and scale hold the key to better jobs. However, the majority of India's workforce remains employed in micro and small firms. In 2017-18, about 57% of all workers were employed in non-agricultural enterprises with five or fewer workers, while about 75% were employed in enterprises with less than 20 workers. Only 16% of workers were employed in enterprises with 20 or more workers, with enterprise size unknown for 9% of workers. Going forward, India must facilitate the scaling up of its enterprises to create well-paying, productive jobs that absorb its young and growing population.

Historically, burdensome labour laws have been one of the constraints to Indian firms remaining small. In a number of states, existing labour regulations impose high costs of employment, preventing firms from hiring and firing workers under reasonable conditions and decrease efficiency in labour-intensive sectors. In addition, inward-looking policies have prevented India from accessing large, global markets. The successful development experiences of the East Asian countries—including South Korea, Thailand, Taiwan and China—highlight that liberal trade policies can help firms become more competitive on a global scale, thereby helping them create more jobs.

There are no easy answers on how to create quality jobs for India's population. The recent PLFS data provide an opportunity to understand the nuances of India's labour market, identify constraints to creating formal, well-paid jobs, and design appropriate policies to address these challenges.

AIR POLLUTION

The time to act is now

POORNIMA PRABHAKARAN

Head, Environmental Health & Additional Professor, PHFI, and deputy director, Centre for Environmental Health *Views are personal*

We cannot have a laid-back approach to the public health emergency caused by poor air quality

JUNE 2019: WE ARE AT the cross-roads in more ways than one. Half-way through yet another year, as the air 'clears' on the political arena and the 'dust' settles down on yet another frenzied poll campaign culminating in the final verdict, the focus needs to move on India's prevailing, unabated problems. Air pollution must figure on top of this list of priorities. Incidentally, #BeatAirPollution was the theme of the World Environment Day (June 5, 2019).

India has had the dubious distinction of being the diabetes capital of the world. Now we vie for the top by being home to some of the world's most polluted cities. The National Clean Air Programme had envisioned a game plan for strategic action to curb the rising levels of air pollution, beginning with 43 smart cities that fall in the category of 102 non-attainment cities (those that consistently show poorer air quality than the National Ambient Air Quality Standards). Loopholes in its structure have been identified and suggestions for revision were aplenty. While one hopes a stable government will foster strengthening of the resolve to fight this new 'killer', what can the scientific community do to catalyse appropriate action?

The evidence base for galvanising policy and action, besides allocating resources for air action plans, has been questioned, not least because of the 'lack of enough local evidence' for health effects of air pollution in India, with most knowledge emanating from studies elsewhere. A consortium steered by the PHFI's Centre for Environmental Health and Centre for Chronic Disease Control, in collaboration with researchers from the Harvard School of Public Health and Karolinska Institutet, Sweden, has infused renewed energy amongst exposure scientists and health researchers in India, to work with each other to build scientific knowledge that will feed into effective policymaking for air pollution control.

The mantra of 'health in all policies' is central to this effort that will assess association of exposure to ambient PM2.5 levels during 2010-18 with a range of health outcomes. A nation-wide model that uses data from multiple sources for exposure assessment from monitoring stations, satellite data, land-use data, weather data and chemical transport models in a unique comprehensive 'ensemble' approach is being constructed and will help build a strong evidence base for studying health effects of air pollution in India. The consortium will help establish evidence base for health effects of air pollution. Once this is done, effective policymaking emanating from India-specific evidence, appropriate resource allocation and targeted action can take place.

This new knowledge will help build awareness amongst healthcare providers. While tobacco-use as a risk factor for respiratory diseases, lung cancer and cardiovascular disease has been taught in the medical curricula, air pollution rarely figures in medical textbooks. A sea change is warranted across mind-sets of doctors and allied healthcare professionals, researchers, policymakers, city planners and the general public on the dangerous exposure to air pollution.

The economic cost of poor air quality is manifested through direct and indirect pathways—illness impacting work-days, increased burden on health services, widening inequalities by virtue of lower socio-economic status being a major factor for greater vulnerability to illness, coupled with poor access to healthcare amongst these categories—all feeding into a vicious cycle that has ripple effects on individual, household and national economies.

Much of the control must focus on dealing with the sources of air pollution. Major causes like industrial pollution, fossil fuel use, vehicular pollution, road dust, waste and stubble burning all require coordinated multi-stakeholder consultation for evolving a cohesive plan for mitigation and control.

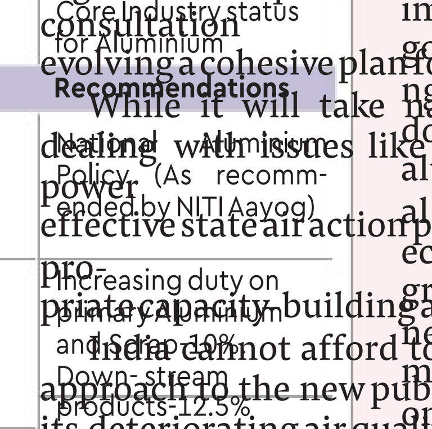
While it will take national-level policymaking for dealing with issues like fossil fuel burning in thermal power plants, effective state air action plans must be facilitated with appropriate capacity building at all levels for implementation.

India cannot afford to have a laid-back, lackadaisical approach to the new public health emergency caused by its deteriorating air quality. The time to act is now.

BUDGET 2019

Aluminium is the real steel

Weighing aluminium on a par with steel will benefit India in the long run



ANSUMAN DAS

Former CMD, NALCO, and an aluminium sector expert

Across the world, steel and aluminium are used the most with critical applications in core sectors like defence, aerospace, automobiles, infrastructure, manufacturing, etc. With a demand of around 100 million tonnes in India, steel sees the most usage. However, globally, industries are fast adopting aluminium as their metal of choice. If one looks at the growth trajectory of aluminium, it is safe to say that at the pace of 21x in the last 60 years, aluminium is one of the fastest growing metals in the world.

India, too, is catching up to this global trend. India's aluminium consumption is expected to double to over 7 million tonnes in five years. In spite of such robust estimates, aluminium sector continues to be neglected. This is difficult to gauge when one takes into account the huge potential India has to build a self-sufficient domestic industry that can meet internal demand as well as boost India's position as a leading exporter in global markets.

While the government has extended support to the steel sector with a dedicated policy, trade facilitation and duty benefits, the aluminium industry continues to haemorrhage due to lack of similar support. The lack of such focused attention for aluminium sector has been hurting the industry and India's prospects in international markets.

duties for Chinese imports, safeguard duties of 10-20% levied on steel imports, and an increase in basic customs duty on all steel products in range of 10-12.5%. In stark contrast, aluminium has witnessed the highest ever import of 23.18 lakh tonnes, resulting in a forex outgo of Rs 38,000 crore ($5.5 billion) in FY19 (i.e. 1.1% of total Indian import bill). At the current pace, aluminium import could result in an estimated forex outgo of over $25 billion in the next five years.

The double whammy of crashing LME prices and increasing production costs, along with surging imports, has affected the Indian aluminium industry adversely and necessitated the need for immediate protection by increasing import duties across all aluminium products in the upcoming Union Budget.

Major economies like the US and China have already imposed high tariffs on both steel and aluminium imports, along with restriction of metal imports based on quality. India is yet to take this measure for its aluminium industry, thereby making it vulnerable as a dumping ground of non-essential imports from other countries. Steel, due to the robust national policy, remains majorly unaffected.

Additionally, it is mandatory for 53 categories of steel products to be covered under the Quality Control Orders (QCO) released in August 2018 to get a standard mark. The Bureau of Indian Standards has also released notifications urging all manufacturers to use standard marks even if their product is not covered

Indian steel vs aluminium industry

Industry	Steel	Aluminium	Recommendations
Production (FY19)	131.7 MMT (Finished Steel)	3.7.MMT (Capacity 4.1 MMT)	
Consumption (FY19)	97.5 MMT	4.0 MMT	
% of Imports (FY19)	18% (17.8 MMT)	~60% (2.3 MMT)	
Growth of Imports (last 3 years)	Declined by 21% (from 22.3 MMT to 17.8 MMT)	Increased by 40% (from 1.67 MMT to 2.3 MMT)	
Core Industry Status	Included in list of Eight Core Industries	No	Core Industry status for Aluminium
Government support in last 3-4 years			**Recommendations**
National Policy	National Steel Policy – 2017 (long term vision till 2030-31) Preference for domestic steel products in Govt. procurement	No policy for Aluminium	National Aluminium Policy (As recommended by NITI Aayog)
Basic Custom Duty	Increased by 5% (June & Aug, 2015) (Primary Metal: 10%, Flat products - 12.5%, Long products - 10%)	Increased by 2.5% (Feb 2016) (Primary Metal - 7.5%, Down-stream Products - 10%)	Increasing duty on Primary Aluminium and Scrap-10% Down-stream products-12.5%
Safeguard Duty	20% on HRFP (Coils) 10% on HRFP (Sheets & Plates)	Nil	
Minimum Import Price (MIP)	MIP imposed for 1 year	Nil	Imposition of MIP as per MECON Report & recommended by MoM
Anti-Dumping Duty	Imposed on both HRFP & CRFP (Alloy & Non-Alloy Steel and Stainless Steel) Seem-less Tubes, Pipes, Wire Rods, Bars	Aluminium Foil	
Peak Custom Duty Rate	15% (increased from 10% to 15% in Feb 2016)	10%	Increasing to 15%

Source: Ministry of Steel, Ministry of Commerce and Industry and Aluminium Association of India

thereby encouraging use of inferior quality scrap instead of a higher grade of aluminium available in the domestic market. China has recently announced inclusion of aluminium in the restricted list of imports from July 2019, with a plan for complete ban on all scrap and waste by 2020. This shall further divert the entire global scrap imports into India.

Now with the US withdrawing benefit of Generalized System of Preferences (GSP) from India and China restricting imports of aluminium scrap, India's vulnerability to aluminium and scrap import is at its peak. If this goes unchecked, the domestic aluminium industry will be forced to fight for survival.

In the light of recent developments, where India has decided to impose tariffs on 29 US products, it is important for the government to take it further by imposing similar measures to protect its domestic aluminium industry that has the potential to contribute to the nation's economic growth. There cannot be a more opportune moment to do so than the upcoming Union Budget, which will set the tone of the intent of the newly elected government.

In this context, the aluminium industry deserves certain benefits in the form of an increase in the basic customs duty on primary aluminium products from 7.5% to 10%, and those on downstream products in range of 10% to 12.5%, with the same duty on primary aluminium and scrap as in the case of all other non-ferrous metals. The duty parity also needs to be maintained for secondary aluminium products to protect interests of both primary and secondary segments of the industry.

More importantly, however, it is necessary to provide the aluminium industry with a core sector status at par with steel. There is also a need to extend the necessary benefits as well