Opinion

WEDNESDAY, FEBRUARY 27, 2019

AGREEMENT PUT TO A VOTE

Jeremy Corbyn, opposition Labour leader

"We cannot risk the country's industry and people's livelihoods and so if it somehow does pass in some form at a later stage, we believe there must be a confirmatory public vote to see if people feel it is what they voted for"

India retaliates, tries to dampen war sentiments

MEA did well to say the strike was a non-military intervention aimed at JeM, need to squeeze Pakistan funding via IMF/FATF

IF INDIA CROSSING the Line of Control (LoC) to enter Pakistani airspace, for the first time since 1971, and blowing up a major Jaish-e-Mohammad (JeM) training camp with 250-300 terrorists in Balakot—the operation involved the use of aircraft from multiple bases, including a mid-flight re-fuelling aircraft, a surveillance drone, apart from 12 Mirage 2000s—was meticulously planned and executed, the pre- and post-handling was equally impressive. That the US was clearly on board was evidenced from president Trump's statement, on the 22nd, that India was "looking at something very strong"; National Security Advisor Ajit Doval had discussed the possibility of the strike with his US counterpart John Bolton two days after the Pulwama attack. External affairs minister Sushma Swaraj being invited to the inaugural plenary of the foreign ministers' conclave of the Organisation of Islamic Cooperation despite Pakistan's opposition also signalled a breakthrough in diplomatic relations, as did China signing off on the UN Security Council condemning the Pulwama attack and naming JeM as responsible for the "heinous and cowardly suicide bombing"; China has, in the past, single-handedly blocked the listing of JeM chief Masood Azhar as a 'global terrorist' at the UN Security Council. And while Pakistan expected China to back it after the Indian strike, a bland Chinese response was to ask both countries to exercise restraint, and the spokesperson of the Chinese foreign ministry responded to a question on the strike by saying "fighting terrorism is a global practice and needs necessary cooperation". And, in an attempt to dampen the jingoism that usually accompanies such strikes, as well as to give Pakistan a face-saver, the foreign secretary called it a "non-military preemptive action" that was "specifically targetted at the JeM camp".

While Pakistan's cabinet has said it will retaliate at a time and place of its choosing, and there is always the possibility of another terrorist attack, Tuesday's strike deep into Pakistan, and the well-publicised surgical strike in 2016, make it clear that this is no longer the zero- or a low-cost operation it used to be in the past. Indeed, if India is able to further isolate Pakistan—external affairs minister Sushma Swaraj is expected to take up Pakistan-sponsored terrorism at the 16th Russia-India-China (RIC) trilateral—and stop IMF aid to it or get the Financial Action Task Force (FATF) to blacklist Pakistan, this could send the already-teetering economy over the brink; the US currently holds the presidency of the FATF.

Despite Tuesday's impressive strike, it would be foolhardy to think India has tamed the Pakistani terror monster, even if the costs have gone up tremendously. And even the afterglow of Balakot can't hide the fact that there was a big intelligence failure at Pulwama, and at various other places where Pakistan-backed terrorists have struck in the past. Apart from this, India also needs to get an elected government in place in Jammu & Kashmir and deal with an increasingly difficult situation there. All of this while, as the Rafale controversy showed, the Indian arms purchase machine is deeply inefficient—signing even the truncated Rafale deal, the CAG pointed out, took 180 months—and, while the political class continues to level charges at one another, that worsens the paralysis; all three forces have large gaps in their equipment needs. In order to fight the 1971 war successfully, in fact, then army chief Sam Manekshaw had to spend months buying equipment and ammunition from all over the world since, even then, the armed forces were woefully short of both. If India has to fight a full-scale war with Pakistan, its politicians can scarcely afford to ignore these realities.

Govt wakes up on tribals

SC must vet process, states must help tribals get their land

THE SUPREME COURT ordering states to evict 1.9 million tribal and forest-dwelling families off their land will not only mean a humanitarian crisis of unimaginable proportions, it shows up the incompetence of both the state and Central governments since neither interceded when the tribal claims on forest land used by them were being rejected. While Congress chief Rahul Gandhi has instructed his state chief ministers to help the tribals, BJP chief Amit Shah has now done the same with BJP chief ministers. Ironically, while the tribal affairs ministry has been writing to various states about the high levels of claims-rejection for several years, there was no meaningful attempt to fix matters.

That matters should have come to this point is ironic since the very purpose of the FRA was to grant tribals the rights to the forest they had been using for decades, if not centuries; and now a petition by various wildlife and conservationist groups has resulted in their getting evicted. Given that 1.9 million families are set to lose their forest rights, it is unfortunate that the SC didn't question the process closely; it must now, at least, ask for greater clarity on the process and whether this violated the FRA. While Rule 13 of the FRA allows oral evidence—by community elders, for instance—of a claim, *Down to Earth* says that many forest departments insisted on other evidence such as satellite imagery and caste certificates; indeed, in March 2017, the tribal affairs ministry clarified the usage of Rule 13, but this didn't seem to have helped. In this context, when the issue of tribal rights was brought up before the Gujarat High Court, it said that the 'primary duty of the Court' in interpreting the FRA was to adopt an approach that helped achieve the 'purposes of the law' and any other interpretation that defeated the purpose was 'not permissible'; the court went on to say, 'the hard fact that the claims petitions are filed by persons who... would hardly possess any such convincing and cogent evidence to the satisfaction of the authorities'.

Also, while the wildlife/conservation groups who filed the petition against the tribal/forest dwelling communities believe that the forest-dwellers are encroachers and are contributing to the denuding of forest land and shrinking wildlife population, there is ample evidence that community-based conservation efforts is helping preserve and even regenerate forests in many states. Communities in states like Gujarat, Maharashtra and Odisha have managed to both re-green barren areas and preserve natural biodiversity—at times, even using the FRA mandate to thwart timber operations and tree-felling plans of the forest department. In fact, one of the *gram sabhas* in Maharashtra has been recognised by the UNDP for its "exemplary work on decentralised forest governance". Forest-rich nations like Brazil, Nepal and Vietnam have vested their forest-dwelling communities with management rights over extensive swathes of forest land. It would be a shame if India moves the other way.

VedicVantage

The BSB is an effort in the right direction but the selection of the private party that would run it has come under a cloud

A PROPOSAL FOR India's first national school board for Vedic education, the Bharatiya Shiksha Board (BSB), was accepted in a meeting of an autonomous body under the Union HRD ministry. The body, the Maharshi Sandipani Rashtriya Vedavidya Pratishthan (MSRVVP), a fully-funded autonomous institution with the objective of promoting 'Vedic knowledge', released an Expression of Interest (EoI) on February 11, inviting applicants to submit proposals for establishing the BSB. According to *The Indian Express*, proposals to the MSRVVP were to be vetted only if they were furnished by February 19, giving aspirants a tight eight-day deadline to submit their proposal. The BSB will be the first private educational board to be certified by the Centre and, on Saturday, the government body found entrepreneur Ramdev's Patanjali Yogpeeth Trust's offer to set up the BSB the best out of the three proposals submitted.

Patanjali's Trust reportedly expressed an intent to commit ₹21 crore for the development of the BSB and claimed that it has the necessary infrastructure ready for the construction of the Board's headquarters. However, surely, setting up of an education board should involve more than just funding and physical infrastructure, especially when matters of pedagogy and methods of historiography are at stake. The importance of academically studying the Vedas—both to unlock the knowledge these contain as well as to examine them critically—is undeniable; Vedic-age debates are integral to the study of history in the country. However, it is important to temper the need to study the Vedas and promote Vedic education with the fact that our understanding of ancient India should not simply be reduced to what the Vedas—or any other such texts—say since ancient India exhibited pluralities. That said, the effort to mainstream Vedic education would surely serve modern India and the understanding of its past better.

THE REAL MAINSTREAM

MULTIPLE CLEARANCES ARE NEITHER LEADING TO THE CONSTRUCTION OF ENVIRONMENTALLY SOUND BUILDINGS NOR IMPROVING THE ENVIRONMENTAL QUALITY IN URBAN AREAS

Building common-sense

CHANDRA BHUSHAN

Deputy director general of Centre of Science and Environment. *Twitter: Bh_Chandra*

THE ENVIRONMENT IMPACT Assessment (EIA) and the prior Environmental Clearance (EC) process for the Building and Construction (B&C) sector in India has been in the eye of a storm for a while. In December 2016, the ministry of environment, forest and climate change (MoEF&CC) issued a notification that devolved powers to Urban Local Bodies (ULBs) to grant EC to the B&C sector, if they fulfilled certain conditions.

But this was challenged in the National Green Tribunal (NGT). NGT termed some of the changes as "dilution" and stayed it in December 2017. It ordered the ministry to re-examine the notification in light of its judgment. In November 2018, MoEF&CC reissued the notification with some changes. This has again been stayed by the Delhi High Court and the NGT. So what is this fuss all about?

For the purpose of transparency, I was one of the members of the expert committee constituted by MoEF&CC that recommended the December 2016 notification.

The genesis

When the first EIA notification was issued in 1994, the B&C sector was not included in its ambit. Then, in July 2004, out of the blue, a notification was issued that mandated that building projects with an investment of over ₹50 crore would require prior EC from the MoEF&CC. This change was reportedly made because of the DMK versus AIADMK politics in Tamil Nadu.

The story goes that, in 2004, the then chief minister of Tamil Nadu, Jayalalithaa, was keen to construct a new assembly building in Chennai. But this was opposed by the DMK party. The DMK, in 2004, was a constituent of the NDA government and A Raja held the portfolio of the environment minister. To stop the construction of the new assembly building, the EIA notification was amended overnight to bring the B&C sector under its purview. At the time, there was no discussion in the country on the validity of this change. No one questioned whether EC was the best route to control environmental impact from the B&C sector.

Subsequently, the EIA notification in 2006 included the B&C sector in Category B projects, and a EC for all buildings with built-up area of more than 20,000 m^2 was granted at the state level by the State Expert Appraisal Committee (SEAC) and the State Environment Impact Assessment Authority (SEIAA). As a Category B project, no EIA study is done and projects are cleared based on the information they fill up in a form.

It is common knowledge that the EIA of the B&C sector is a sham. Almost all projects are given EC based on dubious information and the implementation of the clearance conditions is not monitored. Worse, this clearance has become a major source of corruption. It was because of these shortcomings that discussions started in 2014 to reform the EC process for the building sector, especially when the TSR Subramanian Committee was set up by the MoEF&CC to review the environmental laws of the country.

Multiple clearances by central and state agencies are not a substitute to local planning, monitoring and management

The changes and its rationale

The building sector in India requires multiple environment-related clearances. Under the Water Act and the Air Act, it requires consent from the State Pollution Control Boards. If the proposed building is in a coastal area, a NOC is required from the National Coastal Zone Management Authority. Permission is required from the Groundwater Board for groundwater extraction. Large commercial buildings require an Energy Performance Certificate from the Bureau of Energy Efficiency. On the top of all these, a prior EC is required from the SEAC and SEIAA. But it is evident that these multiple clearances are neither leading to the construction of environmentally sound buildings nor improving the environmental quality in urban areas.

The obvious question is that, if clearances are not working, what other tools can we deploy to improve the environment management in cities? This is where we have to look to other countries to understand how they manage their urban environment.

The first things one learns from other countries is that it is better to have few clearances and better monitoring and enforcement than multiple clearances and poor monitoring. When the One World Trade Center or the "Freedom Tower" was being built in Lower Manhattan, it required one detailed Environment Impact Statement from the Department of Housing and Urban Development. The rest of the planning and permits were issued by the City of New York. The concept of few clearances and better planning and management holds true for cities ranging from London to Paris and from Mexico City to Beijing.

The experience world over also shows that the responsibility of granting building permission and incorporating and enforcing environmental concerns in buildings is done by the local authorities and not by environmental regulators. In fact, in most European countries, the EIA of buildings are either mandated by the local authority or the Town and Country Planning Departments.

Lastly, in most well-managed cities, accredited third-party building auditors are deployed to ensure that environmental concerns are integrated in buildings. Permits are granted based on the reports of these independent auditors. In case the local authority finds any irregularity, stringent penalties are imposed on both the auditor and the building owner.

Based on the above learnings, the December 2016 notification tried to strengthen the environmental management in cities through the following means:

- To connect the environmental concerns in building with the wider city planning, it devolved powers to the ULBs to grant EC to buildings
- To ensure that all large buildings meet certain environment norms, it made EC applicable to all buildings above the size of 5,000 m^2. When the threshold was 20,000 m^2, 80% of all new buildings were excluded from the EC process
- The devolution of power was incumbent on ULBs amending their building bye-laws and incorporating environmental norms for different categories of buildings in it
- ULBs were mandated to set up an Environment Cell. The Environment Cell was to enforce compliance of environmental conditions and provide an oversight to the third-party auditing process
- To ensure better implementation, a system of third-party auditing through Qualified Building Environment Auditors (QBEA)was introduced. This is a trust-based compliance regime, with heavy penalties for non-compliance.

Whether these changes are a "dilution" of the existing system is for the reader to decide. But it is clear to me that multiple clearances by central and state agencies are not a substitute to local planning, monitoring and management. We will have to build the capacity of ULBs and devolve powers to them to manage the environmental quality in our cities. There is no other option.

GST uncertainty for real estate

Since the GST rate has reduced from 12% to 5%, the rate of 12% can no longer be charged. And, with no input credit, it becomes a cost. Whether the developer can recover the same from the customer would depend upon the terms of the sale agreement

NIRAJ BAGRI

Partner, Dhruva Advisors LLP

IN A DECISION which would have far reaching implications for the real estate sector, the GST Council meeting has prescribed a GST rate of 5% without input tax credit for the residential sector and a GST rate of 1% without input tax credit for the affordable housing segment. The changes would be brought into effect from April 1, 2019, and suitable notifications would be issued to give effect to the same. It appears that the option of paying GST at a higher rate by claiming input tax credit would not be available going forward.

Apart from a reduction in rates, it is also proposed that exemptions would be provided from payment of GST to transfer of development rights, lease premium, etc, for such residential property on which GST is payable.

The reduction in tax rates is being proposed with a view to provide relief to the industry which is grappling due to slowdown. Whilst reduction in rates is a welcome relief for the industry, let us evaluate whether these changes would lead to other unintended consequences. For this purpose, let us consider the impact due to proposed changes for cases where a project is going to be launched i.e., new projects and projects which are already underway.

For new projects, there would be a reduction in upfront GST chargeable i.e., 5%/1%, instead of the current 12%/8% rate. But absence of input tax credit would mean that the said taxes paid on procurements would be loaded on to the base price. Whether this would mean an overall reduction in price for the end consumer would depend upon other factors like ratio of construction costs vis-à-vis selling price, cost of land, etc. Whatever may be the outcome, the developer would be in a position to decide and control the outcome i.e., reflect the same in the base price to be charged for the residential property.

A bigger challenge awaits the existing projects. Let us say, the developer has contractually agreed for base price plus GST. Since the GST rate has reduced from 12% to 5%, he cannot charge the rate of 12% any longer. Further, as per the condition of the proposed amendment, the developer would not be able to claim input tax credit. Therefore, it becomes a cost. Whether he can recover the same from the customer would depend upon the terms of his sale agreement, but looking at the current environment, it would be a herculean task.

The option of charging a higher GST rate with input tax credit should be one of the options available to the developer

It is also commonly seen that the project has been advertised as an all-inclusive cost i.e., a lump sum price including GST, stamp duty, etc. For such cases, seeking any additional consideration due to denial of input tax credit would be difficult.

It would also be interesting to see the implications of the anti-profiteering provisions. Typically, any project would have a lifespan of a couple of years. If the benefit arising due to introduction of GST has been computed by the developer and is being passed on over the proportionate life of the project, can he now take a position of not passing any benefit for the balance period? Or, let's say, if the developer intended to pass on the benefit towards the end of the project, would he be required to do the same now, considering that the benefit of input tax credit has been withdrawn?

Given that anti-profiteering provisions are one-way traffic—all the benefits would be required to be passed on without taking into account additional costs, these changes could initiate new challenges for the sector.

It seems prudent that whatever changes are proposed, the option of charging a higher GST rate with input tax credit should be one of the options available to the developer at least in so far as existing projects are concerned.

LETTERS TO THE EDITOR

Patchy & long way to go, period

While the run-up to the much-eyed live award event was marked by varied predictions and speculations, the show moved faster than expected and marginally gained on yearly ratings too. The Indian short documentary, highlighting a stigma and efforts to combat chronic attitudes, was duly recognised. It is therefore important to boost public participation by establishing an award mechanism, driven by practices of fair inclusion and equitable cultural representation. Authorities must ensure decent/sufficient regional representation across the globe, diligence during the nomination process and tactical use of the platform by role models to highlight performances and deliver socio-political messages to promote engagement
— Girish Lalwani, Delhi

First consignment

Afghanistan sent its first consignment through Chabahar port in Iran. The port has opened a new route to promote trade between India and Afghanistan while bypassing Pakistan. It will make strong relationships between both countries. And this event will provide an opportunity to India, Afghanistan, Iran and other central Asian countries to explore further the potential of the port for promoting regional connectivity and trade
— M Irshad Magadhi

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Small towns drive big change

On solid waste management, especially waste segregation, our metros must take a cue from smaller towns like Karjat and Suryapet where able leadership is driving micro-planning and implementation—and this is something that can be replicated at the ward level with the right delegation

CYNICS OFTEN POINT out that old habits die hard. They tell us that it is going to be impossible to get residents of Indian cities to keep different types of waste separate. Yet, we know this is essential for municipalities to find a sustainable solution to the problem of solid waste management.

But there is some good news. Small and mid-sized cities and towns of India are showing the way on how to manage solid waste by getting communities to segregate waste and keeping the waste streams separate. In this column, we share experience from our visits to some of these cities, in particular, Suryapet and Karjat. Effective leadership in these cities and towns has found simple and sustainable solutions to the problems of solid waste management which still elude our metropolitan cities.

The earliest, and the best, success story was that of Suryapet, a city in Telangana, 136 km east of Hyderabad, with population of a little over 1 lakh. In 2003-2004, there was no external funding, no NGO and no Resident Welfare Associations. A single individual, S A Khadar, the Commissioner of Suryapet Municipal Corporation, demonstrated personal leadership that made a big difference. He managed all of the city's wet and dry wastes (32 tons daily at that time) on a half-acre site within the city, earning a gross income of ₹1 lakh per month from vermi-composting and recycling. There was no need for a landfill.

Khadar Saheb began by winning the hearts of his sanitary workers by prompt satisfaction of minor demands such as granting leave and/or reassignment of workplaces. Next, he wooed the residents, one mohalla or street or commercial area at a time, by organising daily meetings on morning rounds from 6-9 am before beginning his office work. Residential pockets that gave 100 %unmixed waste earned token gifts.

Even more impressive and crucial was the municipal corporation's visible commitment to transporting segregated wastes for ease of separate processing. The Commissioner got banks to fund new tractor-trailers (which can unload waste mechanically) for self-help groups by guaranteeing their monthly repayments to banks from the city's payments to the self-help groups for waste collection services. The tractors moved punctually and dependably along lanes, stopping at every 6-7 houses to collect unmixed waste. The same teams swept the roads, so they had the incentive to do efficient collection, without spills during the process of collection. The tractor trailers first offloaded the wet waste, which was stabilised for two weeks by stack-composting—composting in vertical heaps that require less space and are piled off the ground for natural air circulation without manual turning. This was fed to vermi-beds, and with quality vermi-compost in good demand, the municipality earned ₹45,000 per month.

The tractor trailers had high wire-mesh compartments for different categories of dry waste which was offloaded at the inner city sorting shed. Eight waste-pickers on the city's payroll further separated the wastes for daily sale. This is what normally happens informally at the rear of all waste-buyers' premises. The sale of recyclables generated additional earnings of ₹55,000 per month. Open-drain cleaning was done in the afternoons. Soggy silt went directly into a wheelie-bin and, then, into a dedicated leak-proof collection vehicle which unloaded the silt and the debris for widening the road shoulders of all radial roads.

The Suryapet experience shows that citizens can be incentivised to segregate waste when they see administrative will

The Suryapet experience clearly shows that citizens can be incentivised to segregate wet and dry wastes when they see clear administrative will and primary collection vehicles designed to accept and transport wastes unmixed. The universal complaint of city officials that residents do not cooperate is often an excuse for their own lack of will, vision and action.

A second inspiring example of what able leadership can do can be found in Karjat, a small town in Maharashtra with a population of close to 30,000. Ramdas Kokare was appointed commissioner of the Municipal Council of Karjat in end-2017, arriving with a fine reputation for making tiny Vengurla (population of 13,000 and floating population 5,000) a dump-free town. Public expectations of him must have been high.

Within two days of joining, Kokare strictly enforced Maharashtra's ban on plastic carry bags. These are now replaced by sari-cloth bags costing ₹6 per bag. Handcart vendors use bags made out of newspapers. What is amazing is how he persuaded Karjat residents, already enjoying doorstep waste collection, to cooperate in giving 36 kinds of waste separately on different days of the week! This is probably a global first.

Many progressive cities abroad have different bins for wet-dry-garden waste and rejects, and separate days of the month or year to collect e-waste or discarded household furniture and appliances. But Karjat is the first town where we have seen regular weekly collection of so many separate items! Kokare must have intensely motivated and trained his waste collection staff to demand and sustain such achievement. The large shed at the former dump is now full of separate categories of waste regularly being purchased and removed.

The secret of the success of Kokare and Khadar is passion and daily personal supervision, both going around the city every morning before office hours to meet, persuade and exhort citizens to cooperate. In Karjat, after initial warnings, doorstep collectors refuse to collect mixed waste and also report the person. The same evening, an official comes and grills the person on where they dumped their uncollected mixed waste. Such intense individual effort is especially required at the start. Once word gets around, cooperation is easier.

There are other cities with innovative approaches to solid waste management. In Namakkal (population of 55,000) in Tamil Nadu, pushcart collection workers have been manually separating mixed waste into wet and dry, daily at the doorstep of each household, rather than attempt behavior change. Years later, Raichur (2.3 lakh population), Warangal (6.15 lakh population), and Kolar (15.3 lakh population) have redesigned their push-carts to enable them to carry half a dozen bags on the cart so that dry waste can be sorted at source for easy sale without the need for a sorting centre. Alappuzha in Kerala was recently recognised by the United Nations Environment Program (UNEP) for its decentralised system of waste management. In these, and many more small towns, the secret of success is meticulous micro-planning, committed leadership at the administrative level and receptive and engaged communities. The objective is clear—a litter-free, bin-free and dump-free city. Big cities scoff at small towns leading the way and claim that their own waste volumes are unmanageable. But, even in large metropolitan cities, populations of most wards are smaller than of these towns. Decentralisation and effective use of delegated power at the ward level are crucial if micro-planning and implementation is are to work with cooperation from RWAs. Only then can we find collective solution to the challenges of solid waste management in our larger cities.

Towards CO_2 accounting

MEGHA JAIN & AISHWARYA NAGPAL

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India Inc is already seeing the benefits of this

THERE IS A GLOBAL POLITICAL consensus on the role of carbon, besides other greenhouse gases, in climate change. In this context, 'carbon accounting' facilitates not just the identification of the place of emission of the harmful gases, but also their respective place of removal. Carbon accounting (aka GHG accounting) enables quantification of CO2/GHG emissions by an entity (nations, states, corporations, and individuals). It comprises consumption- and production-based accounting (CBA& PBA, respectively). CBA works on the principle that the party benefitting from the activity causing emissions shall bear the costs imposed by the emissions. The global temperature rising to above 1.5 degree celsius (critical level) is more or less a given, if one goes by current and historical emission trends. The arithmetic to contain the rise below the critical level can't get any simpler, though. Emissions should peak no later than 2020. Undoubtedly, this foreshadows a global emergency.

Interestingly, carbon accounting or carbon budgeting is premised on the concept of negative emissions. This is predicated on curbing emissions via extensive restoration, increased bioenergy usage, increasing forest growth, etc, to increase carbon capture and storage. Many climate scientists consider negative emissions as indispensable to tackling climate change. There are a number of methods for carbon accounting, including the life-cycle assessment methodology (ISO), the greenhouse protocol from the World Resources Institute and the Intergovernmental Panel for Climate Change (IPCC). But, since climate crisis is no longer a distant threat, we need an honest assessment of the efficacy of each method, including on calculation errors and assumption biases, before we choose the method most suited.

Organisations, mostly corporates, are keen on getting started on carbon accounting. The reasons for this include potential cost-cutting implications and the opportunity to showcase environmental leadership. Corporate carbon accounting is also fast becoming an integral part of corporate social responsibility—with increasing consumer awareness, carbon accounting helps companies showcase accountability over their carbon footprint; eco-friendly businesses are bound to be easily socially acceptable and enjoy a good reputation.

Carbon accounting matters only if becomes part of the overall accounting. It can't work in isolation. Carbon credit, carbon trade and exchange, carbon tax, etc, are all vital to corporate carbon accounting, which then becomes a guide for emission reduction. Trading carbon credits is a market-based approach where groups claim reduction in carbon and GHG emissions by purchasing credits from another entities. Carbon tax is a form of carbon pricing. It is a levy on the emissions by a business, imposed often on the carbon content of fuels with the purpose to reduce emission by discouraging consumption of emissions-rich inputs and products.

India Inc has begun to recognise the importance of carbon accounting. It has undertaken and reported this in various public forums such as Carbon Disclosure Project (CDP) and "sustainability reports". The number of companies responding to the CDP's information request on climate-change mitigation strategy, emission risk hedging, and carbon accounting has increased steadily 2009 onwards. But, those with the largest carbon footprint still need to do more. Producers and consumers are both responsible for emissions and have a shared responsibility to address the problem. Details of how this shared responsibility is to be divided between the producers and the consumers—only this can help achieve meaningful emission reduction—need to be worked out. The exact nature of this sharing is yet to be determined in negotiations, but both CBA and PBA need to be squared. Carbon accounting for companies is not only about measuring, monitoring, benchmarking and reporting GHG emissions but also about taking accountability and bringing down emissions and reducing impact. It is a catalyst for the evolution of an entirely novel investment and accounting industry. Capitalising on carbon accounting can place companies ahead of the carbon regulatory curve. Carbon accounting might not be an exact science today, but its role has never been more important.

REGIONAL CAFE: KARNATAKA

Aroma of success

Competition from a giant corporation like the ITC or from the widespread unorganised sector has not shaken Cycle Pure Agarbathies from the leadership position it holds

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IT IS COMMON TO ASSOCIATE manufacturing agarbattis (incense sticks) with the unorganised sector. But there is an exception—tucked away in Mysuru, Cycle Pure Agarbathies has been making branded agarbattis since 1948. It is the largest incense stick manufacturer in the country, probably the world.

Arjun Ranga, the managing director, is a third-generation member of the family-run NR Group and also the managing partner, N Ranga Rao & Sons Pvt Ltd. Ranga. who holds an engineering degree from Karnataka and an MBA from Thunderbird, US, returned to India to join the family business after working in the US for a few years. He is playing a major role in taking an old-age product firmly to the new age.

"It's an emotional and personal product used mostly for puja (worship). We take special care to ensure the purity of the ingredients that go into the sticks. We have been one of the largest selling brands since the 1980s and continue to maintain our position," says Ranga. "Our supply chain is vertically integrated. We need wood products, wood powder, charcoal, natural adhesives and fragrances to make agarbattis. We make sure all these ingredients are environmentally friendly."

The NR Group recently received a carbon-neutral certification from the UK-based The Carbon Neutral Company, the leading provider of carbon reduction solutions in the world. This makes Cycle Pure Agarbathies the world's largest carbon-neutral agarbatti manufacturer. The company makes recycled corrugated boxes at relevant units. All the packaging material is certified by the Forest Stewardship Council (FSC). "We need specialised bamboo that is flexible to make agarbattis. This bamboo is actually a grass that grows very fast. It disturbs the ecological balance. To prevent this, we harvest bamboo in the forest," says Ranga.

"We use only natural ingredients that are International Fragrance Association-certified aroma materials and are not harmful to the environment or health. We have been perfumers for generations. My family members have been trained abroad. We create every fragrance in-house. Our fragrance creation and application is IP-protected."

Cycle Pure currently has an annual capacity of 12 billion sticks. They are made from its own facility in Mysuru and other third-party manufacturing sources, spread across Tamil Nadu, Bihar, Odisha and Punjab. "The introduction of GST has made it possible for us to create manufacturing clusters all over India. Our R&D facility is located in Mysuru," he adds.

Ranga says that Cycle Pure provides opportunities for rural women to enhance family incomes. Tamil Nadu is home to 15 agarbatti clusters, and these consist mostly of homemakers making agarbattis from homes. The company provides indirect employment to 35,000 women. Cycle Pure maintains an organised supply chain of raw materials and provides these women agarbatti machines and teaches them how to use it. Women do the packaging as well. "Women are better at it than men," Ranga says.

The manufacturing process was entirely manual till recently. Now it is semi-mechanised to increase production to meet delivery targets. The company has introduced automation and machines in some processes to ensure a high level of standardisation and quality. "Mechanised sticks were introduced eight years ago. They proved to be very expensive. Now it has been reversed. Handmade sticks are more expensive," he adds.

Agarbattis made in the factory and clusters are sent to warehouses. The company has a network of distributors with 4 lakh retail outlets in the country. "We have introduced ERP-enabled supply chain management. Internet of Things-powered sales force automation application 'Sales Diary' has helped us become a more efficient and connected enterprise. Cycle Pure has been awarded ISO 2015 certification as well."

Cycle Pure is one of the top-50 Indian brands as rated by AC Nielsen. Competition from a giant corporation like the ITC or from the widespread unorganised sector has not shaken it from the position it holds. Ranga estimates the country's puja market to be around Rs 10,000 crore, of which the share of agarbattis is around Rs 6,000 crore.

The company has been expanding its product range to move with the times. It has launched Pooja Packs for all occasions, ranging from birthdays to festivities. The Pooja Pack is an all-inclusive kit complete with everything one needs to conduct a puja at home. It comes with the Pure Puja app, which gives instructions to conduct a puja and also gives the option to reach out to a pandit.

In Tamil Nadu, which is the company's most important market, Cycle Pure recently launched three new products—Om Shanthi Pure Cow Ghee Diya, Om Shanthi Pure Chandan Tika and Om Shanthi Pure Puja Oil. Ranga says, "We have taken into consideration the rich culture and traditions of Tamil Nadu and have designed our products accordingly."

Markets such as Maharashtra, Uttar Pradesh, Rajasthan and West Bengal are growing fast. The quality markets are Tamil Nadu, Karnataka and Kerala. Ranga adds, "Cycle Pure has been part of every Indian home and their prayer. Mothers always light a lamp to pray for the future of their children. We are now making region-specific, easy-to-use puja products. These will help take our products to the next generation seamlessly."

Ranga predicts exponential growth in this market. People are veering towards quality products. Consumerism is catching up in the puja market. Even a state like Tamil Nadu, dominated by rational parties, is seeing increasing religiosity.