



**CLIMATE TALKS IN MARRAKECH** Touted to be the "CoP of Action", the much-celebrated first step in operationalising the Paris Agreement ended up being more about the distractions

1-15 DECEMBER, 2016

# Down To Earth

25  
years

FORTNIGHTLY ON POLITICS OF DEVELOPMENT, ENVIRONMENT AND HEALTH

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## 20-PAGE DTE SUPPLEMENT

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## ON THE WEB



### WHAT'S HOT

#### INTERVIEW

### Not bogged down

Indonesia constitutes 83 per cent of Asia's peat lands—where partially decayed vegetation has accumulated. Over two decades, a significant portion of it has been burnt for palm oil and paper industries. At CoP22 in Morocco, Myrna A Safitri from Indonesia's newly formed Peatlands Restoration Agency tells *Down To Earth* that help is on the way. The agency, formed in January this year, is mapping peat lands and restoring areas by blocking canals and digging deep water wells.



#### VIDEO

### Demonetisation blues



Post demonetisation, *Down To Earth* visits Delhi's wholesale markets to understand its effects on various stakeholders. Many small traders and

labourers working in the Okhla, Azadpur and Ghazipur *mandis* say low demand has led to heavy losses. Some without bank accounts are trading money for a small premium. While support for demonetisation is strong, the economy is badly hit. Farmers are the next victims as low demand leads to unsold stocks.

#### POPULAR

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#### ARCHIVE

### IN CONTEXT

As *Down To Earth* enters its 25th year of publication, we bring to you glimpses from our archives

### Missed the bus, again

The Union Ministry of Road Transport and Highways has postponed the implementation of the National Bus Code. The ministry, through its recent notification, has stipulated

January 1, 2017, as the new date for the implementation of the code, which lays down the standard features of a modern bus with designs and materials assessed by regulators. Eight years ago, in "City bus in demand, out of supply" (16-31 October, 2008), *Down To Earth* had reported on this issue: "India has no basic standards for bus bodies. Till recently, a bus operator would buy a truck chassis from a manufacturer, and get it converted into bus



at a body-making facility. The same suspension, brakes and mechanical components would go into a passenger bus as into a truck." The wait for the bus continues.



NANDAN DAVE

## GM crops and the hidden agenda

The article, “Seeds of decline” (1-15 November, 2016), on genetically modified (GM) crops is aptly titled. Their resistance to pests and pesticides, which is the rationale behind GM crops, has proved elusive over the years. There has also been a sharp increase in the amount and number of herbicides and pesticides applied to them and this is expected to increase further. If the yield of Bt cotton, the only GM crop approved for cultivation in India, is any indication, GM mustard is unlikely to be different.

Moreover, the lack of evidence to establish health risks of GM crops does not mean they are safe. Another alarming development is the mega mergers between GMO companies and the agrochemicals industry. The EU, USA and Latin American consumers are apprehensive that the companies may have the potential to concentrate political and financial power and force more countries to adopt a single model of farming, which excludes or impoverishes small farmers. GM crops are not about preventing food shortage, but consolidating the control of food production for profits.

*Down To Earth* welcomes letters, responses and other contributions from readers. Send to Sunita Narain, Editor, *Down To Earth*, 41, Tughlakabad Institutional Area, New Delhi - 110062. Email: [editor@downtoearth.org.in](mailto:editor@downtoearth.org.in)

**H N RAMAKRISHNA**  
**BENGALURU**

## Climate-induced migration

This is regarding Rohan Arthur's "Lakshadweep people will soon be the first climate change refugees in India" (16-30 October, 2016). It is well documented that people from the Lohachura and Ghoramara islands in the Sundarbans delta are one of the first environmental refugees of the country. With rising sea levels and land erosion due to tectonic movements, its inhabitants migrated to the largest of the nearby islands, Sagar Island, between 1985 and 2005. Four years later, cyclone Aila forced 50 per cent of the healthy male population from eight worst-affected community development blocks in the delta to migrate to 11 states and Union Territories. Climate-induced

migration and refugee movement in India is now an ongoing and recognised process. People from the low-lying Lakshadweep islands will only add to the list.

**A K GHOSH**

**DIRECTOR, CENTRE FOR ENVIRONMENT & DEVELOPMENT, KOLKATA  
VIA EMAIL**

## Celebrating a rich tribal past

I wish to express gratitude to *Down To Earth* for reviving my childhood memories of Bomdila in Kameng district, Arunachal Pradesh, through "Vale of Apatanis" (16-31 October, 2016). The vibrant photography by Vikas Choudhary captured the rich history of the Apatani tribe. The article reminded me of the hills and valleys, the ice-filled *nalas*, *kacha* roads, the greenery in the early 80s, the apple *bagan*, my friends and the Losar festival. I would like to read such articles about the tribes of the Northeast.

**JAYANTA TOPADAR**

**VIA EMAIL**

## Can agriculture still create jobs?

Richard Mahapatra's article, "Surgical strike for fetching jobs" (16-31 October, 2016) hit the nail on the head. Agriculture, which creates maximum employment, has been ignored by the present regime. Serious problems such as terrorism and unemployment have no quick solutions like surgical strikes. They require planning which transcends different regimes. Agriculture may not add substantially to the gross domestic product, but can create maximum jobs. Unfortunately, marginal farmers are today shunning

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SORIT / CSE

agriculture due to expensive seeds and fertilisers, stray cattle and vermin menace and improper marketing of their produce. Proper planning in agriculture is needed not only to create sustainable jobs, but also to strengthen the economy.

**L R SHARMA**

**VIA EMAIL**

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CROSS HAIRS BY SORIT GUPTO



## India lost maximum tigers in 2016

**IN WHAT** can be considered a worrying sign for big cat conservation, the country has witnessed the highest number of tiger deaths this year since 2010. According to data released by Tigernet, an official database of the National Tiger Conservation Authority, 76 tiger deaths were reported between January and October

this year. Of this, 41 deaths are still being investigated. Madhya Pradesh, followed by Karnataka, reported the maximum number of big cat deaths during this period. The high mortality rate indicates increased poaching. Poisoning, road accidents and elimination by authorities are also to be blamed. ■

POINT

1.4 million

The number of child deaths due to pneumonia and diarrhoea each year in the world

Source: *One is Too Many: Ending Child Deaths from Pneumonia and Diarrhoea* by Unicef

1,000 WORDS BY VIKAS CHOUDHARY



**SMALL DELIGHT:** A fisherman dries fish near the Kosi riverbank in Bihar. Fish drying is a popular economic activity in this part of the country. Fisherfolk usually catch locally known varieties like *tengra*, *pataxi*, *kothi*, *reba* and *kesra* for supply to Jammu and Kashmir, Siliguri in West Bengal and other parts of the country. The fish is usually dried on long bamboo structures and flipped for uniform drying in the sun.

## Meteorites reveal a dry Martian surface

**LIQUID WATER** does not exist on the surface of Mars, concludes an international research team, after examining meteorites on the red planet. The researchers point out that the Martian meteorites lack rust, indicating that the planet has been extremely dry for millions of years. To drive home the point, experts used data collected from Mars Exploration Rover Opportunity and examined a meteorite cluster located at the Meridiani Planum, a plain situated south of the Mars equator.

Scientists calculated the chemical weathering rate on the planet to determine how long it would take for rust to form on the meteorites' metallic iron components. Based on their findings, it would take between 10 and 10,000 times longer for Mars to reach the same rate of rust formation that the driest deserts on Earth are capable of. A study author said Mars once supported life, but evidence points to this as existing more than 3 billion years ago. For finding life, scientists have to look beneath the surface. ■

## UGC directs universities to ban junk food on campuses



COURTESY: ISTOCK PHOTO

**THE UNIVERSITY** Grants Commission (UGC) has asked universities across the country to take stringent measures against the sale of junk food on campuses and sensitise students against the ill-effects of eating unhealthy food. In a letter issued to the vice-chancellors of all varsities, also available on its website, the UGC said banning junk food would help students reduce

their obesity levels and live a better life. Earlier this year, Punjab banned the sale of junk food in schools, while Manipur, Odisha, Chandigarh and Madhya Pradesh imposed restrictions on it. Junk food is linked to the growing epidemic of non-communicable diseases across the world. It should be avoided as it is high on saturated fats and calories, but low on nutrition. ■

IN FOCUS

Poor Pizza

ANIMALS ASIA



Animal rights groups are urging that **Pizza**, the world's saddest polar bear, on display in a shopping mall in southern China, be sent home for good.

The mall authorities have temporarily moved the bear to a zoo in the northeastern city of Tianjin, its birthplace, where it will be reunited with its parents.

The three-year-old bear has become the centre of global attention since Hong Kong-based Animals Asia posted a video of the animal living inside a glass-walled enclosure in Grandview Mall Aquarium in the city of Guangzhou this year.

Pizza was sent to the zoo to make alterations to the mall, but the aquarium will remain open during its absence. The upgrade includes doubling the size of the bear's living area, *The Guangzhou Daily* reported. It is not clear when Pizza is expected to return.

According to animal rights groups, conditions in the mall are unsuitable for the bear because of cramped living conditions. It has been dubbed as a "horrorifying" animal prison. Almost a million people have signed a petition to close the aquarium in Guangzhou where Pizza was kept. Hundreds of other Arctic animals are also housed in it.

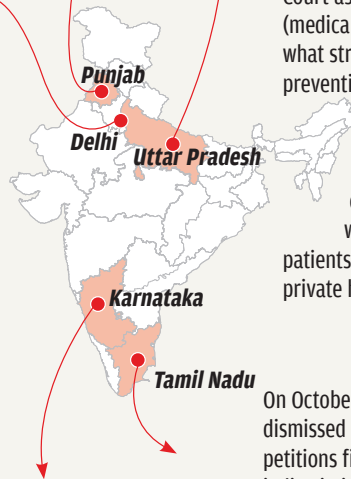
Reportedly, the baby bear has been offered a new home by the Yorkshire Wildlife Park in Doncaster, South Yorkshire, UK, but the Chinese authorities have refused it. According to many campaigners, sending Pizza back to the mall would be "cruel and heartless". Visitors bang on the glass to click selfies with Pizza. China does not have animal welfare laws.

IN COURT

On November 10, the Supreme Court ruled that Punjab was bound to share the Ravi-Beas river water with Haryana and other states and comply with its two judgements for the completion of the Sutlej-Yamuna Link canal.

The Supreme Court, in its judgement on November 8, directed the states and Union Territories to implement the Pre-conception and Pre-natal Diagnostic Techniques (Prohibition of Sex Selection) (Six Months Training) Rules, 2014, forthwith, considering that the training provided therein is imperative for realising the objects and purpose of the Act.

On November 16, the Supreme Court directed the Karnataka chief secretary to furnish all records, including the Cabinet note, prepared during the tenure of former chief minister S M Krishna in 2002, for de-reserving around 405 hectares of mineral-rich land.



The National Green Tribunal directed the Centre on November 17 not to "spend a single penny more" on cleaning up the Ganga between Haridwar and Unnao (in Uttar Pradesh) till their next order. The tribunal said that a substantial amount of ₹20,000 crore has been spent so far by government officials, who knew nothing about the subject.

On November 7, the Allahabad High Court asked the principal secretary (medical health) to provide details as to what strategies had been taken for the prevention and control of dengue and chikungunya. The court also asked as to what medical facilities were being extended to patients. It also wanted to know the number of patients admitted in government and private hospitals.

On October 31, the Madras High Court dismissed a couple of public interest petitions filed last year, alleging indiscriminate sand mining in Tamirabharani riverbed under the pretext of desilting the Srivaikundam check dam in Thoothukudi district of Tamil Nadu, on the basis of the permission granted by the National Green Tribunal.

SO FAR...



Total cases on environment and development tracked since January 1, 2016, till November 11, 2016

SUPREME COURT  
**93**

HIGH COURTS  
**137**

NATIONAL GREEN TRIBUNAL  
**641**

Green tribunal raps Assam over animal deaths in Kaziranga

**THE NATIONAL** Green Tribunal (NGT) has slammed the Assam government over a large number of animal deaths in Kaziranga National Park due to accidents on highways. Most animal deaths occur in the famous national park due to traffic movement on the National Highway-37 that passes through the home of the famous one-horned rhinoceros. NGT has directed the BJP government to submit a status report on the installation of sensor-operated automated traffic barriers and vehicles with interceptor speed sensors by December 15, the next date of hearing. It also sought a report on the exact number of animal casualties so far due to road accidents on the national highway. ■

Compiled by DTE/CSE Data Centre. For detailed verdicts, visit [www.indiaenvironmentportal.org.in](http://www.indiaenvironmentportal.org.in)



# Muted presence

India's participation at the recently concluded 22nd Conference of Parties was passive and lacked vision

**VIJETA RATTANI AND SHREESHAN VENKATESH** | MARRAKECH

**T**HE 22<sup>ND</sup> Conference of Parties (COP22) to the United Nations Framework Convention on Climate Change (UNFCCC), held in the Moroccan city of Marrakech during November 7-18, was supposed to usher in a new era and play a key role in the implementation of the Paris Agreement. The Agreement, adopted by 195 countries in December 2015, seeks to restrict global warming to 2°C above pre-industrial levels and will come into effect in 2020.

Optimists saw Marrakech as an opportunity to step up immediate efforts to tackle climate change. Even for the realists, who thought of the conference as more of a procedural step towards operationalising the Paris Agreement, the event marked an opportune moment to untangle contentious

The 22nd Conference of Parties was held in the Moroccan city of Marrakech during November 7-18



ISSI/CA

issues between the developing and developed countries. But by the end, it became clear that if COP22 would be remembered, it would be for the uncertainty that afflicted it. The reason for the uncertainty was largely the result of presidential elections in the US, where Donald Trump, a climate change denier, emerged victorious.

For India, COP22 provided an opportunity to voice its concerns because it is one of the worst sufferers of climate change. Rainfall has reduced, extreme rain events have increased and agriculture is becoming an increasingly precarious livelihood option in India. According to the World Bank, the country is home to 276 million people living on less than US \$1.25 a day and 200 million people facing hunger. These are the most vulnerable sections of the society

when it comes to climate change impacts. One would imagine that under such conditions, India's presence at COP22 would be assertive and discernible. The reality, though, was starkly different.

India's lack of position was evident during the press conference of BASIC (a grouping of Brazil, South Africa, India and China) ministers on November 17, the eve of the closing day of the conference. While other ministers engaged with the media and put forth independent assessments and expectations within the group, the Indian environment minister, Anil Madhav Dave, seemed satisfied simply to agree with his counterparts.

Issues, such as the vulnerability of the agriculture sector, adaptation to changing climate and loss and damage caused by it, all directly affect India's poor. Yet Indian participation in the discussions was passive. India had no representation on loss and damage due to climate change, which impacts developing countries more than developed countries because of their large populations and low coping capacity. Other developing countries made interventions to push for financial support.

A similar tale unfolded when it came to the contentious and vital area of agriculture, the primary occupation in India. India should have argued for inclusion of agricultural losses due to climate change in loss and damage calculations; but there was no official Indian representative in the discussions until the final sessions. With regards to adaptation (coping with climate change), the discussions remained futile and India had nothing to offer to break the deadlock (see 'More loss than gain', p12).

Indian delegates mostly kept repeating the official lines of fighting for "financial flows" and prompt "pre-2020 action". The "pre-2020 action" that India seems adamant on seeing through is based on the 2012 Doha Amendment to the Kyoto Protocol. The amendment was meant to improve pre-2020 targets and actions. The amendment remains to be ratified even four years after it was signed. Moreover, since India has not ratified it, the demand it is making is hollow. Nonetheless, India recommended a deadline of April 2017 for ratification of the amendment. The deadline was not accepted and the countries



**"America is powerful but ultimately it is just one of the countries on the table and the world does have the power to move forward without US support"**

– Jeffrey Sachs, development economist and UN special adviser on Sustainable Development Goals



**"Paris Agreement has been hugely tailored keeping the US in mind... The potential threat of [its] rejection by the US under a new administration is real"**

– T Jayaraman, professor, School of Habitat Studies, Tata Institute of Social Sciences



**"There is a growing mandate among state governments and private businesses that aim to forge ahead in the endeavour to decarbonise... Hopefully, this will be the persuasion required to stick with the [Paris] Agreement"**

– Mariana Panuncio-Feldman, climate change delegation head, World Wildlife Fund

## More loss than gain

*At Marrakech the task at hand was to thrash out ways to implement the Paris Agreement. While CoP22 failed to deliver groundbreaking progress on most agenda, there was little attempt to address crucial issues*

**Agriculture:** CoP22 was expected to produce some tangible measures to protect the sector from climate change impacts. But it got muddled in the divide between developed and developing worlds. Developing countries wanted agriculture to be primarily treated as an adaptation issue so that farmers can be supported through finance and technology transfer to adapt to climate change impacts. Developed countries proposed that agriculture be considered a mitigation issue, meaning countries need to cut down emissions from agriculture.

**Adaptation:** The Paris Agreement states that adaptation must be treated on a par with mitigation. When parties sat down to discuss ways to ensure this, utter confusion ensued. Some of the sticky points were how to report progress on adaptation, how to assess it and what should be the global goal of adaptation. However, there was one achievement. CoP22 agreed that the Adaptation Fund, set up under the Kyoto Protocol, be continued under the Paris Agreement.

**Loss and Damage:** One of the mandates of CoP22 was to review the two-year work plan of the Executive Committee of Warsaw International Mechanism meant for addressing loss and damage due to climate change, and adopt its five-year work plan. The adoption of five-year work plan has been shifted to next year. Parties agreed to developing countries' demand of support for loss and damage, though the conclusion paper does not mention any figure for the support.

**Finance:** Developing countries wanted a roadmap for Green Climate Fund being set up by developed parties, who have committed to mobilise \$100 billion per year by 2020. Developed countries claimed that the roadmap has been published in the Organisation for Economic Cooperation and Development's October 2016 report that says they were on their way to secure \$67 billion by public finances. But developing nations questioned the methodology used to prepare the report and insisted on more transparency in channelising money to the fund.

**Transparency framework:** The Article 13 of the Paris Agreement requires an enhanced transparency framework for action and support, meaning activities related to mitigation, adaptation, finance and support provided to developing countries. At Marrakesh, parties started to discuss common reporting criteria, methods and baseline years for these activities.

developed countries have contested this and want parity of efforts.

India used the issues of transparency mechanism and global stocktake to press its long-standing demand of equity. The delegation argued that equity should be reflected in the formulation of modalities, procedures and guidelines (MPGs) of the Paris Agreement. However, despite the apparent determination, India had no implementing strategy on how equity should be operationalised or reflected in the implementation of the Paris Agreement. Talks on these issues will continue next year, when the countries make their submissions on MPGs.

Away from the negotiations, one of the catchphrases that India's representatives repeatedly harped on was "sustainable lifestyles". The phrase was even plastered across the extravagant Indian Pavilion. India argued that a sustainable lifestyle was at the heart of Indian culture and tradition, and pointed out that rich countries must curb their unsustainable consumption. Yet it failed to elaborate or quantify what exactly it meant by sustainable lifestyles and consumption. In the absence of such qualification of the phrase, the argument made for calling the Indian lifestyle sustainable could be dismissed as a circumstance of the widespread poverty and resource scarcity in the country.

One small achievement that can be credited to India was the signing ceremony of the International Solar Alliance on the sidelines of CoP22. The Alliance, launched during the Paris Summit in 2015 as an initiative of the Indian Prime Minister Narendra Modi and French President Francois Hollande, aims to mobilise more than US \$100 billion in investments for encouraging the use of solar energy. More than 20 nations have joined the alliance and it will come into force when 15 nations ratify and adopt it domestically.

But on the whole, India's performance at the meet left a lot to be desired. It is ironical that a country reeling from climate change impacts should have a mitigation-centric negotiation strategy. Our focus should have been on agriculture, loss and damage, and finance for low-carbon growth. India now needs to rework its negotiating strategy before the Bonn climate talks in May 2017, where these issues will be discussed again. ■ [@down2earthindia](https://twitter.com/down2earthindia)

merely reiterated that pre-2020 actions should be enhanced.

The other area of discussion where the Indian delegation showed keenness was the procedural elements for further guidance on the form and implementation of Nationally Determined Contributions (NDCs). NDCs are climate actions plans set by countries and were submitted last year to UNFCCC. India advocated that heterogeneity of NDCs should be accounted for in the next cycle of NDCs. India also made active interventions on the issue of global stocktake, which refers

to a five-yearly review of the impact of countries' climate change actions and will happen for the first time in 2023. India said that this process should not burden developing countries and should take into account their differentiated capabilities.

The Paris Agreement talks about a "built-in flexibility" with regard to transparency framework to report progress on countries' climate action efforts and emissions. The built-in flexibility has been understood in terms of differentiation, especially by developing countries. But

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# Why the US should quit the Paris Agreement

Trump's presidency would be extremely detrimental to the Agreement and destroy the climate convention negotiated over the past 25 years



**CHANDRA BHUSHAN**  
Deputy Director General, Centre for Science and Environment

**T**HE MAIN story emerging from the 22nd Conference of Parties (COP22) to the UN Framework Convention on Climate Change (UNFCCC) at Marrakech is that the countries have agreed to frame the rulebook of the Paris Agreement by 2018—a full two years before the provisions of the agreement kick in. But the real story is the disquiet about the future of international climate negotiations post Donald Trump's election as the US President.

I was in Marrakech for the last week of COP22 and the discussions at Bab Ighli village—the venue of the conference—were all about the Trump presidency and the chances of American withdrawal from the Paris Agreement. There were two strands of narrative on Trump and the US withdrawal—one was straightforward while the other was a spin-doctored version of reality.

The straightforward narrative centred on speculation on how quickly and in what manner will Trump withdraw, and the implications of this withdrawal on the climate treaty. Within the climate change networks, legal documents were exchanged about the possible route that Trump would take to leave the agreement. Reports were being circulated on the impact of the US withdrawal on the funding of the UN Secretariat which organises these meetings. There were discussions on the fate of the Green Climate Fund and the proverbial mirage of billions of dollars that the developed countries promised to pay to the developing countries to combat climate change in Paris last year.

Then there was the spin-doctored version. Led by some US-based non-profits, academics and their supporters, this narrative suggested that the US withdrawal was not that important. They claimed that even without Trump, industry along with a few “climate-friendly” cities and states would ensure significant climate mitigation action in the US. They were assuring everyone that the Paris Agreement would be alive and kicking even without the US.

But these arguments are hollow and misleading. The following facts show the disconnect between US presidential candidates and the reality of

climate change:

- Climate change was not even an issue in the US elections. Apart from a few utterances by Hillary Clinton on renewable energy in the presidential debates, there were hardly any discussions on the topic. The fact is that a large number of US citizens do not believe in climate change and even a larger number does not want to sacrifice their “lifestyle” to cut emissions.
- All the Republican candidates in the US election Primaries were climate change deniers and promised to increase the use of coal and other fossil fuels.
- Trump himself is a climate change denier and has reportedly termed the phenomenon a hoax “created by and for the Chinese in order to make US manufacturing non-competitive”.
- During the elections, the Trump camp released a television advertisement featuring an Ohio coal miner. The 30-second clip was aired in Ohio, West Virginia and Pennsylvania—prime coal mining country—promising an increase in coal mining and protection to mining jobs.
- Trump has appointed Myron Ebell, a climate change denier, as head of the Environmental Protection Agency (EPA) transition team. It is important to understand that the Clean Power Plan, under which power plants in the US have been given targets to reduce greenhouse gas (GHG) emissions, is administered by EPA. Trump has vowed to kill this rule.
- Harold Hamm, who became a billionaire by fracking for shale oil and gas, is Trump's adviser on energy and is likely to be US' next energy secretary. This man has talked about dismantling regulations and increasing production of fossil fuels.
- Shares of fossil fuel companies in the US are soaring. Peabody Energy, the largest coal producer in the country, which had filed for bankruptcy, saw its share value go up by 50 per cent after Trump's victory. This company contributed a quarter of a million dollars to Trump's campaign.

The US currently produces more oil than Saudi Arabia, more gas than Russia and more coal than India. And a Trump presidency would ensure that the fossil fuel production and consumption in the US will only go up. This will end Obama's Clean Power Plan and with this, the US commitment to reduce GHG emissions by 26-28 per cent below 2005 levels by 2025. It is important to understand that this commitment itself was insufficient. On a 1990 baseline, the US would have reduced emissions by a mere 13-15 per cent by 2025.

Let us now consider the argument that even if the US withdraws, it would have little effect on the Paris Agreement. The facts tell a different story:

- The Paris Agreement was designed to get the US committed to the UN Climate Treaty. It has no targets for countries and has no consequences for non-compliance. 195 countries, therefore, agreed on a weak treaty that has put the world on a path to more than 3°C temperature increase by the end of the century. If the US junks the agreement, other countries, might become sceptical about its efficacy and quit.
- The US contributes significantly to whatever climate finance is made available by the developed countries to developing nations. For instance, of the US \$10.3 billion pledged to the Green Climate Fund, \$3 billion has been pledged by the US. A US withdrawal would have significant impacts on climate finance.
- The US currently accounts for more than 15 per cent of total global CO<sub>2</sub> emissions; its per capita emission is 17 tonnes. If the US does not take significant action on emission cuts under Trump's presidency, it would have a cascading effect: countries are not likely to increase or even stick to their targets under the Paris Agreement.

In a nutshell, without the US the Paris Agreement, as it stands today, is as good as dead. So, what is the way ahead? Should we try to convince Trump to remain with the Paris Agreement (as UN Secretary General Ban Ki-moon and many other leaders have reportedly alluded to) or should we allow him to leave?

Whether the US stays or leaves, Trump's presidency would be extremely destructive to the agreement. For instance, he may not provide the funds pledged. He may go back on the US commitment to cut emissions. He may demand disproportionate contributions from developing countries or demand

a change in rules to suit US businesses. This would slowly finish the Paris Agreement and even the UNFCCC. At a time when 2016 has been declared as the hottest year on record (with the global temperature about 1.2°C above the pre-industrial era) and there is a huge mitigation gap to meet the 2°C target, we need countries to cut more emissions and quickly. And we need the US to take leadership in emissions cuts. But Trump's presidency would not allow this to happen.

It is in this context that I think it might be better that the US leaves the Paris Agreement. The world has invested too much in these negotiations for the past quarter of a century to be destroyed by a climate change denier who at the maximum would be the US president for the next eight years.

Once the US withdraws, countries would have the time to do a reality check vis-a-vis the Paris Agreement. The US withdrawal might strengthen

solidarity among the countries. They might like to make agreement stronger and incorporate economic sanctions so that Trump and his likes cannot walk away. They might decide to abrogate the agreement entirely and work on a new one. We can only speculate the reaction of the remaining 194 countries, but what is clear is that the Paris

Agreement without Trump is better than the Paris Agreement with Trump. At least we will know who the enemy is!

But as the saying goes, those who do not learn history are doomed to repeat it. During the Kyoto Protocol negotiations, the US under Bill Clinton pushed everybody around and reduced the emissions cut target for the developed countries from 20 per cent to mere 5 per cent. The US argued that the Republican Party and the US Congress would not agree to a treaty with stiff targets and hence a weak Kyoto deal came into existence. Then George Bush came and walked away from the Kyoto Protocol. Obama and his team used the same tactics from Copenhagen onwards to dilute UNFCCC and a weak Paris Agreement was signed. And now, Trump is planning to withdraw from this Agreement as well. We should not let this happen.

The international community should never agree on an agreement just for the convenience of one country, even if that country happens to be the most powerful (and polluting) country of the world. We should agree on a climate treaty which is in the best interest of all, especially the poor and the vulnerable communities of the world.   @Bh\_Chandra

**The international community should never agree on an agreement just for the convenience of one country, even if that country happens to be the most powerful (and polluting) country of the world**

# Rock bottom

It is difficult to find water even at record depths in Kolar, Karnataka's horticulture hub

**JIGYASA WATWANI**  
| KOLAR, KARNATAKA

**B** *EKU BEKU shashvata neero* (We want a permanent source of water!) For the past five months, Kolar, a district in Karnataka, has been reverberating with this slogan. Every day, hundreds of farmers and traders gather at College Circle in Kolar town to protest an acute shortage of water, which resulted in a 50 per cent crop loss this year in the district. Kolar is ranked highly among all the districts in the state in productivity and yield of horticultural crops. But the protest has landed on deaf ears as nobody from the state government has acknowledged it, forget about visiting the site. This forced many farmers to abandon agriculture and migrate to Bengaluru.

For more than a decade, Karnataka has been overexploiting its groundwater. In 2006, Kolar's average groundwater level was at a depth of 15.03 m. This year, from January to August, it dropped to 61.48 m. It now ranks the lowest among all districts in the state. In fact, groundwater has been overexploited in all its five *talukas*, leaving no scope to further tap groundwater, which meets its irrigation and domestic needs.

However, this is not the first time Kolar has witnessed such scarcity. Groundwater was overexploited in all its *talukas* in 2011.

The eastern gateway to Karnataka, Kolar, has no perennial source of water. Although it is drained by three river basins—Palar, Ponnaiyar and Pennar—these rivers and their tributaries are small and carry water only during the rainy season. The semi-arid district receives an annual average rainfall of just 748 mm. The rainfall is also extremely erratic. While in 2005, the annual rainfall was 1,195.4 mm, in 2016 it was just 521 mm. In the absence of surface water and adequate measures to recharge water aquifers, farmers started digging bore wells in early 2000s, a practise which soon became rampant.

In just four years, from 2011 to 2015, the number of bore wells in Kolar increased by 64 per cent. Although the Central Ground Water Board says Kolar had 84,287 bore wells—the highest in the state in 2015—Holali Prakash, a farmer from Kolar *taluka* and one of the leaders of the protest, says that this is a conservative estimate. It could be at least 125,000, Prakash says. Like

Since June 12, the citizens of Kolar have been protesting the acute shortage of water. Groundwater in all its five *talukas* is overexploited



SRIKANT CHAUDHARY / CSE



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Prakash, many farmers began abandoning water-intensive crops such as paddy and sugarcane, and shifted to mulberry, millet and vegetable cultivation.

But this was just the beginning of the water woes in Kolar, where the majority of the population depends on agriculture. With declining groundwater levels, bore wells too began to dry up. Chandrashekhar Jalakanta, an IBM employee who has been protesting daily, says of the 1,700 bore wells drilled by the district panchayat this year, 500 did not yield water. M Thippeswamy, senior geologist, groundwater department, Kolar, says that nearly 40 per cent of bore wells in the district—33,715 of the 84,287—are dry. As a result, people began digging deeper and the depth of a bore well increased from 91 m in the early 2000s to 548 m in some areas today. At present, the average depth of a bore well in Kolar is 393 m. At ₹ 688,000 for drilling a 393 m bore well, the failure of 33,715 bore wells amounts to a wastage of ₹ 2,319 crore.

### Eucalyptus makes it worse

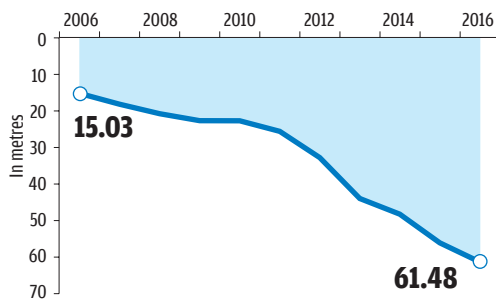
The water deficit has also been compounded by the plantation of eucalyptus trees. Each tree can extract 15 to 20 litres of water per day. Introduced by the state government in the 1960s under its afforestation programmes, the tree became popular in the 80s. Today, the majority of the district's eucalyptus is found in two of its talukas, says MVN Rao, director of a local non-profit, Gram Vikas.

For many farmers, the zero maintenance tree, which matures in seven years, provides lucrative returns. Prakash says while the investment on eucalyptus is ₹ 8,800 per hectare (ha), the return is ₹ 40,000/ha. V Govindappa, a farmer from Honnsethalli village of Mulabagal taluka, who grows eucalyptus on 70 per cent of his 8 ha land, says it is like insurance for them. "We use the money from eucalyptus plantation to buy gold for our daughter's marriage," says Govindappa. Following studies which linked eucalyptus cultivation to the depletion of groundwater levels in Kolar, the state government in 1990 asked the forest department to restrict eucalyptus to degraded reserved forests and wastelands. But some farmers continued to grow eucalyptus plantation as the order did not prohibit its plantation on private land. To further prevent

## Kolar's predicament

Kolar's groundwater levels hit the lowest among all districts in Karnataka in 2016. Proposals to divert river water from elsewhere are not without controversy

Groundwater level in Kolar



Source: Central Ground Water Board



### Projects initiated to divert water from elsewhere

▲ **YETTINAHOLE PROJECT:** It will divert water from the tributaries of the westward flowing Netravathi. But an April 2015 study by T V Ramachandran of the Indian Institute of Sciences, Bengaluru, says the project can generate only 7.5 TMC water, as against the estimated 24 TMC

■ **K C VALLEY PROJECT:** It aims to divert treated sewage water from a plant in Koramangala-Challaghatta valley. But residents suffering from water-borne diseases fear it will amplify their health problems

the depletion of groundwater, the forest department has been replacing eucalyptus trees with bamboo and tamarind since 2013. Each year, they remove eucalyptus from 1,000 ha of forestland. "We are going to ask the government to issue a blanket ban on eucalyptus plantations, including those on private farms," says Srinivas Rao, district forest officer, Kolar.

### Inadequate planning

Though the district administration and the forest department have been trying out measures such as crop diversification, artificial recharge and water conservation, residents feel it is not enough.

To discourage farmers from growing eucalyptus, the forest department distributed 0.8 million sandalwood seedlings and 0.6 million Melia dubia (Malabar neem) seedlings this year. Jalakanta, whose father grew ragi, says that the returns on sandalwood are more. Srinivas Rao says they are thinking of providing the seedlings at a subsidised cost. Jalakanta says this is much needed as sandalwood requires huge investments.

Between 2010 and 2016, Kolar's horticulture department assisted farmers in building 200 individual and 20 communi-

ty farm ponds under the National Horticulture Mission. But it ignores the fact that the ponds are full only during the two rainfall months, says Jalakanta.

Prakash says a permanent solution to meet Kolar's requirements lies in diverting water from the rivers in the state. According to a 1972 report by G S Paramashivaiah, an irrigation expert, every year, 1,500 thousand million cubic feet (TMC) of water from the state's major rivers such as the Krishna and the Cauvery drains into the sea. Kolar needs only 100 TMC annually, says Prakash. Although in 2015, the state government announced two projects to divert river water to Kolar, both drew the ire of scientists and citizens (see 'Kolar's predicament').

Shubha Ramachandran of Biome Environmental Solutions, a Bengaluru-based non-profit, says although diversion is a way out, it's not the only solution. She points to the neighbouring Chikballapur district where residents filled up water tanks to recharge the aquifer. This ensured that water was available in open wells. A part of the problem can be solved by the revival of water bodies and judicious use of whatever water is available, she adds. ■

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# REVENGE OF THE RICH

Trump's election reflects the anger of the rich who did not get richer. This inequity is also at the core of the climate change challenge

SUNITA NARAIN



**WHAT DOES** the ascension of Donald Trump to US presidency mean for climate change? Also, what does Trump mean for our inter-connected and by now highly globalised world?

Let's discuss climate change first. As my colleague Chandra Bhushan argues so forcefully in this issue (see 'Why the US should quit the Paris Agreement', p14), firstly, Trump is not the only climate denier in the US. All Republican nominees and even Democratic candidate Hillary Clinton avoided using the "C" word during the election campaign. But there is no doubt that President-elect Trump is of another shade of this grey. He denies climate change is happening, though recently he said to CNN that "humans have some connectivity" on climate change. He is certain that the US needs to dig more coal, build more power plants and do everything to ramp up production, which will increase greenhouse gas emissions. So, he is bad news for climate change.

But this is not new. As Chandra Bhushan says, the US has invariably made the multilateral world change rules; reconfigure agreements, mostly to reduce it to the lowest common denominator, all to get its participation. Then when the world has a weak, worthless and meaningless deal, it will walk out of it. All this while, its powerful civil society and media will hammer in the point that the world needs to be accommodating and pragmatic. "Our Congress will not accept" is the refrain, essentially arguing that theirs is the only democracy in the world or certainly the only one that matters.

This happened in 1992, when in Rio, after much "accommodation" the agreement to combat

climate change was whittled down, targets were removed and there was no agreed action. All this was done to bring the US on board. But it walked out. Then came the Kyoto Protocol, the first and only framework for action to reduce emissions. Here again, in December 1997, when climate change proponents Bill Clinton and Al Gore were in office, the agreement was reduced to nothingness—the compliance clause was removed, cheap emission reduction and loopholes were included. All to bring the US on board. Once again, they rejected it.

Then came Barack Obama and his welcome commitment to climate change actions. But what did the US do? It has made the world completely rewrite the climate agreement so that the targets, instead of being based on science and contribution of each country, are now based on voluntary action. Each country is allowed to set targets, based on what they can do and by when. It has led to weak action, which will not keep the Planet's temperature rise below 2°C, forget the guardrail of 1.5°C. This was done to please the Americans who said they would never sign a global agreement that binds them to actions or targets. Paris

fatally and fundamentally erased historical responsibility of countries and reduced equity to insignificance. This was done because the US said this was the redline—nothing on equitable rights to the common atmospheric space could be acceptable.

Also, the Centre of Science and Environment's analysis of US climate change action plan in the report, *Capitan.America*, showed that even under Obama the proposals were business as usual.



This is when the world tiptoed around equitable rights, was bent out of shape and scraped the bottom of the barrel. Now the US will even walk out of this. Chandra Bhushan, then, rightly asks: is it time we thought of a world agreement without the US?


Let's now turn to what the Trump era means for globalisation. It was in the 1990s that the world stitched the global trade agreement and made rules for free, unfettered movement of goods. It wanted an interconnected world, where cheap labour could be used to enhance corporate profits. It got this. The two decades that followed saw the amazing rise of China as a provider of these goods; it also saw consumption increasing manifold. It was also in the 1990s that this same world agreed that there was a need to moderate economic globalisation so that climate change could be mitigated. This was ecological globalisation, its counter to economic globalisation. But it failed.

Trade won over climate; consumption won over emission control. The success of economic globalisation showed up in the balance sheet of emissions: the carbon dioxide (CO<sub>2</sub>) emissions of the rich who gobbled up these goods did not decrease and the CO<sub>2</sub> emissions of the countries who manufactured these increased. The Planet was fried.

This is where we are today. We have Trump, who openly denies climate change and has won elections. A large majority stands with him. Calls for protectionism are growing in this already rich world. The UK's Brexit vote is also a testimony to this anger. It is the revenge of the rich, who did not get richer. It is the revenge of the educated; the well-off who believe they are entitled to more and that this is being taken away from them by "others". This is also a time when the already developed world, which has long exhausted its quota of the global atmospheric space, wants to burn more fossil fuel for its growth. It believes it is growth-deprived.

The key reason for all this is the fact that globalisation increased inequity. This is at the core of the problem today. This is also the core of climate change—ultimately, if emissions are linked to economic growth, then the question is how this growth will be shared between people and between nations. Economic and ecological globalisation are about making rules that benefit people and the Planet, not in ways that some get richer or that we blow up the Planet. This is what we need to work on in the present world. But this demands a change in the narrative. For too long, the two discussions on growth and climate change have been separated. For too long, we have been told that we cannot discuss the issues of equitable growth and equitable allocation of the carbon budget. This is what needs to change.

But for this, for once, let's move beyond shadow-boxing. The election of Trump should teach us that the divisions are deep; the crisis is real. It is time to wake up. Otherwise, we will be in denial. And the climate deniers will have the last laugh. ■

 @sunitanar





DARRON R. BIRGENHEIER

# Is the free market losing its buyers?

Trump's victory shows growing discomfort with globalisation

**RICHARD MAHAPATRA AND  
SUBHOJIT GOSWAMI**

**T**HE DEVELOPED world's poorest country—the United States of America (USA)—has voted for its new president. The victory of Donald Trump was unexpected. But the anger that fuelled his victory was very much expected, and sends out a clear message. It questions the free market model of economy that has been the only model in existence for more than half of the world's population.

Championed by the developed world, the free market economy has been under scrutiny since 1990. But developments in the aftermath of the recession of 2008 show that countries are increasingly losing interest in this model of

economy. The recession wiped out 13 per cent of the global production and 20 per cent of the global trade. In fact, its impacts are still being felt across developed countries. Britain's surprise vote to leave the European Union (Brexit) was the biggest reality check on the efficacy of globalisation, while high unemployment in Spain and severe economic crisis in Greece that led to adoption of austerity measures across the countries were wake-up calls. Opinion poll after opinion poll, including the one from the Pew Research Center, a Washington-based fact tank, suggests that many European countries want to follow in Britain's footsteps and exit the European Union to pursue their sovereignty over decision-making and economy.

This sentiment was reflected during the US presidential election campaigns when unusual reports filled the newspapers. "Nobody is talking about the 43 million poor of US". "Voters can't buy bus tickets to go to the poll station". "USA just closes its eyes to the inequality". Then there were the kind of slogans Trump made: Stop outsourcing American job to India and China; Deport illegal migrants from the country. The campaign slogans had an uncanny similarity with those made in developing countries: free the market economy; create jobs for the locals; eradicate poverty. This is the reason Trump won, even though he has accumulated his fortune by reaping the benefits of free trade.

For the world yet to overcome the Brexit shock, Trump is just a rude reminder that there is some fundamental problem with the free market model. "Donald Trump's victory should serve as a lesson for Europe's mainstream forces ahead of their own ballots next year. Politics as usual just does not work on both sides of the Atlantic. Clearly,

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people are not feeling they profit from the benefits of globalisation and free trade,” says Anthony L Gardner, the US ambassador to the EU.

The victory of Trump also indicates that the developed world now struggles with the third world problems. Its economies are in tatters; inequality is further widened, with a handful of people amassing the major chunk of profits generated out of a free market; and human development indices have declined sharply.

For example, in the US the per capita GDP grew by 14 per cent between 2001 and 2015, but the average wage grew by only 2 per cent. An analysis by the McKinsey Global Institute shows that the real incomes of about two-thirds of households in 25 advanced economies were flat or fell between 2005 and 2014. The situation was the worst in Italy, where 97 per cent of the middle-class saw stagnant or declining take-home pay. In USA, the figure was 81 per cent. About 193 million people, or one-third of those whose income has not been advancing, express negative opinions about free trade and immigration.

The possibility of creating the world's biggest free trade market now looks bleak due to this rising discontent against economic liberalisation in developed countries. The proposed Transatlantic Trade and Investment Partnership (TTIP) between the EU and the US, dubbed one of the most ambitious free trade accords ever attempted, has attracted opposition in Europe as voters have grown doubtful of the benefits of globalisation. The victory of Trump, who has pandered to the anti-globalisation sentiment, is likely to result in the demise of the deal. He has already vowed to withdraw the US from another free trade agreement, the Trans Pacific Partnership that covers 12 countries, on his first day in office. “Instead, we will negotiate fair, bilateral trade deals that bring jobs and industry back onto American shores,” Trump said while unveiling plans for his first 100 days in office.

Small wonder that immediately after the US presidential elections, multilateral financial organisations like the World Bank Group and the International Monetary Fund (IMF), who champion the free market economy, defended the model. Addressing a press conference at the World Bank-IMF Annual Meetings, World Bank Group President Jim Young Kim cited the example of China that has lifted 700 million people out of poverty using the same model of economy. Christine Lagarde, managing director of IMF, was more vocal. On Trump's idea of getting American jobs by adopting protectionism, she said, “The rhetoric against [free] trade would do harm to the country. I call it economic malpractice.” Just a few months ago, the research depart-

ment of the IMF had alleged that the proponents of neoliberalism have been over selling the benefits of free market.

Trump had campaigned on a promise to scrap international trade deals that transferred US jobs overseas and flooded domestic markets with foreign goods. His call for “Americanism, not globalism” struck a chord with the white working-class voters at a time when the US was still licking the wounds of the North American Free Trade Agreement (NAFTA), an agreement signed between the US, Mexico and Canada in 1994. NAFTA had resulted in the loss of manufacturing and shipping jobs for the Americans.

### Verdict against rising inequality

There is another reason Trump's brand of protectionism has found takers in USA. Free trade, which served the country for two decades following Europe's and Japan's wartime collapse, ensured enrichment of an already rich part of the society. The protectionism, as demanded and upheld by Abraham Lincoln, is now looked upon as a more fitting answer to “exclusionary capitalism” that helped the economic elite reap all the fruits of unrestrained international trade.

Factory work, which was once the backbone of the middle class, is now all but gone. It has been replaced by low-paying service jobs. In 1980, one in five Americans worked in manufacturing units. Now it is one in 12. Ohio now has one-third fewer manufacturing jobs than it had in 2000. Estimates by Massachusetts Institute of Technology economist David Autor show USA lost a million

manufacturing jobs to China between 2000 and 2007—this is a quarter of the jobs lost across the US during the period.

Political scientist Francis Fukuyama, who had previously supported the American model of capitalism and free trade, also highlights this fallout of globalisation. “We thought to make the best of globalisation by producing nothing ourselves and offering services instead. This was a mistake. We forgot that socialism never was a big issue in the US, because enough people always managed to move into the burgeoning middle class. Nowadays, this is no longer the case, because they have worked in industries that we have outsourced to countries like China,” he says.

Other than soya beans and corn, which in a highly mechanised agriculture are practically produced without human labour, the US sells services like patents and licences, and technologically sophisticated products like industrial machines, semiconductors, electric apparatus and medical equipment. Unfortunately, high-tech industries and research do not create jobs for the majority of American people. This explains why the Rust Belt (Pennsylvania,

**Trump's victory indicates that the developed world now struggles with the third world problems. Its economies are in tatters; inequality is further widened; and basic human development indices have declined sharply**



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GARON S

Ohio, Michigan and Iowa) has been decisive in Trump's victory. These are the states where working class people and union workers have seen deindustrialisation and manufacturing decline.

A study by the Pew Research Center finds that 65 per cent of Americans agree that the gap between the rich and the rest has widened in the last 10 years. In 2013, the median wealth of the nation's upper-income families (\$639,400) was nearly seven times that of middle-income families (\$96,500), the widest wealth gap seen in 30 years when the Federal Reserve began collecting these data.

Obviously, the US is no stranger to the trend of rich dictating the political agenda, financing the candidates who protect their interests and ensure that the laws are in the interest of the corporate. The six-month-old Dakota Pipeline Access protest is the most recent specimen. Despite hundreds of indigenous people upping their protests against this proposed pipeline, Kelcy Warren, the chief executive officer of Energy Transfer—the promoter of the project—says, "I am 100 per cent sure that the pipeline will be approved by a Trump administration." In June, Warren donated US \$100,000 to the Trump Victory Fund and an-

other \$3,000 to the Trump campaign.

So, American political scientist Larry Bartels was not off the mark when he recently said the US senators are five to six times more likely to listen to the interests of the rich than to the interests of the middle class. "There is no discernible evidence that the views of low-income constituents had any effect on their senators' voting behaviour," Bartels said. Economist Joseph Stiglitz says from the 1980s until 2007, deregulated capitalism in the US brought greater material wellbeing only to the very richest in the richest country of the world (see 'How Trump happened' on p28). "Over the course of this ideology's 30-year ascendancy, most Americans saw their incomes decline or stagnate year after year," says Stiglitz.

"There are many Americans who work two jobs to make ends meet," says Hershey Friedman, professor of Business at Koppelman School of Business, Brooklyn College. "One of my friends, a college professor, is having trouble paying his rent and is heavily in debt. He is considering working at night driving a cab. There is a large number of people like that in the US. They are opposed to an economy slanted to benefit the rich," Friedman says.

Increasing inequality and stalled growth in the wake of global financial crisis are also the reasons most nations in Europe seem to denounce the ideology of free trade. This becomes evident from the rise of anti-globalisation movements and nationalist parties in several countries.

Brexit exposed the anti-EU feelings and anger against the power structures that are alienated from the society and ineffective in tackling global downturn and the Eurozone crisis. The referendum is the result of a realisation that the beneficiaries of globalisation have been powerful corporations, affluent families and skilled and educated workers; the working-class continues to struggle with stagnant wages, job losses and staggering debt. “A UK departure is going to make the entire EU inward-looking and more defensive on globalisation,” says Fredrik Erixon, director of the European Centre for International Political Economy, a policy research think-tank based in Brussels.

In both Europe and the US, the grouse has been evident among older and less-educated citizens whose livelihoods were affected by automation and cheaper foreign labour—two main features of globalisation. Branko Milanovic, a leading economist of inequality, explains in one of his books that the recent surge of inequality in the West has been driven by the revolution in technology, just as the Industrial Revolution drove inequality about 200 years ago.

## Rise of restrictive trade measures

Way back in 2011 when the Occupy Wall Street took roots, highlighting inequality and the failure of the economy to meet people’s expectation, the International Labour Organization (ILO) hinted that the growing unrest had an uncanny protagonist: the youth. Currently, the population in the age group of 15-24 is at a historic high. This group has not seen any economic model other than the free market. Comparing the current crisis of unemployment among the youth to the Great Depression, ILO said, “There have been serious financial crises, none have been as deep, as prolonged, and as globally contagious as the current crisis.” It also indicated that a generation is growing up without access to the labour market, further precipitating the crisis. It is no surprise that a majority of Trump’s voters are less educated unemployed youths.

Growing unemployment is one of the reasons most developed countries are resorting to economic protectionist measures. The WTO report, which analysed restrictive trade measures between mid-October 2015 and mid-May 2016, says the G20 economies have introduced new protectionist trade measures at the fastest pace since 2008 economic

recession. “G20 economies applied 145 new trade-restrictive measures—an average of almost 21 new measures per month, compared to 17 in the previous report,” it states.

Going by the European Commission report, between July 1, 2014, and December 31, 2015, Russia issued the largest number of measures restricting government procurement. Countries, such as Algeria and China, used discriminatory tax measures favouring local businesses. In the field of services and investment, China adopted the highest number of restrictive measures, followed by Indonesia.

China is the EU’s second largest trade partner. But the EU says Chinese exports are flooding European market. Recently, it has taken temporary anti-dumping measures against the imports of Chinese seamless steel pipes.

“Europe cannot be naive and must protect its interests, especially when it comes to dumping,” says Peter Ziga, trade minister of Slovakia that holds EU’s presidency.

The European Commission says emerging economies were responsible for 50 per cent of all trade-restrictive measures introduced between June 2014 and December 2015. However, developed countries, including G20 members, also take protectionist measures despite repeated pledges

against them. According to European Commissioner for Trade Cecilia Malmström, “Trade protectionism continues to be on the rise worldwide. Open markets are proven to bring more innovation, increased productivity, economic growth and prosperity. Despite this, few barriers to trade have been removed, while new ones have been introduced.”

Though USA is officially committed to free trade, it has limited openness since the 2008 recession. In fact, it has implemented the maximum protectionist measures since 2008. USA had pursued protectionism between the Civil War and the World War II, before it radically changed its mind in the middle of the 20th Century, when Europe’s industries were largely destroyed, and turned into the follower of free trade to prevent others from protecting their industrial production. The optimism of the first two decades after the World War II is now sagging. Under the Trump regime, it is most likely to tailor its rules to shut out foreign companies from public tenders.

Like Japan, which practised protectionism much to its benefit, the upcoming Republican government in the US is going to be conservative in foreign trade deals and pay heed to Abraham Lincoln’s warning to his countrymen: “I proceed to try to show that the abandonment of the protective policy by the American Government must result in the increase of both useless labour and idleness; and so, in proportion, must produce want and ruin among our people.”

**Emerging economies were responsible for 50 per cent of all trade-restrictive measures during 2014-15. But a WTO report says G20 economies introduced new trade-restrictive measures at the fastest pace since 2008 recession**



JOSEPH E STIGLITZ

## How Trump happened

Widespread anger stemming from the loss of trust in government decided the new presidency of the US

**A**S I have traveled around the world in recent weeks, I am repeatedly asked two questions: Is it conceivable that Donald Trump could win the US presidency? And how did his candidacy get this far in the first place?

As for the first question, though political forecasting is even more difficult than economic forecasting, the odds are strongly in favour of Hillary Clinton. Still, the closeness of the race (at least until very recently) has been a mystery: Clinton is one of the most qualified and well prepared presidential candidates that the United States has had, while Trump is one of the least qualified and worst prepared. Moreover, Trump's campaign has survived the behaviour by him that would have ended a candidate's chances in the past.

So why would Americans be playing Russian roulette (for that is what even a one-in-six chance of a Trump victory means)? Those outside the US want to know the answer, because the outcome affects them, too, though they have no influence over it.

And that brings us to the second question: why did the US Republican Party nominate a candidate that even its leaders rejected?

Obviously, many factors helped Trump beat 16 Republican primary challengers to get this far. Personalities matter, and some people do seem to warm to Trump's reality-TV persona.

But several underlying factors also appear to have contributed to the closeness of the race. For starters, many



Americans are economically worse off than they were a quarter-century ago. The median income of full-time male employees is lower than it was 42 years ago, and it is increasingly difficult for those with limited education to get a full-time job that pays decent wages.

Indeed, real (inflation-adjusted) wages at the bottom of the income distribution are roughly where they were 60 years ago. So it is no surprise that Trump finds a large, receptive audience when he says the state of the economy

is rotten. But Trump is wrong both about the diagnosis and the prescription. The US economy as a whole has done well for the last six decades: GDP has increased nearly six-fold. But the fruits of that growth have gone to a relatively few at the top—people like Trump, owing partly to massive tax cuts that he would extend and deepen.

At the same time, reforms that political leaders promised would ensure prosperity for all—such as trade and financial liberalization—have not delivered. Far from it. And those whose standard of living has stagnated or declined have reached a simple conclusion: America's political leaders either didn't know what they were talking about or were lying (or both).

Trump wants to blame all of America's problems on trade and immigration. He's wrong. The US would have faced deindustrialization even without freer trade: global employment in manufacturing has been declining, with productivity gains exceeding demand growth.

Where the trade agreements failed, it was not because the US was outsmarted by its trading partners; it was because the US trade agenda was shaped by corporate interests. America's companies have done well, and it is the Republicans who have blocked efforts to ensure that Americans made worse off by trade agreements would share the benefits.

Thus, many Americans feel buffeted by forces outside their control, leading to outcomes that are distinctly unfair. Long-standing assumptions—that America is a land of opportunity and that each generation will be better off than the last—have been called into question. The global financial crisis may have represented a turning point for many voters: their government saved the rich bankers who had brought the US to the brink of ruin, while seemingly doing almost nothing for the millions of ordinary Americans who lost their jobs and homes. The system not only produced unfair results, but seemed rigged to do so.

Support for Trump is based, at least partly, on the widespread anger stemming from that loss of trust in government. But Trump's proposed policies would make a bad situation much worse. Surely, another dose of trickle-down economics of the kind he promises, with tax cuts aimed almost entirely at rich Americans and corporations, would produce results no better than the last time they were tried.

In fact, launching a trade war with China, Mexico, and other US trading partners, as Trump promises, would make all Americans poorer and create new impediments to the global cooperation needed to address critical global problems like the Islamic State, global terrorism, and climate change. Using money that could be invested

**Several underlying factors appear to have contributed to the closeness of the race. For starters, many Americans are economically worse off than they were a quarter-century ago**

**The US economy has done well for the last six decades. But the fruits of that growth have gone to a relatively few at the top—people like Trump, owing partly to massive tax cuts**

**Those whose standard of living has stagnated or declined have reached a simple conclusion: America's political leadership either didn't know what they were talking about or were lying**

in technology, education, or infrastructure to build a wall between the US and Mexico is a twofer in terms of wasting resources.

There are two messages US political elites should be hearing. The simplistic neo-liberal market-fundamentalist theories that have shaped so much economic policy during the last four decades are badly misleading, with GDP growth coming at the price of soaring inequality. Trickle-down economics hasn't and won't work. Markets don't exist in a vacuum. The Thatcher-Reagan "revolution," which rewrote the rules and restructured markets for the benefit of those at the top, succeeded all too well in increasing inequality, but utterly failed in its mission to increase growth.

This leads to the second message: we need to rewrite the rules of the economy once again, this time to ensure that ordinary citizens benefit. Politicians in the US and elsewhere who ignore this lesson will be held accountable. Change entails risk. But the Trump phenomenon—and more than a few similar political developments in Europe—has revealed the far greater risks entailed by failing to heed this message: societies divided, democracies undermined, and economies weakened.

*Joseph Stiglitz is former chief economist of the World Bank and recipient of the Nobel Memorial Prize in Economic Sciences. He teaches at the Columbia Business School*



MONTEK SINGH AHLUWALIA

# Get ready for post-globalisation era

## Trade, climate change and the role of multilateral development banks are critical areas

**T**HE ELECTION of Donald Trump as US President, coming after the Brexit vote, is widely seen as a thumbs down for globalisation. Herewith some comments on implications for trade policy, climate change and the role of multilateral development banks.

### Trade policy

The most immediate worry relates to global trade. A slowdown is already under way and pessimists worry that if the threat to raise tariffs, which was mentioned in the campaign, is implemented, it may trigger a Smoot-Hawley-type process, precipitating a severe downturn as happened in the inter-war years of the last century. Things may not turn out as bad, but a fresh protectionist turn in the US will have a negative effect on the global economy which will affect us as well.

Industrialised countries have turned against globalisation because of the perception that it has hollowed out manufacturing and shifted jobs to developing countries. The perception is exaggerated: some jobs may have been offshored, but other jobs have been created, and more could be created if industrialised countries were to undertake the reforms to restart growth and re-skill their labour. From our perspective, the key issue is whether we should remain open or respond by turning inward.

There are good reasons for us not to turn inward. The US, Europe and Japan are likely to have a continuing comparative advantage in the development of new technology, but to sell the products embodying these technologies in world markets, each industrialised country has to be as competitive as possible and it helps them to exploit the lower manufacturing costs in developing countries. There is much talk of robotification and 3D printing reducing labour costs in industrialised countries and thereby shrinking global value chains (gvcs). The technology has indeed advanced impressively, but it is not clear that it would be sufficiently cost-effective to offset the lower costs of skilled labour in developing countries.

**A fresh protectionist turn in the US will have a negative effect on the global economy which will affect us as well. But there are good reasons for us not to turn inwards**

If gvcs are here to stay, even if they expand less aggressively, it follows that we need to position ourselves to derive full benefit from them. Sceptics will be quick to point out that we have not benefited as much as other developing countries from the growth of gvcs in the previous decade, but this is largely because we have not implemented policies that would make us competitive. The policy lesson for us is to focus on overcoming these disadvantages rather than turning our back to continued openness. This is strengthened by the fact that Asia is the part of the world most likely to experience rapid growth, and this region is likely to remain open and pursue trade integration. We should plan to be part of the Asian growth story and encourage deeper trade integration with the other fast-growing Asian countries, including China.

Early conclusion of the Regional Comprehensive Economic Partnership (RCEP) agreement would send the right signal at this time. Unfortunately, the Indian industry has been lukewarm about our regional integration efforts, and some parts of it have even opposed the steps taken. Industry needs to reconsider its position in terms of what is in its longer term interest. They should work harder to persuade the government to remove impediments

to our competitiveness, rather than argue for higher tariffs on the assumption that these impediments are here to stay.

We also need to rethink our strategy in the WTO. Trade negotiators have to fight hard to protect national interests, but successful negotiations are also a matter of give and take. Unless industrialised countries can present the outcomes to their domestic constituencies as providing a gain from their perspective, they will marginalise the WTO and push for plurilateral negotiations outside it. This is what led to the Trans-Pacific Partnership and the Transatlantic Trade and Investment Partnership, but as these agreements appear to be stalled, there is a window for showing progress in the WTO. We should review our position on ongoing WTO matters, such as trade facilitation, government procurement, the Information Technology Agreement II and the Trade in Services Agreement. We often act in the WTO on the



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assumption that we should resist any narrowing in our “policy space” but there may be a good case to change domestic policy where it has become the source of competitive disadvantage.

## Uncertainty over climate cooperation

President-elect Trump had said in the campaign that he would scrap the Paris Agreement and this is causing much worry among those fighting against climate change. Unlike trade policy, where the Republican Party can be expected to exert a moderating influence on unnecessary reversals, there is no such restraining element on climate change. Many in the Republican Party are climate change deniers and the fossil fuel lobby is strong.

The Paris Agreement has many shortcomings. Nevertheless, it is important because it broke the earlier impasse in the UN Framework Convention on Climate Change and got all the countries on board. It was hoped that as momentum developed it would be possible to improve the agreement in subsequent reviews. A US withdrawal will undoubtedly interrupt the momentum of global cooperation on climate change. It will also create uncertainty about policy in industrialised countries, slowing down investment in the development of green energy technology. It would also put paid to hopes of mobilising financial resources to help developing countries make the transition.

There is not much India can do to counter this development other than urge our point of view in bilateral discussions and use the G20 forum, now chaired by Germany, to persuade the new US administration to stay the course.

## World Bank for sustainable development

A major problem facing developing countries today is the need to invest massively in building sustainable infrastructure that will moderate the energy requirement and therefore the GHG consequences of future growth. The additional investment needed in developing countries on this count is estimated to be between US \$1 trillion and \$3 trillion per year between now and 2030. This covers investment in new green energy sources (solar, hydro and wind) plus the associated balancing investments. It includes investment in energy-saving urban infrastructure and transport systems.

Multilateral development banks (MDBs), such as the World Bank and the Regional Development Banks, and also the New Development Bank (BRICS Bank) and the China-sponsored AIIB, can all play a critical role in supporting



ILLUSTRATIONS: SORIT / CSE

investments in these areas. They can provide technical support in project design and also in devising the policy framework needed to incentivise the shift. They can contribute directly to financing a part of the project. Given the scale of the challenge, private investment in the form of public-private partnerships will be necessary. This calls for an assurance to the private investor that the policy framework is conducive to private investment and that policy will be stable over the life of the project. The involvement of MDBs in financing these projects even in a limited way will help reduce risk perception in the private sector and be an assurance against whimsical policy changes.

The G20 had, in the past, called upon the World Bank to prepare specific proposals on how MDBs can help in this area. No credible proposal has emerged thus far, but with the World Bank President having just been

elected to a second term, it is

opportune to push for concrete action. A recent report by the Center for Global Development has recommended that of the \$3 trillion additional investment that may be needed annually in developing countries, \$200-250 billion should come from all MDBs taken together. The current flow from these institutions for infrastructure is about \$50 billion per year. The biggest contributor is the World Bank and it must play its part in meeting the enhanced target for MDBs. Indeed, it must give a lead. An increase of the order required will only be possible if the major member countries agree to a large increase in the World Bank's capital, along with a clear mandate to develop a work programme for action in this area.

Industrialised countries have been reluctant to expand the capital of the World Bank. They say there is no shortage of funds from the capital market and the real constraint is the absence of well-prepared projects and a credible policy framework that would attract private funds. The case for greater involvement of the World Bank arises precisely because its involvement can help in both the areas. World Bank lending would not substitute for private flows—it would, in fact, leverage them. The need to push in this area is all the greater if climate change negotiations run into difficulties, especially in the area of mobilising finance. Once again, the G20, under the German presidency, is the logical forum to push these ideas.

*Montek Singh Ahluwalia is former deputy chairperson of the Planning Commission of India*



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ASHIS NANDY

# There was thirst for an outsider

## People thought of Trump as an instrument to fix the establishment

**D**ESPITE HAVING an impressive resume and an illustrious political career, Hillary Clinton lost to Donald Trump, a rank outsider whose intemperate comments and other stunts were lambasted by the liberal camp. So, how could this billionaire Republican script one of the major upsets in the history of US elections? If you think Trump is a spoiler, then you have to know that there was thirst for an outsider in the system. People thought of him as an instrument to fix the establishment.

Post-electoral analyses suggest that Trump's message was more resonant than Clinton's as he focussed on trade and immigration. While the Democrats sneered at Trump's socialist promises of nixing international trade deals and reclaiming manufacturing industry, the often-neglected Americans drove him to the White House.

Every establishment is run on the basis of rationality and organisation. You have to fight that rationality within the establishment. For some people, Hillary is rational and Trump is not. But not many realised the need to challenge this rationality. We have to be suspicious of the rationalist structure that drives a government and its economy.

Trump had chosen to speak about economic nationalism instead of globalisation; he preferred isolationism to interventionism and voiced in favour of job growth-oriented economy rather than jobs export-oriented economy. Many have started to think that his economic policies may see a collapse of the "bourgeois democracy". While the victory of an authoritarian Republican leader has kindled hope of fighting neoliberalism and welcoming protectionism, does that also mean that a form of authoritarian capitalism will ensue?

We have examples of countries where authoritarian capitalism triggered development. If you look at East and Southeast Asia, stellar economic growth was achieved during the regime of Syngman Rhee (South Korea), Ferdinand Marcos (the Philippines), Mahathir Mohamad (Malaysia) and Lee Kuan Yew

(Singapore). All of them endorsed an authoritarian form of capitalism. You cannot separate it from development. These Asian tigers, whom I also call man-eaters, thought that an authoritarian structure will help them actualise their development dreams.

But this form of tradition comes with a caveat. There is no place for human considerations. No one asks where will the indigenous and poor people go? How will they be affected?

The modern Western civilisation is blinded by the assumption that it is the vanguard of future. It does not realise that no human construction is perfect and all human constructions are open to criticism. There was a belief that the vision of enlightenment can be actualised through Western colonisation. No radical thinkers could identify this arrogance of Western civilisation. They say "man is the measure of all things", but this homocentrism is ultimately self-destructive. If we think of the West, they are largely dependent on defence and other sophisticated technologies.

This, itself, is anti-people, anti-life and anti-future. You have to realise that technology cannot solve all problems.

Trump has tapped into the anger of millions of people who are jobless, marginalised and displaced, and he has promised to return the sovereignty to America. But it is to be seen how his economic policies impact the society. He believes that environmental concerns are all hoax.

This is where he has to distance himself from that arrogant assumption that the edifice of laws and the diplomatic processes that his government builds will lead to historical progress. You need a new way of looking at the world. It's an age of compassion and humanity that requires a different form of consciousness and a different type of schooling.

*(Based on a conversation with Subhojit Goswami)*

*Ashis Nandy is an Indian political psychologist, social theorist and critic who has written extensively on European colonialism, development and modernity*

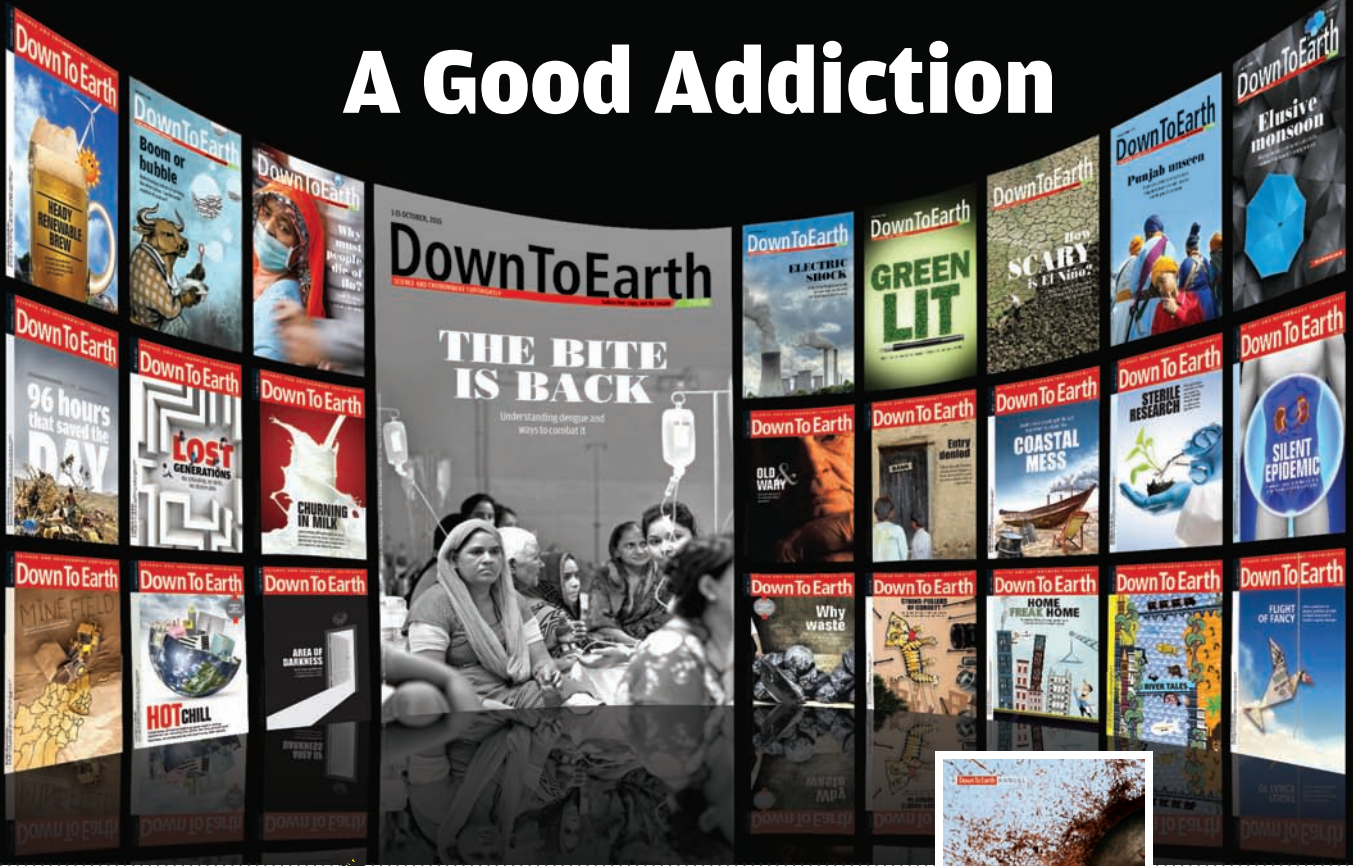


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# COMMUNITY WELLBEING AT THE CORE OF MARUTI SUZUKI'S CSR

Long before Corporate Social Responsibility became a buzzword or even mandatory, Maruti Suzuki was engaging with communities to identify gaps, using collaborative approaches to find solutions. Using social interventions, the Company supports village panchayats (elected bodies) to enhance infrastructure facilities in the domains of education, water and sanitation and rural infrastructure, with the singular objective of improving quality of life and making the village an 'Adarsh Gram' (Model Village). It recognises the fact that while industrialisation benefits local communities economically, large-scale migration of labour and vehicle movement around the very same industries also puts pressure on local infrastructure. Striving to create prosperous and content communities around manufacturing facilities is therefore vital for long-term sustainability. As of March 2016, the Company is working in 21 villages across Haryana and Gujarat locations.

Aligning itself closely with Government's social agenda of not only Swachh Bharat but also Skill India, the Company is addressing the growing mismatch between industry needs and what the Government run Industrial Training Institutes (ITI) produce. The Company has adopted over 140 ITIs to provide infrastructure support,

curriculum strengthening, faculty and student training, stronger industry exposure, holding of job fairs and partnering with its own dealer network to create a better job-fit. Automobile Skill Enhancement Centres are setup with state-of-the-art infrastructure and training facilities. Over 5,000 students are gainfully employed through this initiative.

Road safety is the third arm of the Company's multi-pronged CSR work. The Company's main focus is driving training, as "driver fault" is identified

**The company increased its expenditure on its CSR venture to 783.6 million Rs in 2015-2016 from 372.5 million Rs in 2014-2015, which is 2.4% of their average net profit**

as the major cause of road accidents. By supporting driving training of underprivileged youth, the Company is able to enhance their employability while making roads safer. Creating awareness among school children, and taking integrated measures on specific road stretches, are other ways in which the Company contributes to road safety. The Company has trained more than 3 million people in over a decade. The Company manages six Institutes of Driving Training and Research in partnership with State Governments, besides offering training through over 370 neighbourhood driving schools (Maruti Driving Schools) in partnership with dealers.

Maruti Suzuki has hence, committed itself to serve the society through its CSR initiatives and has identified local communities and societies around its

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Water ATM - Community Safe drinking water project

manufacturing facilities to be a major stakeholder.

**Village Development:**  
**'Swachh Bharat Swachh Gaon'**

In a land where ceaseless waste is poured unmonitored into the rivers, where health in rural areas is endangered because of poor sanitation facilities and unavailability of toilets, Prime Minister Narendra Modi's Swachh Bharat Abhiyan is a much-needed social drive.

In such times, hence, Maruti Suzuki's initiative to further this drive is laudable. As a part of their Corporate Social Responsibility (CSR), the company has made earnest efforts to reach out to the rural areas around its manufacturing facilities in Haryana and in Hansalpur, Gujarat. As a result of water and sanitation initiatives, over 1,500 households in 4 villages of Manesar now have better methods of liquid waste management. This is due to the 11.9 km of sewer line that has been laid under Maruti Suzuki's watch.

Not only has the company aided in laying better sanitation for the villages but it has also constructed community toilets along with those for individual houses. So far, more than 2,000 toilets have been built for individual homes and 15 community toilets have been installed in the villages of Manesar, Rohtak. For furthering solid

waste management, 65 sweepers along with 9 waste collection vans have been deployed in 12 villages to help maintain cleanliness on the streets. These vans are covering over 7,500 households on daily basis. The streets have also been rid of potholes that collected water during the monsoons.

Maruti Suzuki has actively

borne diseases in these villages. With the construction of toilets, open defecation has stopped and respect for people's privacy is more prominent.

Further, the company has made major infrastructural progressions in the form of new constructions along with repair work in village communities. In the year 2015-2016, community halls

**Waste Collection Vans running in villages for Solid Waste Collection**



participated in creating awareness about the maintenance of the villages' hygiene and sanitation facilities. Programmes have been organized with the help of NGO's to instill an understanding in the people about the continuous preservation of a clean environment for retention of good health. The joint efforts have led to considerable reduction of water

were built, crematoriums were repaired and roads were upgraded. The CSR team of Maruti Suzuki has constantly kept in touch with the village Panchayats to better understand their needs and collaborate with them.

Efforts undertaken by the Company in Bass Hariya village at IMT Manesar paved the way for that village to receive



Toilet Blocks constructed in Government Schools — Before and After

Open Defecation Free certificate and 'Nirmal Gram' award by Government of India.

### **Education initiatives: Strengthening school infrastructure and creating yearning for learning**

As per the annual reports of Pratham, a Delhi based non-profit organisation, Government schools have been lagging behind in providing proper education to the students enrolled with them. According to the Annual State of Education Report (ASER) released by Pratham in 2014, 30.8 per cent of rural students prefer to pay more for private schools than enrolling with Government schools for want of better education facilities. Additionally, the student attendance have remained more or less stagnant as 2013 with 71.4% in primary schools and 71.1% in upper primary schools in 2014.

With annual reports presenting a dismal condition of Government schools in the country, Maruti Suzuki's CSR ventures in education present a silver lining to the students enrolled in these Government Schools. Since 2008, the company has upgraded 47 schools that have benefitted more than 50,000 students.

The Company is developing the infrastructure facilities for creating an enabling environment for the students. A separate cleaning area for utensils used in mid-day meals has been constructed in schools leading to the mid-day meal workers in schools winding their work faster. Additionally, the drinking water tanks now cease to be plagued with leftovers from the meals. It has also led to a wider hygiene practice wherein more and more children have started to wash their hands before and after meals which came out in an impact assessment study conducted by the Company. Improvements in school infrastructure in terms of boundary walls and wider

classroom windows have led to an increase in attendance. Retention of girl students has specially gone up by the construction of the new toilet blocks.

Apart from improving the infrastructure, a MoU has been signed with the Government of Haryana with a holistic approach to improve the learning level among the students of 50 Government schools. This initiative includes training the teachers to use modern day teaching methods along with providing teaching learning material in schools for the students.

The company has installed 16 multi-media projectors in a total of 13 schools and a total of 37 supplementary teachers

### Support teachers provided in Government Schools with smart class



have been provided. To further encourage learning, institutionalised rewards and recognitions have been introduced with over 700 academic excellence awards having been distributed so far. These awards were given to the meritorious students of class X and XII in supported schools. Scholarships have been organised for students who want to pursue studies in engineering, diplomas and for those who want to join the ITIs. A total of 158 scholarships were distributed in the year 2015-2016.

Classes in the Government schools affected by Maruti Suzuki's programme ceased to be unattended with the help of the supplementary teachers. Prior to that, teachers would be absent for months, a phenomenon that affected the completion of syllabus and exam results. The supplementary teachers not only keep the classes running but have also improved the students' results in Mathematics, Science and English. Students' attendance

is seen to have improved as infrastructural improvements have gone hand in hand with learning improvisations. Classrooms, in these schools in the rural areas, are not boring centres for rote learning but spaces where students learn to interact with their immediate social surroundings. The learning standards have improved as a result of better methods of teachings.

Throughout Maruti Suzuki's initiatives in Corporate Social Responsibility, the employees of the company have been actively involved as volunteers. In the last year, the employees in different engagements for social benefits invested more than 15,000 hours. This venture has bloomed into a two way process with the employees having a deep sense of satisfaction while giving to the people in terms of the knowledge that they have acquired over the years. The employee turned volunteers understand that a simple

action from their side can help change or save a person's life. Additionally, Maruti Suzuki makes no discrimination in the employees' portfolios and everyone participates in the volunteer programmes equally.

Two years back when Government brought social giving by large-scale corporates into law, it was clear that these companies could do much more for the society by sharing a simple 2% of their profit. As per the Annual Sustainability Report, Maruti Suzuki has made substantial developments in and around the rural areas of Gurgaon, Manesar, Rohtak in Haryana and Hansalpur in Gujarat. Students of Government schools seem to have been benefitting greatly from the facilities provided to them by the company over the years. A foundation has thus been laid in the success that can be achieved if corporates regularly join hands with non-profit organisations on a regular basis.

Support provided for 47 Government schools





ISTOCK PHOTOS

# A sniff to save

It can detect a person buried under six metres of snow. **PERVEZ CAMA**, who travelled to the Swiss Alps, traces the history of St Bernard, a dog groomed to rescue travellers, and now part of popular culture

Aptly called babysitters, St Bernards are gentle and friendly



**WAS** on an unusual mission in the snowy landscape of the Swiss Alps: to discover the history and antecedence of one of the world's most popular dogs, the St Bernard. When we began our ascent, we were enchanted by the quintessential Swiss alpine scenery with its precipitous and thickly wooded hills, massive vertical rock faces and pretty, flower-decked wooden cottages. However, this was a difficult journey in inhospitable environs.

The final stretch of the road up the mountain was long, circuitous and seemingly endless. Every turn revealed a desolate landscape dominated by rocky terrain and boulders. All around, the characteristic jagged peaks of the lofty Swiss Alps kissed the sky. It looked daunting even from the comfortable ambience of our vehicle. Centuries ago, during winter, it would have been forbidding for a traveller to negotiate this treacherous mountain road from Martigny in Switzerland to Aosta in Italy.

The road finally opened out and a simple signboard announced that we had reached our destination—the Col du Grand St Bernard, a pass a height of about 2,470 metres. This is the oldest pass in the western Alps, and importantly, this is also the location of an ancient monastery on the border of the two countries—Switzerland and Italy—where monks live their pious lives. Ahead lies a lake, bordered by sheer stony walls that culminate in a line of intimidating tooth-like peaks, and beyond which, the road traverses the equally intimidating slopes that descend into Italy.

In 57 BC, Julius Caesar was looking for

a shorter route from Gaul to Italy, and Caesar's son, Augustus, ultimately proved triumphant over the belligerent Gallic tribes occupying the pass, crowning his victory by building a colony on the Italian side, called Aosta in his honour. A plaque announces that Napoleon and his army had marched through this road in 1800, en-route to Italy. A large statue of St Bernard of Menthon, the patron saint of the Alps, watches over this bleak landscape. He founded this monastery in 1049.

Such inhospitable surroundings naturally promoted austere living and spiritual leanings amongst his monastic order, and there were God's subjects to be cared for as the harsh winter conditions caused many travelers to flounder and lose their lives with nine metres of deep snow and temperatures of  $-30^{\circ}\text{C}$ . To assist in rescuing and guiding people through dangerous snowstorms, the monks developed a special breed of dog, known today to the world as the St Bernard.

## Intelligent guardians

The earliest record of this breed being used at the monastery dates back to paintings drawn in 1690. The heroic dogs proved their mettle for about 200 years by helping the monks to save nearly 2,000 people exhausted and stranded in the mountain snows, right up to the 19th century. It is said that they could detect a person buried under six metres of snow.

Their massive and strong bodies could bulldoze a path through the snow, their huge paws helped in digging deep and their keen senses led people to safety. The last documented rescue occurred in 1955. A legendary dog, Barry, is estimated to have saved more than 40 lives, and his embalmed body is still preserved in the National History Museum of Bern, Switzerland.

But many dogs lost their lives due to avalanches. Incredibly, as the story goes, the younger dogs received little training from the monks and mostly learnt their search and rescue duties by accompanying the older dogs. Popular legend portrays the St Bernard going to the rescue missions with a barrel of brandy around its neck. But that is a fallacy as the monks used to actually strap packs of food and water around its back to revive

The statue of St Bernard, the patron saint of the Alps, watches over this bleak landscape



The dogs have evolved into their present form after being crossed with several breeds; (Below) Estimated to have saved more than 40 lives, Barry's body is embalmed and preserved at the National History Museum of Bern, Switzerland



COURTESY: DUBIOUSHAUSFRAU.COM

travellers smothered beneath the snow.

Reigning as the national dog of Switzerland, the St Bernard dog is believed to have a common ancestor in the Alpine Mastiff, along with the English Mastiff and the Swiss Mountain Dog, a big breed raised by farmers and the pastoral community in Switzerland. The dogs themselves have evolved over the years into their present form after being crossed with several other large molosser type breeds and are related to the mastiff group of dogs. Terrible winter avalanches in the early 1800s obliterated many fine dogs in the line of rescue duty, and the remnants were mated with the New-

foundland dogs, which led to the development of heavy fur.


### Majestic beings

Old portraits reveal that the old working rescue dogs of the hospice looked different and had a smaller size than the current giant dogs, which are the result of breeding designed to enhance the breed's majestic appearance and attractiveness. Their current dimensions are big and may range upwards of 70 cm in height and between 65 and 140 kg in weight. Modern day St Bernards can be both long and short haired and are popular worldwide because they are family dogs.

Aptly nick named "babysitters", they are eager to look after people, especially children, in their homes. They are gentle and friendly, and have been captured in various movies such as *Beethoven* and its sequels. The dogs require constant grooming and large spaces, and are known to harbour eye, bone and heart ailments that can run up steep medical bills.

Some monks still reside at the monastery, while others visit it as a spiritual retreat. However, modern transport and a tunnel constructed below the mountain in 1964 made the dogs redundant. So the Barry Foundation in Switzerland purchased the dogs from the monks and established breeding kennels in 2004. The dogs are taken out by their handlers to interact with people and their sociable nature ensures much cuddling and thrills tourists.

But the dogs no longer patrol the frigid paths in the icy temperatures of winter for they are shifted to the ancient Roman town of Martigny during these months. During summer, the lonely crags resonate with the deep throated calls of the giant St Bernards. It was the pass that created the dogs, and today, they have saved the pass from fading into the shadows of history. Their legend still endures. ■

*The author writes on travel and wildlife*  
 @down2earthindia



गेल (इंडिया) लिमिटेड

भारत की  
**नं.1**  
प्राकृतिक  
**गैस**  
कम्पनी



## प्रदूषण मिटाएँ

इससे पहले कि वह मिटा दे हमारा  
**भविष्य**

भारत में हर साल वायु प्रदूषण के कारण  
**14,00,000** अकाल मृत्यु हो जाती हैं।  
ईंधन के तौर पर प्राकृतिक गैस को अपना कर  
इस समस्या का समाधान करने में सहयोग दें।  
आने वाली पीढ़ियों का भविष्य सुरक्षित करें।

## # हवा बदलो

प्राकृतिक गैस अपनाएँ



स्रोत: इंस्टिट्यूट फॉर हेल्थ मेट्रिक्स एंड इवैल्युएशन (आईएचएमई), यूनिवर्सिटी ऑफ वॉशिंगटन

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# Chimeras of afterlife

A growing number of the elite are freezing their bodies in the hope for a rebirth. Is it possible?

**I**N A historic and unusual verdict last month, a high court in London granted a terminally ill teenage girl her wish to be frozen post-mortem in the hope that medical advances might revive her in the future. The girl had petitioned the court, as her estranged father was opposed to the idea. The court gave the mother the final say in deference to the teenager's wishes.

The girl's dead body was immediately shipped to the US and frozen at the Cryonics Institute in Detroit, one of only four places in the world that offer to cryopreserve the dead—three are in the US and one in Russia. Since 1967, when the first person was pickled in liquid nitrogen, 250 futurists have been frozen, while about 1,500 are in the queue.

While some might sympathise with the girl's decision to be mummified, what are the odds that a frozen body, especially the brain—bodies are hung upside down so that the brain is affected the last should the nitrogen oxygen leak—could be defrosted and revived without damaging the structural integrity of the neurons?

Cryogenics or preservation of body parts in extremely low temperatures is neither new nor controversial. Eggs, sperms and embryos are now routinely frozen and thawed for infertility treatments. This is possible, thanks to a technology called vitrification that allows cells to be frozen without damaging them with the help of some anti-freeze materials.

However, making it work for whole bodies or even brains is a fantasy that many believe is very unlikely to come true.

Nevertheless, the proponents of cryonics believe that one day it might be possible, with techniques of molecular nanotechnology, to revive frozen zombies by decoding and reconstructing the complex network of neurons and their interactions that determine an individual's persona—her thoughts, memories and desires. In fact, American inventor and futurist Ray Kurzweil has stuck his neck out by claiming that scientists would be able to simulate a person's mind and download into a computer by 2030.

For some, even this claim would be fantastically ri-

diculous if it were not fraudulent too. In a 2015 article, "The False Science of Cryonics" published in the *MIT Technology Review*, neuroscientist Michael Hendricks of McGill University, who works on less evolved species like the microscopic roundworm *Caenorhabditis elegans*, argues that despite the fact that we know all of its genes (about 1,000) and have mapped its 302 neurons, we still can't "simulate the mind of this worm." Incidentally, the human brain is an orchestra of 100 billion neurons! "The technology to do so, let alone the ability to read this information back out of such a specimen, does not yet exist even in principle. It is this purposeful conflation of what is *theoretically conceivable* with what is *ever practically possible* that exploits people's vulnerability," he writes.

Even if it were to become possible to simulate/download the mind, will it be really you? Assuming that the subjective "I" is a gestalt of the innumerable interactions between the neurons, would it remain the same "I" in a time and space removed many times over? Thinkers of Hendricks' persuasion believe that it is counterintuitive, and hence, unlikely that it would be "you" who would come back to life.

Besides, cryonics also raises a host of moral, philosophical, and, not to say, financial dilemmas. The girl's father, who has condemned cryonics for "selling false hope," was worried about her feeling totally disoriented in a future sans anyone whom she may have known. In a similar vein,

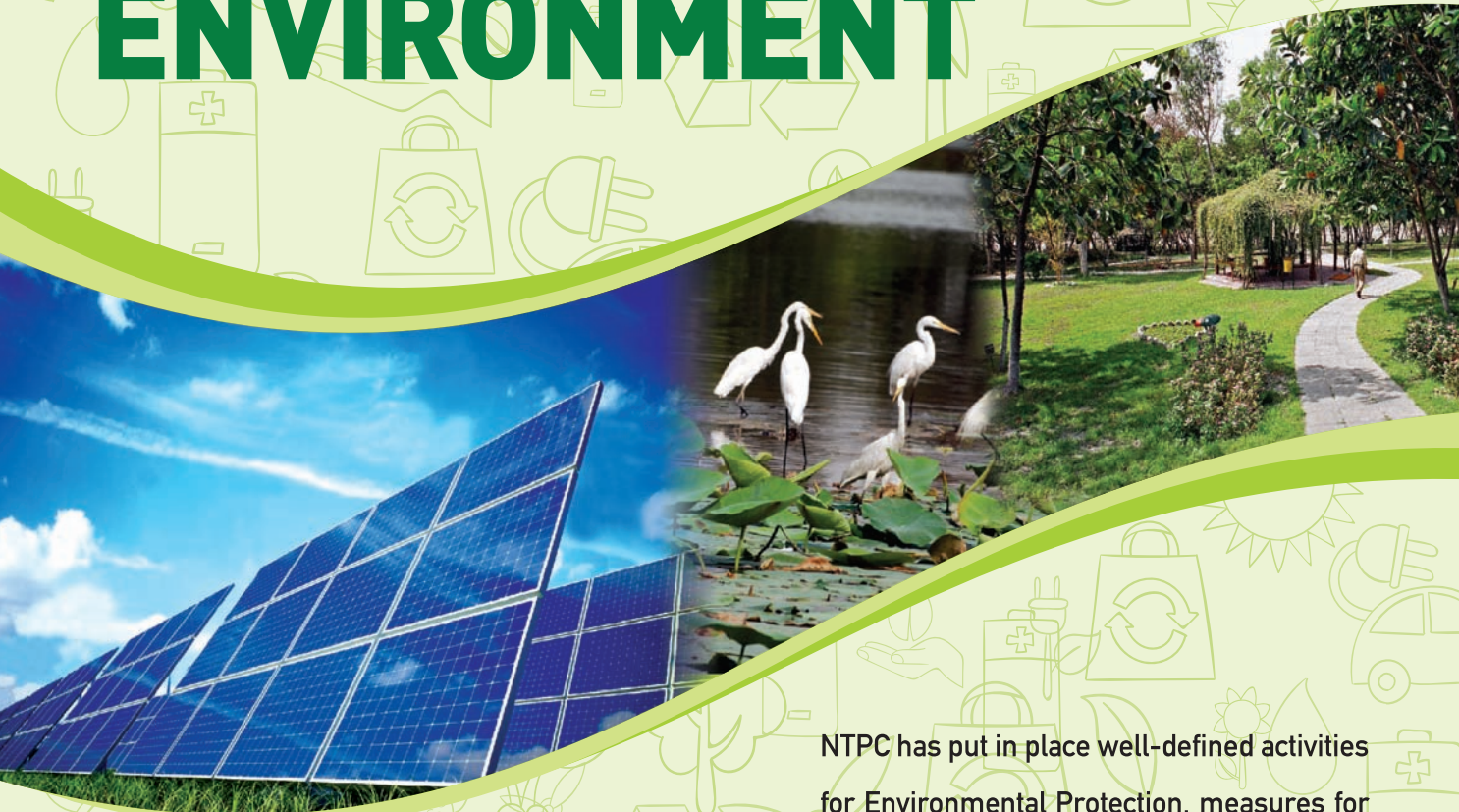
James Hughes, head of the Connecticut-based Institute for Ethics and Emerging Technologies, backs cryonics yet will not sign up for it as, to quote him, "I value my relationship with my wife."

Money matters too. It cost the girl's mother about 40,000 pounds, which she reportedly rustled together by selling off property, to have her frozen. Clearly, cryonics, like immortality, is a fantasy entertained by the elite for only for they can afford the luxury of longing for another life. For others, it doesn't make sense to gamble modest earnings on Pascal's wager. They would be better off spending it on making the present joyous and beautiful. ■



TARIQUE AZIZ / CSE

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# Leafy saga

Of the 106 species of leafy vegetables consumed in southern Odisha, 78 are wild species—each with a distinct taste and medicinal property

SNIGDHA DAS

**A**S WINTER sets in, the fragrance of leafy greens fills the kitchens across Odisha. This is the time when nature is bounteous, and a variety of potherbs can be found growing in kitchen gardens, roadsides, grazing fields, undergrowths in forests, along water bodies... almost everywhere. The leaves are no longer spoiled by moisture or infested with germs and worms. And *saaga bhajaa* (cooked green leaves) becomes a regular feature on the menu of Odias.

People in Odisha typically relish a wide variety of potherbs, both domesticated and wild. While they have a cultural significance—*saaga bhajaa* is an integral part of the platter offered to deities during festivals—they play an important role in the food and nutritional security of those living in rural and tribal areas.

SRIKANT CHAUDHARY / CSE



The *Ambiliti saaga* has a sour taste and can help relieve scurvy and skin disorders

## Abundant cures

“Leafy vegetables are considered primary food class because they are photosynthetic tissues with high levels of vitamin K and food value in comparison to other fruits and vegetables,” says an ethnobotanical study conducted in the southern districts of the state by the Berhampur University.

Besides, these greens are inexpensive. Of the 106 species of leafy vegetables consumed in southern Odisha, 78 are wild species—people simply collect these greens when they are grazing animals, gathering fuel and fodder or fetching water. Fifteen of the species are wild as well as domesticated and 13 are under cultivation, notes the study published in the *International Journal of Agricultural and Food Science*.

These greens not only make a quick meal after a hard day's work—*saaga bhajaa* is prepared by simply stir-frying the greens and is best enjoyed with rice, especially *pakhala bhaata* (rice soaked in water overnight)—they bring variety to the menu. While some greens are crunchy, others are smooth in texture. Then there are greens that are sour and some that taste bitter. Most people in rural and tribal areas are aware of their therapeutic values.

Take, for instance, the red hogweed or *Boerhavia diffusa*, which grows during the monsoon and post-monsoon period. It is said to cure asthma and cough, says the Berhampur ethnobotanical study. The Central Council of Research for Homeopathy underscores this folk knowledge, and says that the juice extracted from its roots can help cure urinary disorders, leukorrhoea, rheumatism and encephalitis.

Sessile joyweed or *Alternanthera sessilis* is another weed that is known to help increase the flow of bile in the intestine and stimulate lactation. The International Union for Conservation of Nature (IUCN) says it can be used to treat diarrhoea, dysentery,

**Unfortunately, high-yielding greens such as spinach, lettuce and fenugreek are fast replacing invaluable wild greens**

fever and inflammation of the intestines. Then there is *Commelina benghalensis* (Bengal dayflower or *kaniseera*), a tiny plant with beautiful purple flower that can easily be spotted across paddy fields. Ethnobotanical studies show that the weed, *kaniseera*, helps alleviate constipation and rheumatic pain. The Kani tribal community of the Western Ghats uses its leaves, latex and the powder of roots to treat leprosy, says an ethnobotanical survey published in the *Global Journal of Pharmacology* in 2015.

The plant is also effective against several bacteria, including those that cause typhoid and dysentery, because it contains high levels of antioxidants, lutein and beta-carotene, says a study published in *Der Pharmacia Sinica* in 2011.

Those looking for a change in taste can go for the three-foliolate creeper which has delicate yellow flowers. Called *Oxalis corniculata* or creeping wood sorrel, this plant is sour in taste (see ‘Ambiliti saaga’). It has all the essential nutrients required for good health. Being high in vitamin C and potassium, it helps relieve scurvy and skin disorders. A review published in the *International Journal of Pharmaceutical Sciences and Research* in 2015 says the plant is rich in carbohydrates, crude protein and crude lipid, and can be used as an alternative vegetable during an emergency.

Water clover or *Marsilea minuta* is a similar looking four-foliolate plant, but thrives in an entirely different ecosystem. This fern grows abundantly in shallow pools, along rivers, canals and ditches and in paddy fields. One can occasionally find the fronds, called *sunsunia* in Odia, being sold in village markets. It is said to be rich in protein and minerals.

Unfortunately, high-yielding greens such as spinach, lettuce, fenugreek and *amaranth* are fast replacing these invaluable wild greens. This not only limits our food basket of leafy vegetables, but we could lose the traditional medicinal knowledge associated with each of the greens forever.

These wild leafy vegetables can strengthen our nutritional and food security, and provide important cues for developing policies on sustainable utilisation of natu-

## RECIPE

### Ambiliti saaga

#### INGREDIENTS

1 bowl of creeping wood sorrel  
2-3 garlic pods  
2-3 green chilies  
Salt to taste  
Mustard oil for seasoning  
Banana/sal leaf for roasting

#### METHOD

Wash the fronds and shoots thoroughly; drain the water. Wrap the greens along with chopped garlic and chilies in a banana or sal leaf and tie it up with a thread. Place the sealed greens in an oven or on a charcoal grill for less than five minutes. The leaves will char into a smoky brown colour. Take out the steamed greens, add salt and mustard oil, and mix well. Serve hot with rice. Most people enjoy the dish with *pakhala bhaata* (rice soaked in water overnight).

If you do not have the means to roast the greens, simply place the ingredients in a wok and cook over a low flame with the lid covered. The moisture-laden fronds will release water, helping the greens to get steamed. Switch off the burner after five minutes. Add salt and mustard oil to the cooked greens. Mix well.

ral resources for human sustenance, say botanists from Chandbali College in Bhadrak and S N College in Kendrapara, who have documented the ethnobotanical knowledge associated with leafy vegetables consumed in Bhadrak district.

Their study, published in *Scientia Agriculturae* in September 2015, reveals that these wild greens are also being threatened by several anthropogenic and natural causes such as land-use changes, habitat destruction, unscientific harvesting, overgrazing and invasive species.

Commercial cultivation of these wild greens will not only help improve the economic and nutritional condition of people, but also help in conserving biodiversity. ■

 @down2earthindia

**PATENTLY ABSURD** LATHA JISHNU

# Hallelujah to the songwriter's rights

Leonard Cohen may not have cared for the loss of a copyright, but in India the rights of lyricists are still under attack

Leonard Cohen (RIP) has faded into the night leaving behind enduring songs and indelible memories of the drug-laced beatnik era of the 1960s. Some of those numbers have become ingrained in the collective memory of generations who were captivated by the lyrical charm of the verses spun out by the Canadian poet, novelist and songwriter. His most remembered numbers were made iconic over the years by other singers as Cohen himself, who started singing in his thirties, and was a mediocre performer initially; his baritone would take a while to be fine-tuned before he gave us the haunting renditions of "Suzanne" and "Hallelujah" among others.

Suzanne captures the bohemian mood of the 1960s wondrously well but its interest for readers of this column lies elsewhere. Published as a poem in 1966, it was recorded by singer and social activist Judy Collins the same

year, while Cohen made it his debut single in a 1967 album "Songs of Leonard Cohen". It is listed as one of the top songs of the 1960s and is one of the most-covered songs in his catalogue. However, in the following decades, Cohen always prefaced his performance of Suzanne with a story that won him tremendous applause.

Here is what he would say: "I feel very good about this song. It is a song that people loved. Fortunately, the rights of that were stolen from me...I thought it was perfectly justified. It would be wrong for me to write this song and get rich from it too. So I'm happy for that friend who put that piece of paper in front of me and said: "Sign this". And I asked: "What is this"? He said: "Just a standard writers' contract". So I signed it, and it was gone!"

The copyright was taken away not by the usual suspects, the recording companies, but by his arranger who convinced Cohen that it was "necessary" to temporarily relinquish his rights to the song. The story took an unexpected turn after a contrite Jeff Chase, who had con-

vinced Cohen to sign, met him in 1984 and offered to make amends. Three years later, the copyright reverted to Cohen.

Making money from his other much-loved songs does not appear to have troubled Cohen unduly. Hallelujah, his signature song, turned out to be a blockbuster although Cohen's own version was not an immediate success. One of the most popular covers ever, Hallelujah hit the big time in 1991 after John Cale used it on a Cohen tribute album. This, in turn, inspired the biggest hit of them all by Jeff Buckley whose album has sold more than five million copies. All this kept the royalties rolling in as more than 300 artists released covers of Hallelujah including Bob Dylan, Neil Diamond and just about everyone else.

Copyright battles between songwriters and record labels, on the other hand, seldom have a happy ending. That's

why globally it's always been a struggle for singers and lyricists to wrest royalties from music giants for their own works. In India, it took the determined efforts of lyricist Javed Akhtar, when he was a nominated member of the Rajya Sabha, to bring about a change in the law to benefit performers. The 2012 amendment to the Copyright Act allows them to claim royalty for their works which were earlier cornered by producers. The Act declares authors owners of the copyright, which cannot be assigned to producers.

And yet, producers are still fighting over the law's wording. Arguing that the amendment bestows an independent copyright on the producer of the sound recording, they have just won their case in the Supreme Court. Their claim: once the author of a literary work or composer of musical work authorises a film producer, or producer of a sound recording of his work, he parts with the copyright. This, surprisingly, has been upheld by the apex court. ■



TARIQUE AZIZ / CSE





# The moral treadmill

Is an individual solely responsible for his/her wellness?

PRIYA TALWAR



.....  
**THE WELLNESS SYNDROME**  
 Carl Cederström and André Spicer  
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**I**T MAY be common to prohibit people from smoking in public places, but how bizarre would it be to ban smokers from applying for jobs? That was the news some years ago when several healthcare institutions in the US disqualified smokers who applied for jobs. The logic: your mind and body are economic resources, and if you take care of them, you are a good worker. And if you fail to conform to this idea, then you are simply weak-willed.

In a capitalist economy, there is more to this bizarre moral command. Employees who are smokers potentially cost more to the employer—not because they would suffer from diseases, but because it would be cheaper not to hire them and provide health insurance. This invasive command to be always healthy, happy and successful is called the wellness command, something you should be wary of, say academicians and authors, Carl Cederström and André Spicer in *The Wellness Syndrome*.

## Ideology sans logic

They say there is nothing wrong in being healthy, but when wellness becomes an ideology, the failure to conform becomes a stigma. Not just health, but happiness, success, mindfulness are all capitalist ideologies to which we may be succumbing to at the cost of edging out the world. With an idea as definitive as that, the authors show how everyday life could throw up peculiar situations.

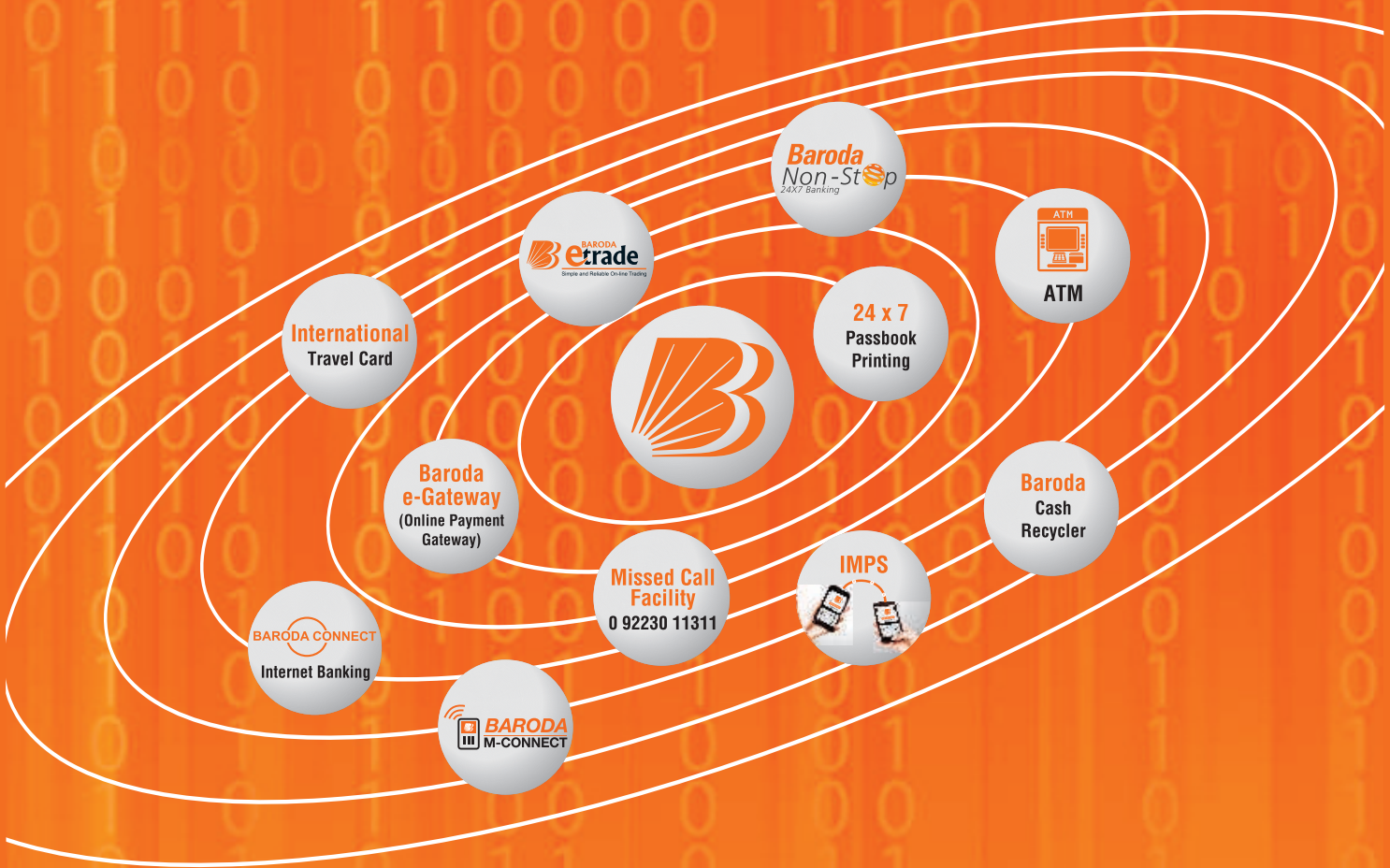
Take, for example, the mind-body approach to health. The idea that physical illnesses are caused by what's troubling your mind



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## EXCERPT

**TODAY**, wellness has become a moral demand—about which we are contently and tirelessly reminded. To be a good person, as Herve Juvin reminds us in the epigraph, is to constantly find new sources of pleasure. It means turning life into an exercise in wellness optimization. At work, we are kindly offered a place on ‘wellbeing programmes’. As consumers, we are required to curate a lifestyle aimed at maximizing our wellbeing.

When we engage in boring activities, such as washing up at home, we should think of them as improving our mindfulness. Even baking a loaf of bread is now recast as a way of nurturing our wellbeing.

In other words, wellness has wormed itself into every aspect of our lives. A few decades back wellness was the preserve of small groups of alternative lifestyles. Today, wellness has gone mainstream.

It dictates the way we work and live, how we study, and how we have sex. We find it even in the most unexpected places, such as the Ashland Federal Correctional Institution, Kentucky, where prisoners undergo wellness programmes, and learn about nutrition, exercise and how to deal with stress.

Our concern in the book is not with wellness *per se*. Our concern is how wellness has become an ideology. As such, it

offers a package of ideas and beliefs which people may find seductive and desirable, although, for the most part, these ideas appear as natural or even inevitable. The ideological element is particularly visible when considering the prevailing attitudes towards those who fail to look after their bodies. These people are demonized as lay, feeble or weak willed.

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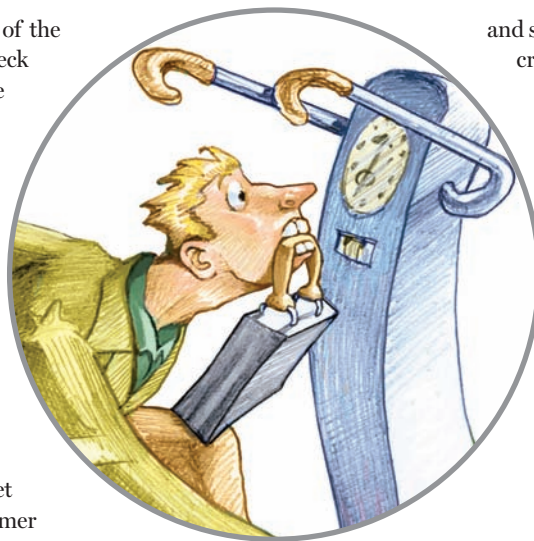
indicates that you must take charge of the cause of the illness. Your inability to check or take charge means you are responsible for your condition. So by putting the onus on the individual—placed at the centre of modern living—the wellness command depoliticises the issue at hand and discredits the economic causes. So the choice is solely yours. If you fall ill, you are solely responsible; when you are sacked or are unable to find a job, you are at fault, not the economy, which has failed to generate employment for everyone.

For instance, the authors interpret the happiness index announced by former British Prime Minister David Cameron in November 2010, as a “cheap compensation for a weakened welfare state”. Cameron emphasised that though he hadn’t forgotten to improve the economy, “prosperity”, he believed, “alone can’t deliver a better life”. The irony is that this index was announced close to the time when students and labour unions were protesting against his austerity measures.

In the US, what was an alternative lifestyle trend a few decades ago, has become the mainstream ideology. Half of US employers today provide wellness programmes to their employees. However, they resulted only in minor health improvements.

### Pushing insecurities

The central critique the authors offer is this: “The wellness command essentially pushes the structural insecurities of the modern economy back onto the individual.” From management science, popular psychology to human relations and the happiness



and success industry, the command pervades critical aspects of our life. The more you chase it, guilt and anxiety will be the symptoms you are likely to suffer. So the next time you are on a diet, check whether you can completely evade guilt. And if you hire a life coach, see whether you were made to feel that the only real barrier to getting what you want is you, and not external factors. The solution, the authors suggest, is to stop being obsessive about your health and happiness, forget that you have “unlimited potential”, and instead, act upon the world and make it a better place.

But should the alternative to realising your potential be to *change* the world? Who is to say that what is “excessive enjoyment” and what are “moderate pleasures”? Who decides that and how? The authors are mum on this, just like they deny any voice to those individuals who consciously practise any command of wellness—be it mindfulness over traditional methods of cognitive therapy, life coaching, treadmill desk, or the walking meeting.

Not only is their solution moralistic, extremist, but also reductive. Why should the wellness command be an alternative to “thinking soberly about the world, acting in it or transforming it”? Can’t the wellness command be checked and appreciated through people who achieve a balance?

For today’s “anxious” individual, who has no “Gods to look up to” like the Greeks (read institutions), no “public sphere” (read community living) and an unstable economy, it seems that to equip oneself with soft shoes is more reasonable than carpeting the entire earth. ■

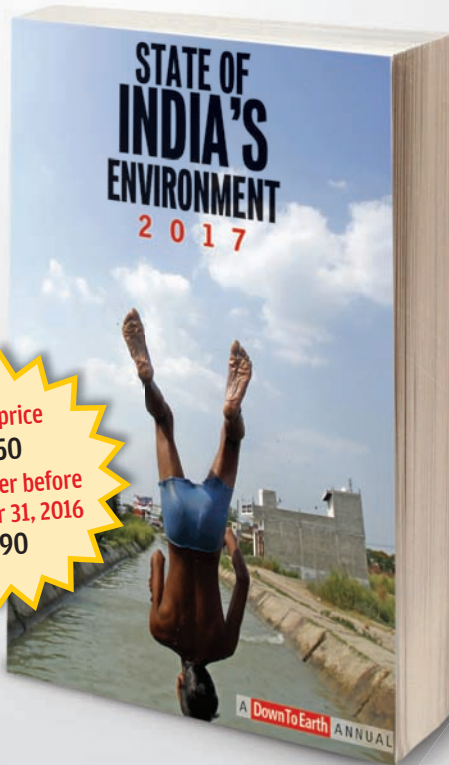
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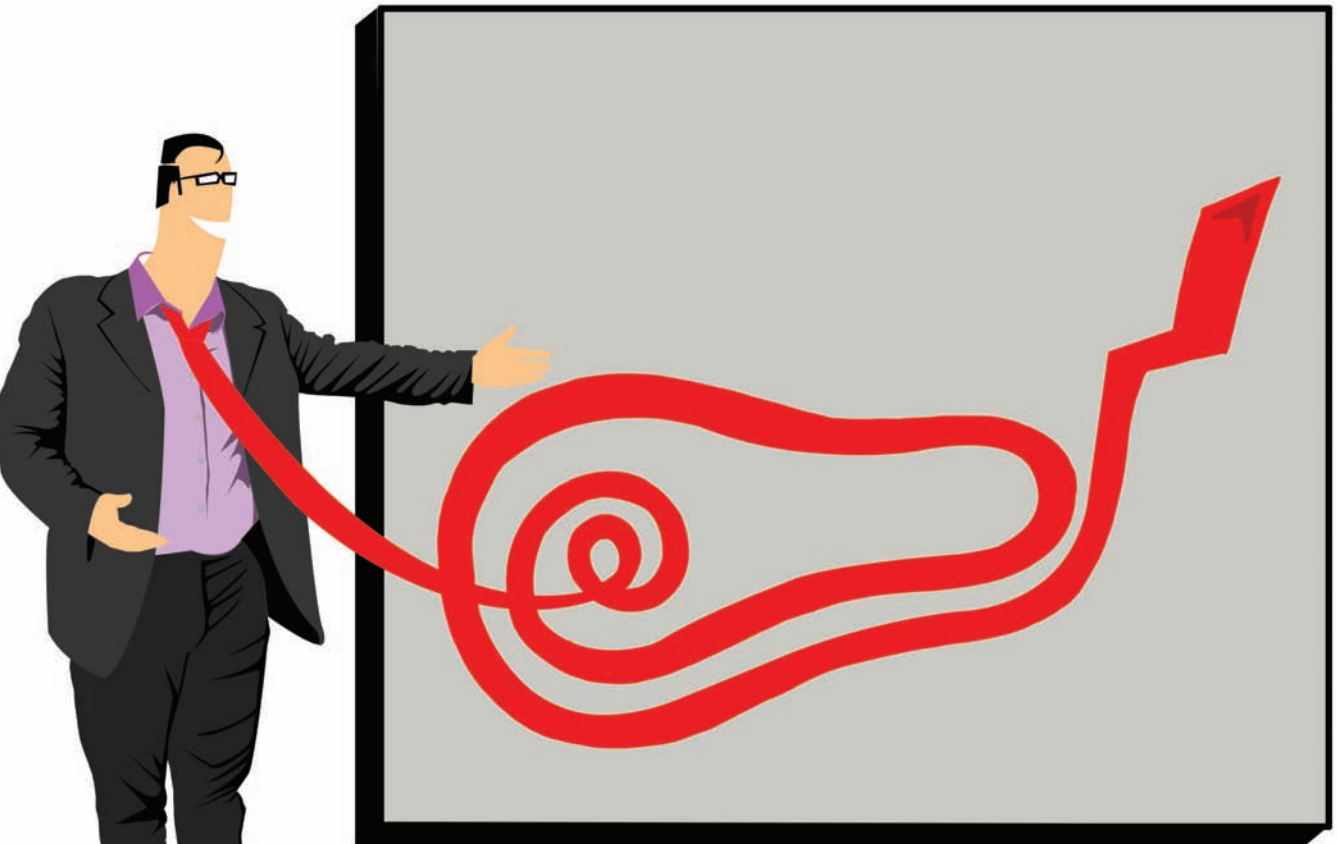
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SORIT / CSE

# TYING UP WITH SANITATION ECOSYSTEMS

It is imperative to reimagine the role of the corporate beyond funding and infrastructure creation to achieve a sustainable sanitation ecosystem

**NAINA LAL KIDWAI**

**T**ODAY, THERE is an unprecedented buzz and energy around which corporates have been called to action in the sanitation sector. The Swachh Bharat Mission (SBM) has provided India Inc with an opportunity to spend on a specific cause with high visibility. It therefore comes as no surprise that today many corporates are responding enthusiastically to this call to action, with a majority leveraging Section 135 of the Companies Act, 2013. However, corporates should not be mere funders, for we as a country, would lose out on an opportunity to leverage the value additions that this sector can offer, particularly in the realms of innovation in technology, project management and scalability.

It has become critical to reflect on the current trends around corporate engagement in the sector, the gaps in the sanitation ecosystem and the potential role that corporates can play. Ultimately, it is essential that we view the corporate not merely as a source of funding or for infrastructure creation, but as a partner in India's journey towards sustainable sanitation.

### Open challenge

Sanitation is one of India's greatest unmet challenges. Inadequate sanitation has dire consequences for public health, children's education and growth, women's safety and the fight against poverty.



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According to a report of the World Health Organization (WHO) and the United Nations Children's Fund (Unicef), over 50 per cent of India's population still defecates in the open. Further, many households remain unconnected to the sewage system, with over 0.13 million tonnes of human waste being generated every day, and this number is only going to increase.

Given that sanitation in the Indian context is multifaceted, layered in behavioural, social and cultural complexities, there is a wide disparity. While 85.9 per cent people in Odisha and 82.4 per cent in Bihar do not have access to toilets, a state like Sikkim was recently declared 100 per cent open defecation-free (ODF). With the mammoth task at hand, the government's target to make India ODF by 2019 necessitates the involvement and collaboration amongst multiple stakeholders, including the corporate sector.

In letter and spirit, it is important to acknowledge that the call to action to corporates, particularly from the government, envisages support beyond just the funding or construction of toilets. The recent guidelines of the Ministry of Drinking Water and Sanitation (MDWS) say: "The creativity and efficiency of the corporate sector, and their management and financial resources can help in achieving the vision of a Swachh Bharat." Thus, the modalities of this support may be in the form of financial assistance, by way of the Swachh Bharat Kosh, or getting involved through technical expertise, marketing excellence and outreach support.

The government would like corporates to engage through a constructive value-driven approach. Further, by using the mandate of the Companies Act, 2013, the government is looking for ways to bring about a more effective and efficient approach to achieve the goals of sanitation through convergence with corporate social responsibility (CSR).

With the aim to capture CSR trends in the sector, the India Sanitation Coalition (ISC) recently released a report, *CSR in WASH: What are India's top companies up to?*, anchored by Samhita Social Services, a partner of the coalition, analysing the top 100 companies with the largest CSR budgets. The report found that 90 per cent of the companies have at least one CSR programme in Water, Sanitation and Hygiene (WASH). However, the findings demonstrated that 75 per cent of the companies were supporting programmes related to infrastructure creation—construction of toilets and water facilities, with limited attention on behaviour change programmes. It was only a handful of companies that were engaging across the value chain of sanitation that includes all the components of Build, Use, Maintain and Treat (BUMT).

Some companies are also implementing operations and maintenance programmes. Additionally, it was also found that industries with a strategic interest—like Heavy Engineering & Manufacturing and fast moving consumer goods companies (FMCG)—were more

likely to support WASH programmes than other industries and that most of these WASH programmes were concentrated in rural areas. Also, while the call to action envisaged a role for corporates beyond funding and infrastructure creation, the data showed that a majority were inclined to stay only with funding, rather than drive the sanitation programme.

## Beyond compliance

To reimagine the corporate as a partner, it is important to first understand why many have fallen into this compliance, number-driven approach. The primary reason is that they have not been integrated into the broader sanitation ecosystem. Thus, many corporate-funded projects without the right partners and guidance run the risk of solely focusing on supply side targets.

Initially, the approach of the government led many corporates to view the SBM goals as a "toilet-building" programme. However, this number-driven and disconnected approach can be disruptive to the broader objective to end open defecation. Therefore, the lack of a supportive ecosystem remains a hindrance for corporates to move towards the role of a partner, even though some may be willing and able to do so.

Many development partners also conventionally follow certain partnership stereotypes seeing corporates as mere funding pipes for projects. To move forward, corporates must be integrated into the sanitation ecosystem to enable partnerships, knowledge sharing, capacity building initiatives and a platform for communication and exchange. This includes incorporating small and medium enterprises into the mix, and in turn, encouraging private-public partnership models that encourage innovation of affordable, yet aspirational products.

Entrepreneurship across the sanitation value chain will play a critical role in creating the service infrastructure for safe sanitation.

The opportunities for corporate engagement in the sector are vast. The required capital expenditure for the SBM programme alone is estimated to be ₹255,240 crore for rural and ₹131,137 crore for urban. However, we must now create a supportive and enabling ecosystem that can help sensitise corporates towards sanitation, facilitate impactful partnerships, and leverage their strengths. Even though sanitation may not be a corporate's business focus, providing support both through CSR funds and volunteering would go a long way in bringing about ODF.

Similarly, corporates already engaged in related sectors like education and health can also seamlessly move into the sanitation space with the right support. To achieve sustainable sanitation, it is imperative that we re-imagine the role of the corporate beyond funding and infrastructure creation, to that of a partner. Together, through collective efforts, we can achieve a clean India. ■

*(The author is chair of the India Sanitation Coalition)*

**Entrepreneurship across the sanitation value chain will play a critical role in converting those who defecate in the open to practice safe sanitation. Similarly, corporates already engaged in related sectors like education and health can also seamlessly move into the sanitation space with the right support**



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# TPP has been trumped

Donald Trump's first priority is to withdraw the US from the Pacific Rim mega trade pact—and that's good news

**T**HE TRANS PACIFIC Partnership (TPP) is dead in the water. It died effectively on November 11 when Republican and Democratic leaders in Congress categorically told the White House they would not advance it. For President Barack Obama, it was a major slap in the face as his ambitious plan to bind Asia and the Pacific in one of the biggest trade agreements unravelled. But for the rest of the world and specially for civil society movements in the 12 nations that comprise TPP, it was celebration time because of the receding threat of restrictive measures on a host of critical economic and social sectors that the mega trade agreement would have imposed.

And on November 21 came still sweeter news. President-elect Donald Trump made TPP's rollback a priority as he announced a series of measures that his administration would take in the first 100 days to "make America great". The first of these would be a note of intent to withdraw from the TPP agreement which he described as "a potential disaster for our country". He would instead "negotiate fair bilateral trade deals that bring jobs and industry back".

That is undoubtedly the final nail in TPP's coffin because the other countries are unlikely to find it worthwhile to push ahead with the deal without the US. As Japanese Prime Minister Shinzo Abe—who is among its fervent cheerleaders—admits, TPP would be "meaningless" minus the US. For the Obama administration, it is a humiliating defeat given that TPP was a top priority for it. Since TPP was signed in February 2016, the White House has been lobbying relentlessly for it, with Obama even making it part of Hillary Clinton's campaign.

The sigh of relief which was palpable after the setback in Congress should have turned into a loud cheer after Trump's promise that was carried in a brief clip

posted on YouTube. Why we did not hear those shouts of approval is that most liberals do not like the incoming president and his agenda—and admittedly for perfectly valid reasons. Yet, for another lot of liberals who look at Trump from a global aspect, he spells hope, not least because he is anti-war. That he is against mega trade blocs, too, is another point in his favour.

Civil society movements across Asia, Latin America, Oceania, and North America that have come to fight TPP for over seven years, say the agreement would have "expanded corporate power to destroy peoples' livelihoods, undermine human rights and the environment, threaten financial stability, increase the cost of life-saving medicines and attack health and other pro-people safeguards".

The underlying reason is that TPP is not about free trade but the reverse: a sharp increase in protectionism by way of stronger and longer patent and copyright protection. This kind of protectionism, which strives to enforce standards higher than that required by WTO rules, is aimed at helping multinationals increase profits. This would be significant in the case of products such as medicines and software. The bigger threat from TPP is that it would have

become the blueprint for other such trade pacts. A dead giveaway is the following statistic: the gain for the US is just 0.23 per cent of GDP.

India is not likely to respond to the demise of TPP. For a country that was not part of the pact but was threatened by it, the relief is certainly immense. Although conclaves have been held on the impact of TPP on India's trade, there was little it could do to oppose it. The biggest worry was the impact it would have on the generic medicines industry and the undermining of public health. For the time though, the Modi government's cheers for Trump will have to be muted. ■





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