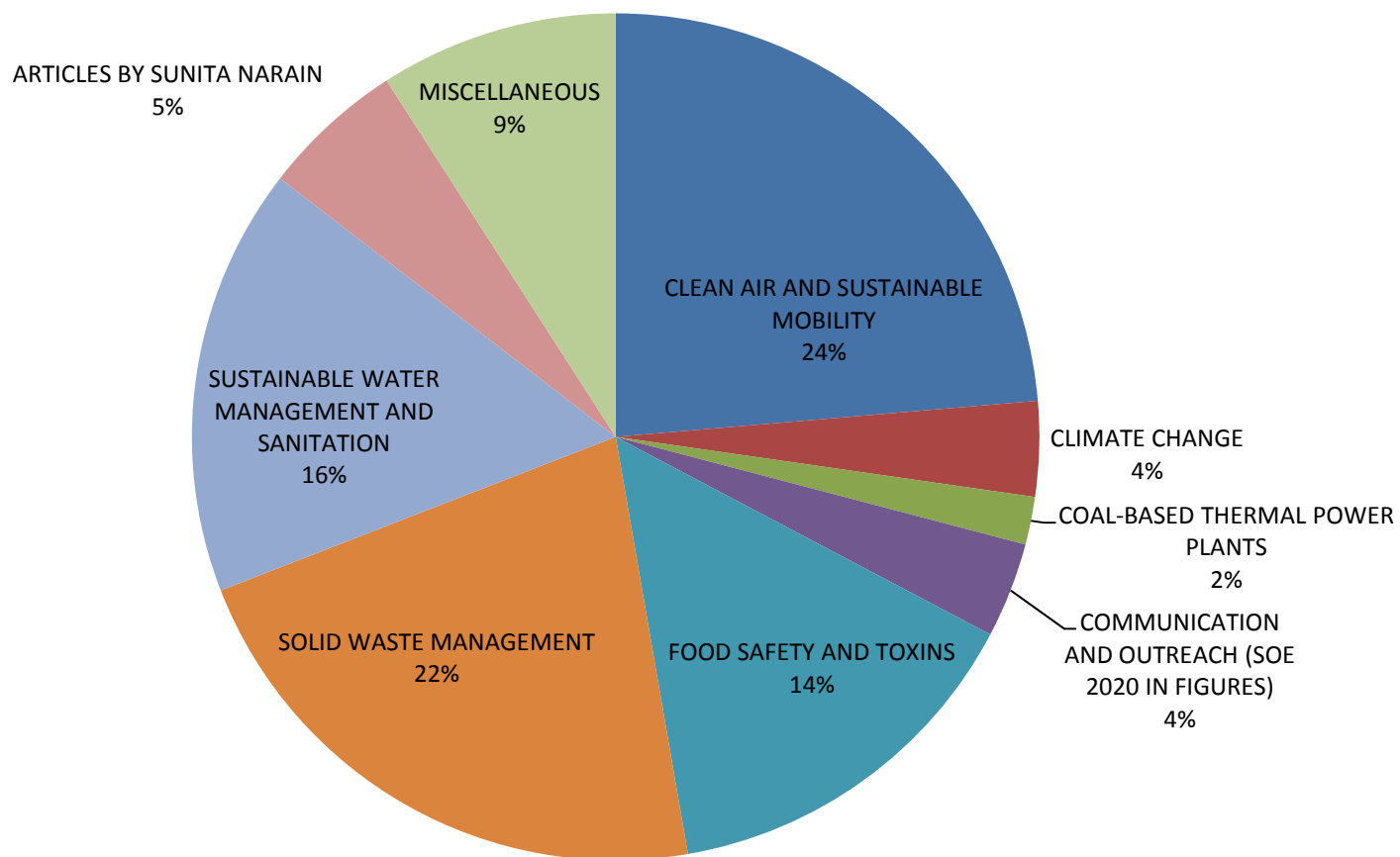




CSE In Media

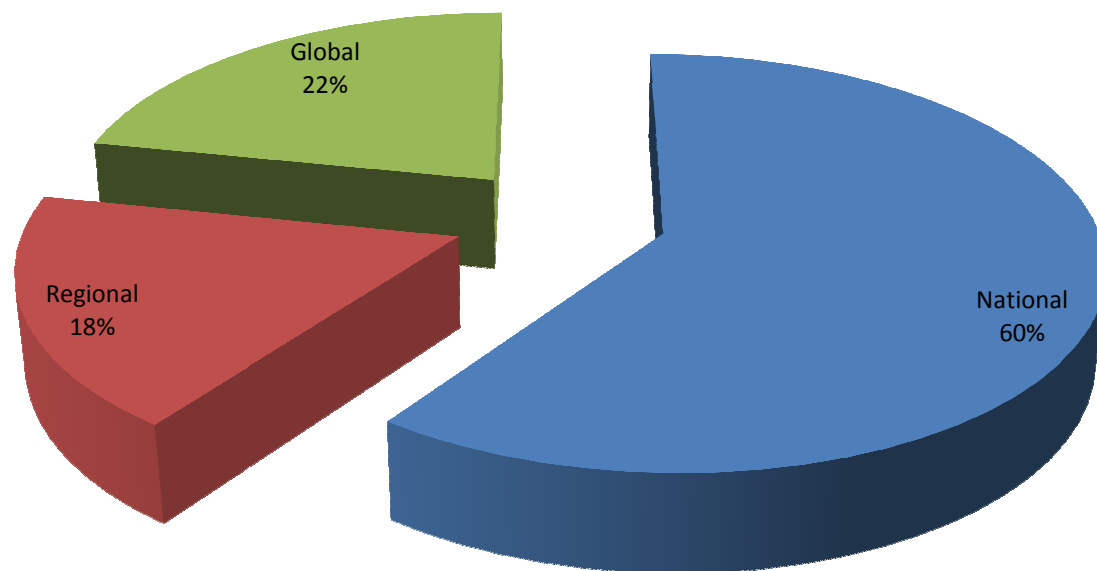
**a selection of press clippings
July 2020**

CSE Programmes and Publications in News, July 2020



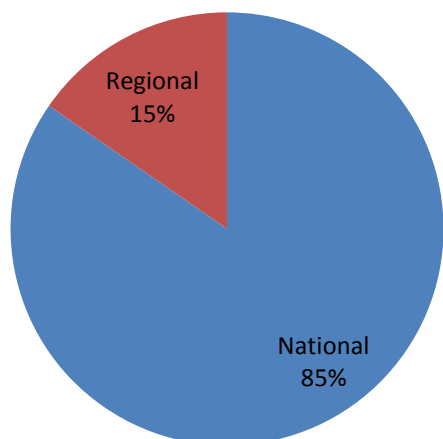
Total clippings = 55

CSE in News (overall): Region Wise July 2020

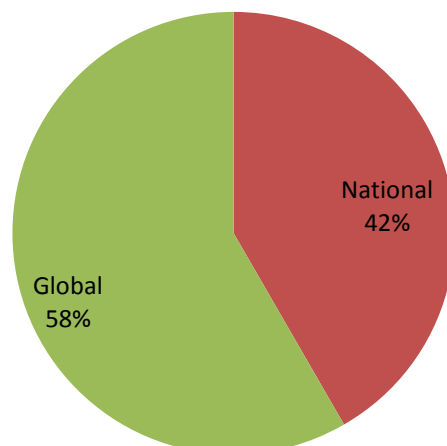


CSE PROGRAMMES AND PUBLICATIONS IN NEWS: ISSUE WISE

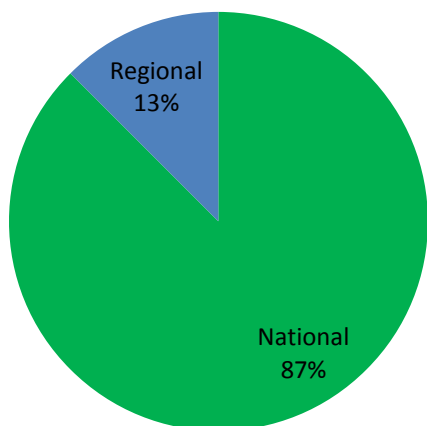
CLEAN AIR AND SUSTAINABLE MOBILITY



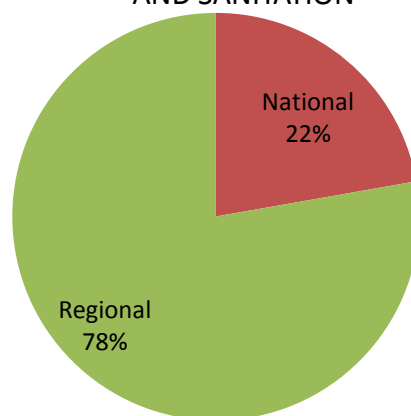
SOLID WASTE MANAGEMENT



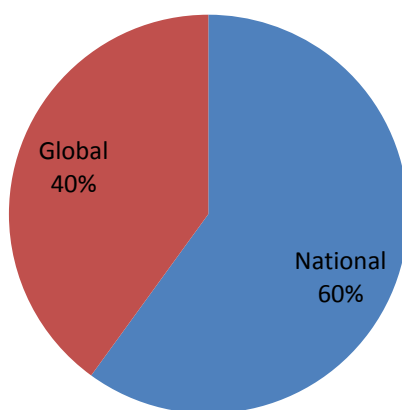
FOOD SAFETY AND TOXINS



SUSTAINABLE WATER MANAGEMENT AND SANITATION



MISCELLANEOUS



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Vehicle pollution level shot up by 539% in city: Study

Kochi: An analytical study by the centre of science and environment has found that Kochi has shown dramatical drop in air pollution levels during the lockdown period compared to other cities.

The report says that new analysis of summer air quality trends during the national lockdown that started on March 25, 2020, reveals a mixed trend in 22 mega and metropolitan cities in the country. While the PM2.5 and NO2 curves fell and flattened dramatically in cities — a phenomenon that hogged the national attention — tropospheric ozone pollution (henceforth ozone) increased and even breached standards in several cities: a fact that was not noticed as widely.

"As soon as lockdown 4.0 was declared with more relaxations, traffic returned on our roads. As a result, average NO2 levels increased rapidly from the cleanest lockdown phase. This increase was the highest in Kochi with 539%," said Anumita Roychowdhury, executive director-research and advocacy, CSE.

"We do not see much build-up of pollution in Kochi given its climatic conditions. More expansion in monitoring grid and data generation across the city will help provide better exposure levels. During lockdown we have seen dramatically lower levels in Kochi. But in terms of percentage increase in NO2 levels, this is the highest," Anumita said.

The other higher percentages were Chennai-77%, Noida- 66%, Jaipur- 43 %, Visakhapatnam- 89%, Pune-81%, Delhi- 49 %, Gurugram- 81%, Hyderabad- 45%, Bengaluru- 38%, and Ghaziabad- 49%. The reason for such high levels could also be the fact that Kochi is moving to a near normal traffic when compared to other cities.

Pointing out that ozone levels have gone up, CSE researchers said ozone is not directly emitted by any source but is formed by photochemical reactions between oxides of nitrogen (NOx) and other volatile organic compounds (VOCs) and gases in the air under the influence of sunlight and heat. Ozone can be controlled only if gases from all sources are controlled. "This pandemic-led change in air quality has helped us understand summer pollution. Normally, every year, winter pollution is what draws our attention. The characteristics of summer pollution are different: there are high winds, intermittent rains and thunderstorms, and high temperature and heat waves. This is in contrast to winter -- with its inversion, lower mixing height of air, and cold and calm conditions that trap the air and the pollutants in it," she said.

The most granular data (15-minute average) was sourced from the central pollution control board's (CPCB) official online portal, the central control room for air quality management - all India. This has analysed over 23 million data points recorded by 116 air quality monitoring stations or about 50% of the existing network under the continuous ambient air quality monitoring system (CAAQMS) of the CPCB.

All cities with three or more CAAQMS stations were included in this analysis to ensure geographical and demographical representations.

Data from state pollution control board showed that when lockdown restrictions were relaxed, air quality witnessed a gradual fall. Of the seven stations and three real-time ambient air quality monitoring stations, the levels were fairly high in MG Road and rising in Vyttila and Eloor. These are the three main stations where air pollution levels had shot up from May first week onwards.

Traffic in Delhi contributes to highest share of toxic VOC emissions

Traffic emissions and the burning of solid fuel contribute to the highest share (80%) of volatile organic compounds (VOCs) in Delhi's air, the national capital's first-ever analysis of such compounds has revealed. VOCs are gases emitted from certain solids and liquids, affecting local and regional air quality, human health and climate, both directly and indirectly. They are a group of pollutants that can cause a range of health issues, including injury to the central nervous system and even certain cancers, according to the US Environment Protection Agency.

A team of 14 researchers from the Indian Institute of Technology (IIT)-Kanpur, IIT-Delhi, Laboratory of Atmospheric Chemistry (LAC), Switzerland, Space and Atmospheric Sciences Division and the Geosciences Division (Ahmedabad) conducted the study of the source apportionment of VOCs in Delhi's air. They collected high-frequency data during January -March 2018.

They collected the samples at two locations—IIT-Delhi campus (an urban area surrounded by residential and commercial areas) and Manav Rachna International University (MRIU), Faridabad (a suburban site in a relatively open area and small parks in the vicinity).

The study is part of the Central Pollution Control Board's (CPCB) ongoing projects on real-time source apportionment of air pollution as well as the Department of Biotechnology's on the impact of air pollution on health.

"During the analysis, we observed a high concentration of VOCs and trace gases. We also saw strong day-night variations in the concentrations at the two sites. We identified six major contributing factors to VOCs at the sites, including two traffic-emission related factors, two solid-fuel combustion factors and two secondary factors," SN Tripathi, head, civil

engineering department, IIT-Kanpur, and one of the corresponding authors of the study, said.

At the urban site, traffic-related emissions contributed 56.6% to the total VOC concentration compared to 36.0% at the suburban site. The researchers found a higher concentration at the urban site, mainly because of heavy vehicular movement during the day and the plying of heavy-duty vehicles during the night as compared to the suburban site.

Solid fuel combustion contributed 27.5% to emissions at the urban IIT-D site, and 30.4% to the emissions at the suburban MRIU site.

"Emissions from the burning of solid fuels (such as wood, charcoal, coal, biomass, leaves and waste), particularly in the night, were identified as a significant source contributing to a high concentration of VOCs at both the sites," the study read.

According to the study, secondary factors were the most important source of VOCs during the daytime, accounting for 15.9% of the total VOC concentration at the urban site and 33.6% at the suburban site. At the suburban site, the factors were dominated by oxygenated VOCs such as benzene, toluene, xylene, which are mainly emitted from industries and the burning of biomass. These substances are carcinogenic and prolonged exposure to them can adversely impact human health.

"The study highlights the crucial role that anthropogenic sources (man-made emissions) play in pollution levels in Delhi. We urgently need measure to reduce such emissions from traffic exhaust and solid fuel combustion to mitigate the severe pollution and environmental impact of VOCs as well as aerosols in Delhi-NCR," Tripathi said.

Interventions such as transitioning to cleaner fuels and ultimately to electric vehicles are required to cut down on these emissions and improve the ambient air quality in the region, he added.

"It is crucial to study VOCs to get a complete picture of air pollution and its

sources. For instance, when Delhi switched to CNG (lesser polluting fuel) from diesel, it was thought that, for the time being, it would reduce pollution. But CNG emits more VOCs, and eventually, cities like Delhi will have to convert to cleaner fuels to actually control high levels of pollution,” Dilip Ganguly, associate professor, Centre for Atmospheric Sciences, IIT-Delhi, and one of the study’s corresponding authors, said.

An air quality analysis conducted by the Centre for Science and Environment (CSE) during January 1-May 31 this year also revealed high levels of ozone (a product of VOCs and NO₂) pollution in Delhi-NCR. The analysis underlined vehicular and industrial emissions as the major reasons behind it.

Anumita Roychowdhury, the executive director of research and advocacy, CSE, said, “So far air pollution has been dealt with only in terms of particulate matter (PM), which is not enough, given the complex nature of pollution in Delhi-NCR. Gases such as VOCs are major components of air pollution. They are toxic and harmful and contribute to the formation of ozone and secondary particulates in the atmosphere. We require a holistic approach to address the issue of air pollution. Cleaner action plans, therefore, need to address particles and gases together.”

Hindustan Times | Delhi | July 3, 2020

Why e-vehicles aren’t popular in Bengaluru, and how this can change

Bengaluru is today synonymous with traffic and air pollution. Among Indian cities, Bengaluru ranked third in overall emissions and energy consumption in a recent survey by CSE (Centre for Science and Environment). PM_{2.5} and PM₁₀ emissions contribute to much of the air pollution in the city, and 60-70% of these emissions originate from vehicles and road dust.

Considering the high contribution of vehicle emissions to air pollution, the Karnataka Electric Vehicle and Energy Storage Policy is a welcome move. The policy targets 100% electric mobility by 2030 for certain vehicle segments — auto rickshaws, cabs, corporate fleets, school buses, public transport buses, and three- and four-wheeler goods vehicles.

Buses, cars should be electrified first. Buses and four-wheelers (private cars, cabs) are the major contributors of CO₂ emissions in Bengaluru, followed by two-wheelers, considering the average daily run of different categories of vehicles. Around 6,000 intra-city buses each cover 150-200 km per day, 1.75 lakh taxis cover 200 km, and 14.85 lakh private cars cover around 10 km each daily. (Though the number of private cars in the city is almost eight times that of the taxis, the average daily run of taxis is 20 times that of private cars.)

Hence, electrification of buses, followed by cars/taxis and then two-wheelers, should be the State’s preferred route of action. But are electric buses financially viable for BMTC?

State Transport Utilities (STUs) across India have been exploring financial models including purchase and lease, for electric vehicles. The outright-purchase model implies a huge initial cost on the STUs, but as the ownership remains with a single entity, operations are comparatively easy. Whereas the leasing model has a complex structure in terms of the sharing of responsibilities between STUs and leasing agencies.

BMTC (Bangalore Metropolitan Transport Corporation) has already made clear its intention to include electric buses in its fleet. Though the initial procurement costs would be high, deploying e-buses on profit-making routes (Vajra and Vayu Vajra) could help BMTC cope with this. Besides, the operation and maintenance cost would be low compared to the diesel bus variants. Faster Adoption and Manufacturing of Electric Vehicles scheme (FAME)-II, which subsidises the purchase

of e-vehicles for public transport, is also likely to help.

Can e-vehicles catch on in car, two-wheeler segment?

Electric cars in India typically have a range of 100-150 km per charge, depending on battery capacity and vehicle class (For example, Mahindra e2o Plus – 110 km/charge, Mahindra Verito – 180km/charge, Tata Tigor – 140km/charge). But, as mentioned earlier, the average daily run of cabs in Bengaluru is 200 km. That is, a gap exists between the available and required range of e-cars.

This can be addressed by setting up fast-charging stations at select locations based on a Public-Private Partnership (PPP) model. The PPP model would ensure financial and operational viability. To begin with, such charging infrastructure can be set up in zones that have high pollution and traffic, such as CBD and IT parks.

Certain cab aggregators, such as Lithium Urban Technologies, have already started running EV cab fleets. An incentive policy can further encourage EVs in this segment. Cab aggregators could also be mandated to deploy a certain percentage of electric vehicles in their fleet.

For the two-wheeler segment, range doesn't seem to be a problem. According to the Comprehensive Mobility Plan drawn up by the Directorate of Urban Land Transport, the average daily run of a two-wheeler in Bengaluru is only 8 km, whereas e-bikes in India run approximately 70 km/charge.

However, the two-wheeler e-segment is not catching on because currently very few apartments can provide charging points for these vehicles in parking lots. This has to be thought about while designing new buildings.

What we can learn from global EV leaders Some global leaders in electric vehicles – such as Norway, USA, and China – have policies targeting demand-supply incentives (subsidies for both purchase and manufacturing), technological research, charging infrastructure, and

outreach. For instance, Norway provides free public charging-points, and a 10,000 NOK subsidy for private charging-stations. Meanwhile, the US has mandated EV-readiness for certain kind of buildings, and has streamlined the permit process for EV charger installation. All commercial establishments have EV park-and-charge lots. Of the total charging stations in the US, 16% are fast-charging stations, and the rest are normal ones.

Further, the US and China regularly hold customer awareness programmes to increase public engagement and interest. What Bengaluru can do

In Bengaluru, the lack of charging infrastructure remains a major roadblock. As the purchase of electric vehicles is already subsidised, policies should now target city-wide charging infrastructure. Battery swapping can also be a game changer for the EV ecosystem – battery standardisation, with 'One battery fits all' principle, plays a key role. One should be able to exchange EV batteries at any station, irrespective of manufacturers. Incentives such as free parking, discounted charging at public places, dedicated parking for e-cabs, and mandating EV charging facility in building bye-laws (residential and commercial) will go a long way in encouraging citizens to opt for electric vehicles, thus ensuring eco-friendly transport.

Citizen Matters | July 3, 2020

बिना किसी बाध्यता के मिले प्रदूषण मुक्त

आबोहवा : सुनीता नारायण

सार्वजनिक परिवहन प्रणाली मजबूत करनी होगी।

औद्योगिक इकाइयों को स्वच्छ ईंधन पर लाना होगा।

ट्रक व अन्य भारी वाहनों को अविलंब बीएस--6 पर लाया जाए।

कोरोना महामारी के बीच लॉकडाउन-अनलॉक में दिल्ली का पर्यावरण ही बेहतर नहीं हुआ, बल्कि इससे भविष्य को लेकर एक उम्मीद भी जगी है। साफ हवा में हर कोई खुलकर सांस ले रहा है। आगे ऐसी ही स्थिति कैसे बनाए

रखी जा सकती है और इसके लिए क्या योजनाएं बनाई जानी चाहिए, इन विषयों को लेकर नईदुनिया के सहयोगी प्रकाशन दैनिक जागरण के संजीव गुप्ता ने जानी-मानी पर्यावरणविद व सेंटर फॉर साइंस एंड एनवायरमेंट (सीएसई) की महानिदेशक सुनीता नारायण से लंबी बातचीत की। प्रस्तुत हैं मुख्य अंश :--

- लॉकडाउन को कैसे देखती हैं आप? इससे क्या सीख मिली?

-लॉकडाउन ने लोगों को भले ही घरों में कैद कर दिया, लेकिन हवा को प्रदूषण से बिल्कुल मुक्त कर दिया। मृतप्राय यमुना को भी जैसे फिर से जीवन मिल गया। लेकिन यह सब तब हुआ, जब जिंदगी भी ठहर सी गई थी। होना यह चाहिए कि बिना किसी बाधयता के हमें खुलकर सांस लेने के लिए प्रदूषण मुक्त आबोहवा मिले।

Coronavirus in Kerala: लॉकडाउन के बाद अब तक लगभग पांच लाख लोग लौटे, करीब 2400 संक्रमित मिले

-किस तरह के उपायों से पर्यावरण में सुधार आगे भी बरकरार रह सकता है?

-सार्वजनिक परिवहन प्रणाली मजबूत करनी होगी। औद्योगिक इकाइयों को स्वच्छ ईंधन पर लाना होगा। ट्रक व अन्य भारी वाहनों को अविलंब बीएस-6 पर लाया जाए। इलेक्ट्रिक वाहनों को बढ़ावा दिया जाए। पैदल चलने की प्रवृत्ति और साइकिलिंग को प्रोत्साहित किया जाए।

-लॉकडाउन और अनलॉक के बीच दैनिक जागरण की भूमिका को लेकर आप क्या कहेंगी?

इंदौर में 4,998 तक पहुंची कुल कोरोना संक्रमितों की संख्या, 24 घंटे में 44 नए मामले दर्ज
इंदौर में 4,998 तक पहुंची कुल कोरोना संक्रमितों की संख्या, 24 घंटे में 44 नए मामले दर्ज
यह भी पढ़ें

-किसी महामारी के दौर में एक राष्ट्रीय समाचार पत्र की जो भूमिका होनी चाहिए, उस पर दैनिक जागरण सौ फीसद खरा उतरा है। तमाम बाधाओं को पार करते हुए जागरण रोज हमारे पास आया। इसका वेब पोर्टल भी उपयोगी साबित हुआ। जागरण ने इस कठिन दौर में भ्रम दूर किया और समाज को सच से रूबरू कराया।

-दैनिक जागरण की पत्रकारिता को लेकर क्या विचार हैं?

दैनिक जागरण ने क्रिस्टल क्लियर पत्रकारिता की। जागरण की टीम ने इस कठिन दौर में हर अहम घटना को बेहतर ढंग से प्रस्तुत किया। जब घर में बैठे-बैठे लोग तनाव और अवसाद का शिकार हो रहे थे, तब जागरण ने नए-नए कॉलम शुरू करके उन्हें इससे भी उबारने का प्रयास किया।

Dainik Jagran | July 8, 2020

पराली के धुएं पर अंकुश के लिए हर दो सप्ताह में समीक्षा करेगा ईपीसीए

दिल्ली सहित चार राज्यों के साथ गुरुवार को हुई पहली ऑनलाइन बैठक

- सुप्रीम कोर्ट के 28 फरवरी के हर निर्णय को सभी राज्यों को करना होगा लागू

राज्य ब्यूरो, नई दिल्ली :

पराली पर अंकुश लगाने के लिए पर्यावरण प्रदूषण नियंत्रण एवं संरक्षण प्राधिकरण (ईपीसीए) अब हर दो सप्ताह में समीक्षा बैठक करेगा। इस दौरान पराली जलाने की घटनाओं पर नियंत्रण के उपायों की वस्तुस्थिति की जानकारी ली जाएगी।

सर्दी के मौसम में दिल्ली-एनसीआर में वायु प्रदूषण और पराली के धुएं पर अंकुश के लिए गुरुवार को ईपीसीए की अहम बैठक हुई। इस दौरान ईपीसीए ने दिल्ली, हरियाणा, उत्तर प्रदेश, पंजाब और केंद्र सरकार के अधिकारियों के साथ प्रदूषण नियंत्रण के लिए उठाए जा रहे कदमों की समीक्षा की।

बैठक में तय हुआ कि इस तरह की समीक्षा हर दो सप्ताह में की जाएगी। बैठक में सभी राज्यों को प्रदूषण व पराली के धुएं पर रोकथाम के लिए उठाए गए कदमों की जानकारी देनी होगी। ईपीसीए ने किसानों को पराली नहीं जलाने के लिए प्रोत्साहित करने के उपायों पर सुझाव मांगे।

ईपीसीए अध्यक्ष भूरेलाल ने बताया कि धान की बुआई हो चुकी है। अक्टूबर में कटाई शुरू हो जाएगी। इसी के साथ पराली जलाने की घटनाएं भी जोर पकड़ने लगती हैं। इसलिए केंद्र सरकार से भी इस मद में इस साल का बजट जल्द जारी करने को कहा गया।

वहीं, बैठक में शामिल ईपीसीए की सदस्य सुनीता नारायण ने बताया कि पराली जलाने पर रोक के लिए पंजाब, हरियाणा और उत्तर प्रदेश के किसानों को प्राथमिकता के आधार पर मशीनें बांटने पर भी चर्चा की गई।

राजनीतिक स्तर पर हंगामे और केंद्र व राज्य सरकारों के स्तर पर सख्ती के बावजूद बहुत से किसान पराली जलाते हैं। इस साल कोरोना संक्रमण से लोग पहले ही ही परेशान हैं। अगर पराली का धुआं भी दिल्ली एनसीआर में पहुंचा तो सांस के रोगियों को खासी दिक्कत झेलनी पड़ सकती है। इन्हीं सब बातों को ध्यान में रखते हुए ईपीसीए ने पराली के धुएं से निपटने के लिए अभी से कमर कस ली है।

Dainik Jagran | July 9, 2020

CPCB Proposes Stringent Fines for Noise Pollution

Incessant honking, loud construction activity, loudspeakers at odd hours – all contributors to noise pollution – could soon fall heavy on the pockets of those violating norms. The country's pollution watchdog, the Central Pollution Control Board (CPCB), has proposed a set of fines ranging from Rs. 1,000 to Rs. 100,000 for people violating noise pollution rules, including measures for the repeat offenders.

The new fines have been proposed in response to a set of cases going on in the National Green Tribunal (NGT) regarding noise pollution wherein the applicants

complained that despite several court orders, the problem of noise pollution continues in the national capital. They had complained that by the use of music systems, public address systems etc. during weddings or other functions, the noise being created at odd hours was adversely affecting the health of the citizens.

In November 2019, a bench headed by the NGT chairperson A.K. Goel had asked the CPCB to look at revising fines for bursting crackers and for repeated violations. The tribunal had also asked laying down stringent compensation for tampering with the sound limiters.

Noise has increasingly become a nuisance in India, especially in urban areas. Noise pollution and its sources are regulated under the Noise Pollution (Regulation and Control) Rules, 2000.

"The noise standards for motor vehicles, air conditioners, refrigerators, gensets and certain types of construction equipment are prescribed under Environment (Protection) Rules, 1986. Noise emanating from industry is regulated by SPCBs/PCCs (State Pollution Control Board/Pollution Control Committees) for states/union territories under the Air (Prevention and Control of Pollution) Act, 1981. As part of strategy to reduce noise pollution, the steps taken by the Central Pollution Control Board include methodology for noise mapping in India, identifying hot spots and mitigation plan for control of noise pollution etc. apart from the National Ambient Noise Monitoring Network in seven metropolitan cities," Union Minister of State in the Ministry of Environment, Forest and Climate Change (MoEFCC) Babul Supriyo told the Indian Parliament while replying to a query in March 2020.

While noise pollution does not receive as much attention as air and water pollution, it is known to impact the health of people. Noise pollution can emerge from vehicular traffic, honking, railways, metro trains, aircrafts, industries, generators, construction activities, use of public address systems, bursting of firecrackers

among others. Airports can also be a source of noise pollution. In a September 2019 case on noise pollution, the NGT directed that Delhi International Airport Limited should not only measure and maintain the prescribed noise levels but also display the same in the public domain.

“Incessant honking of vehicles plying on the roads is one of the sources of noise pollution especially in cities/towns. Ministry of Road Transport and Highways, under the provisions of Motor Vehicle Act, 1988 and Rules notified thereunder have stipulated the norms for noise from horns and vehicles,” said Supriyo. He also told the parliament that reports indicate that “high noise levels can impact health of people including women and children, causes sleep disturbance, stress, hypertension etc. besides impact on the hearing capacity and ear disorders etc.” Fines for violation of noise pollution rules In a report filed with the NGT (June 12, 2020), the CPCB has come out with a list of fines for violation of noise pollution norms. For instance, violation of norms regarding the use of loudspeakers/public address system can result in seizure of the equipment and a fine of Rs. 10,000. Similarly, violation of noise pollution norms regarding the use of diesel generator sets can result in sealing of DG sets and a fine of Rs 10,000 to Rs 100,000 depending upon its size. The violation in cases of sound-emitting construction equipment can result in a fine of Rs 50,000 and its seizure or sealing. The violation of noise norms while bursting firecrackers beyond the time limit (prescribed by the Supreme Court) could attract a fine of Rs 1,000 (in the residential, commercial or mixed zone) and Rs 3,000 (in a silence zone). But in case of violation of norms during public rallies, marriage procession or any religious event, a heavier fine of Rs 10,000 could be levied on the organiser in residential/commercial or mixed zone and Rs 20,000 in a silence zone. The noise pollution rules define the acceptable level of noise in different zones

for both day and night time. Silence zones, which are declared by the state governments, are areas around hospitals, educational institutions and courts.

In case of the first violation of noise rule within a fixed premise in a function organised by the resident welfare organisation, a marriage function, public or institution event, banquet hall, open ground functions, a fine of Rs. 20,000 may be levied while a second violation could result in a fine of Rs 40,000.

However, more than two violations could result in a fine of Rs 100,000 and sealing of the premises.

Honking is one of the major sources of noise pollution in cities. Photo: Nomad/Flickr.

The CPCB also told the NGT that they deliberated on fine for tampering of sound limiters – devices fitted in microphones to control the maximum sound generated – but given that the limiters can be faulty too, they wouldn't be accurate for ensuring regulations. The pollution watchdog said that they are in the process of framing source-specific standards for regulations of loudspeakers and public address systems for specific uses.

At present, violation of noise pollution rules is a criminal offence punishable under Section 15 of the Environment (Protection) Act, 1986 which could attract imprisonment upto five years and fine upto Rs 100,000. Thus, the NGT had noted that “since prosecution of a non-cognizable offence may have its own limitations” civil liability on ‘polluter pays’ principle can be invoked with a proper compensation regime. The fines proposed by the CPCB, in compliance with the NGT order, would be finalised once the green tribunal gives it a go-ahead.

There are a total of 70 noise monitoring stations under the National Ambient Noise Monitoring Network (NANMN), established in March 2011, across seven cities – Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Lucknow and Mumbai. The 2019 ambient noise level data of these seven cities show that about 90% of these

stations found noise level beyond the accepted limits both during day and night. At some stations, the noise levels recorded were more nearly double the allowed norms.

Noise pollution can take a toll on health "Despite substantial data on adverse health effects of noise pollution, the government does very little to curb it. CPCB should actively monitor noise levels and take action without waiting for the general public to complain. There are some low hanging fruits when it comes to controlling noise pollution. For example, it is easy to control noise from honking by simply controlling the level of sound in the horns and levying fines on the offenders," said Vibha Varshney, a researcher working on health and science issues, with the Centre for Science and Environment, a Delhi-based environment think-tank. The NGT too in its order had noted that noise is an underestimated threat that can cause a number of short and long-term health problems. The tribunal had noted that noise has auditory as well as non-auditory effects on sleep, hearing, communication, mental and physical health. It observed that noise can disturb work, rest, sleep, communication and damage the hearing and cause psychological and pathological reactions and long noise exposure can cause even irreversible loss of hearing.

Delhi-based clinical psychologist Anu Gehlot said that "constant exposure to noise can be a significant trigger for mental disorders such as depression, panic disorder and anxiety disorders." "Higher prevalence of mental disorders have been observed in people living in crowded areas and areas that are prone to a high level of noise pollution. Noise pollution is one of the most detrimental triggers to latent psychological problems and can lead to exacerbation of the same. Regular exposure to noise can even come out in the form of people being irritable, nervous and facing difficulty in taking decisions. It has also shown to hinder the normal development of speech and

hearing in children resulting in delayed developmental milestones affecting their overall growth. The problem is significant in India's urban areas and thus it is very important that authorities in India make a concerted effort to control and regulate noise pollution to protect millions of people," Gehlot told Mongabay-India. According to the World Health Organisation, about 1.1 billion young people (aged between 12–35 years) are at the risk of hearing loss due to exposure to noise. In 2017, a report had highlighted that Delhi and Mumbai are among the list of worst cities across the globe in terms of noise pollution.

The Wire | July 9, 2020

Delhi: EPCA reviews readiness to prevent farm fires

NEW DELHI: Ahead of the crop stubble burning season, which tends to start around October 15 in parts of northern India, the Supreme Court mandated Environment Pollution (Prevention and Control) Authority (EPCA) on Thursday held a meeting with the states of Punjab, Haryana and Uttar Pradesh.

The body reviewed the preparations made by each state in order to prevent stubble burning this year. EPCA has directed each state to submit a compliance report, along with the actions taken so far, stating a review meeting will be held fortnightly along with the timelines in which work should be completed.

EPCA member Sunita Narain said the meeting was in continuance with the Supreme Court order from February, which had directed each state to carry out directions to incentivise farmers and provide machines to reduce instances of stubble burning. The meeting on Thursday included members from the state pollution control board and state agriculture departments.

"There is a clear plan in place for each state already. Now the work that has already been completed needs to be monitored along with the pending work with fixed timelines. This will then be monitored for the next three months and the aim is to ensure it gets completed before the stubble burning season," Narain told TOI.

Among other directions, states have been asked to set up custom hiring centres in each district where equipments will be provided to farmers to manage stubble. A mobile app — 'CHC Machinery'— that was released last year will be assessed by each state for the number of farmers registered.

Times of India | Delhi | July 9, 2020

Motor vehicle sales hit a bump in Capital

Jatin Anand

Only 37,363 vehicles were registered during April-June quarter this year compared to last year's 1,61,040. Vehicle registrations in the Capital plummeted by over 76% between April and June this year, ostensibly due to the series of national lockdowns to contain

Hindu | Delhi | July 11, 2020

To decongest busy ITO junction, traffic police seeks a detailed study from PWD **Traffic unit's deputy commissioner of police (central range)**

Anita Roy on Tuesday wrote to PWD officials asking for a detailed study of the ITO junction and the area in a 4-5km radius around it. With an aim to decongest central Delhi's busy ITO intersection, the traffic police has written to the public works department (PWD) to conduct a comprehensive study of the stretch and adjoining areas to assess traffic volume and accident count so that tailor-made solutions can be found.

Traffic unit's deputy commissioner of police (central range) Anita Roy on Tuesday wrote to PWD officials asking for a detailed study of the ITO junction and the area in a 4-5km radius around it. "ITO is a very important junction, considering that it is the primary connecting point between central and east Delhi. Our plan is to make this stretch a model one for the rest of the city. For this, understanding the issues plaguing the area will be the first step," Roy said.

The traffic police has asked the PWD to assess details such as the vehicular volume at the intersection during normal as well as peak hours. The traffic police has also asked for information on how traffic volume is affected during VIP movements, sports events, exhibitions and protests. Details of pedestrian counts and parking requirements in nearby areas have also been sought as a part of the study.

Shashi Kant, PWD's engineer-in-chief, said the department will take up the study and all required aspects would be looked into. He, however, said he was yet to "officially receive" the communication from the traffic police department.

Before asking the PWD for the study, the traffic police department, along with Central Road Research Institute (CRRRI) and two road safety NGOs, had conducted a series of inspections of the area before the lockdown was imposed on account of Covid-19 on March 25.

A senior PWD official, privy to the development, on condition of anonymity said the outcome of the ITO decongestion plan, along with the ongoing Pragati Maidan redevelopment project, which includes a traffic circulation plan around Mathura Road, Purana Qila Road, Bhairon Marg and the Ring Road, will result in holistically decongesting all these stretches.

Ranked among the busiest intersections in the national capital, ITO daily sees serpentine jams, which worsens during the rush hour. However, no effective solution has been implemented by authorities to ease commuter woes.

In 2015, the Delhi traffic police, with the Unified Traffic and Transportation Infrastructure (Planning and Engineering) Centre, has come up with a one-way plan for the intersection.

During the evening rush hour, when vehicles coming from east Delhi were directed towards Deen Dayal Upadhyay (DDU) Marg, and from there made to take a right towards Gandharva Mahavidyalaya to join Bahadur Shah Zafar Marg via Kotla Marg. Similarly, vehicles coming from Minto Road and Connaught Place are made to take a left from DDU Marg towards Kotla Marg. Senior traffic officials said even though this one-way plan had helped take away some traffic from the main intersection, the problem was more deep-rooted.

S Velmurugan, chief scientist, traffic engineering and safety division, CRRI, who was part of the inspection team, said no recent study has been conducted to assess the problems of ITO.

"We have been taking measures to regulate traffic in the area based on a study from 2017 which estimates that nearly 4.5 lakh vehicles pass through the junction throughout the day, but that study does not give exact data about traffic flow at different timings," he said.

Velmurugan said measures such as the construction of a 1.2km tunnel between Purana Qila Road and the Ring Road along with six underground U-turns on Mathura Road, Bhairon Marg and the Ring Road will decongest ITO crossing and W-point near Pragati Maidan. "These measures should come up at the earliest. Delay only aggravates the problem," he said.

The PWD is constructing this ₹777-crore project to ease travel to India Gate and parts of central Delhi from different corners of the city, especially from east Delhi, Noida and Ghaziabad.

Anumita Roychowdhury, executive director (research and advocacy), Centre for Science and Environment, said, "With limited public transport modes, and a fear of safety, commuters are likely to depend on private vehicles and this will add to the vehicular load. Preparing for the worst will help agencies manage this actuality in the coming months," Roychowdhury said.

Hindustan Times | Delhi | July 11, 2020

NDMC installs anti-smog gun in Connaught Place to reduce pollution

According to the statement, the anti-smog gun has a 'throw distance' of 100 metres with the size of water droplets ranging between 30 microns and 50 microns that could cover an area between 27,000 square metres and 37,000 square metres. With an aim to reduce the air pollution level, which increased after lockdown norms were relaxed, the New Delhi Municipal Council (NDMC) on Monday installed an 'anti-smog gun' in Central Park, Connaught Place.

According to NDMC officials, it is a pilot project and more such machines will be installed if this trial is successful.

An NDMC official said that this device is designed to reduce air pollution by spraying atomised water into the atmosphere so that dust and pollution particles are cleared from the environment and the concentration of PM10 and PM2.5 is reduced.

PM2.5 are ultra-fine particles that can enter the lungs and bloodstream and are the most prominent pollutant in Delhi-NCR as well as in other major cities across the

country. PM10 particles are coarser, with a diameter of 10 microns. The Air Quality Index reading of Delhi on Monday was 72, which is in the satisfactory category.

"The anti-smog gun is designed to create an ultra-fine fog, comprising very fine water droplets (less than 10-micron in size). These tiny water droplets will be spread over a sizeable area with the help of a high-speed fan, which can absorb even the smallest dust particles in the air," an NDMC statement read. NDMC chairman Dharmendra inaugurated the machine in the presence of the secretary of NDMC Amit Singla.

According to the statement, the anti-smog gun has a 'throw distance' of 100 metres with the size of water droplets ranging between 30 microns and 50 microns that could cover an area between 27,000 square metres and 37,000 square metres. The cost of the machine is Rs13 lakh and it will be operated by a wired remote control system.

As per a study of the Centre for Science and Environment (CSE), the pollution level in Delhi-NCR, which had come down by at least 79% during the initial phase of the lockdown, registered a comeback with the city reopening in the fourth phase of the lockdown May-end. Of the six megacities, where PM2.5 levels were studied during this period, Delhi had seen the steepest rise (4-8 times), as compared to other cities (2-6 times), an analysis by CSE showed.

Experts, however, expressed doubts over the success of the anti-smog gun.

Shambhavi Shukla, programme officer, air pollution, CSE said that while it might suppress or settle the pollutants for some time, it was not a long-term solution.

"Such machines may suppress smaller particles like PM2.5 over a small area for a certain time, but they are not a long-term solution. The only way out is to control the

sources of pollution. We also have to see how much water they would consume and how long they would be able to control the smog or smaller particles because their effects wear out quickly," Shukla said.

Hindustan Times | Delhi | July 14, 2020

[With limited public transit, cycling picks up speed in Delhi, finds study](#)

The initial finding of the ongoing study by five researchers—all alumni of IIT-Delhi and IIT-Roorkee—shows that on at least 22 of the 56 stretches monitored, the number of cyclists has increased by 4% to 12%.

Nearly two-and-a-half months after Delhi started relaxing the lockdown norms put in place to contain the Covid-19 pandemic, roads of the national capital have started seeing a surge in the number of cyclists, a study has found.

The initial finding of the ongoing study by five researchers—all alumni of IIT-Delhi and IIT-Roorkee—shows that on at least 22 of the 56 stretches monitored, the number of cyclists has increased by 4% to 12%. The reason for the increase vary from limited public transport options to a preference for contactless modes of travel to keep the Covid-19 infection at bay, says the draft report.

P Shridhar, the road safety engineer heading the project, said the stretches were studied to find how commuting patterns and traffic volume have changed after the city came out of lockdown, imposed on March 25. The restrictions were eased gradually from the second week of May with public transport resuming in the capital on May 20.

"Our study is focusing on commuting patterns since May 18, when the city started unlocking its economy. While the volume of private vehicles has increased, we also observed that the volume of cycles on arterial roads has gone up," said Shridhar, who is also a consultant for the governments of Karnataka, Gujarat and

Tamil Nadu to make commuter friendly public spaces.

He said, "Apart from seeing these cyclists as just numbers, we also did a detailed survey to ascertain if they were new cyclists, and if so, why had they made the switch and what kind of infrastructure problems do they face during their commute."

On 22 stretches, the study found that the increase in the number of cyclists was in the range of 4% to 12%. The 22 stretches included Mathura Road (between Apollo Hospital and Jangpura), India Gate roundabout, Noida Link Road, August Kranti Marg, Sri Aurobindo Marg, Panchsheel Marg, Pankha Road, Aruna Asaf Ali Marg, Dabri-Gurgaon Road in Dwarka, Vedant Desika Mandir Marg (near Ber Sarai), and GT Karnal service road (near Shahdara metro station), among others.

While most of these stretches are in the upscale parts of south and central Delhi — roads in these parts are wider and the traffic volume low, making them ideal routes for cyclists — curiously, the rise in cyclists numbers was also seen in many parts of west and north Delhi, both with predominantly working-class populations. "Lower middle-class users are switching to cycles for economic reasons. With a restriction on public transport and given their limited income, many are seeing cycles as a long-term option to save on commuting expenses," the study draft reads.

"For the middle and upper-class cyclists, who mostly own a private vehicle, the reasons for the switch are completely different -- they are using cycles for shorter distances, recreational purposes and also as a means to keep fit amid the pandemic scare," it said further.

Based on their findings, the research team have assessed that in the coming year, road share of cyclists could go up by as much as 20% to 25%. Delhi government estimates show, there are nearly 1.1 million regular bicycle users in the city,

but this figure is from before the pandemic.

A similar analysis by the Centre for Science and Environment (CSE) found the share of cyclists of total road commuters will rise from 4% to 12%. "The takeaway from this is that cities will have to be planned to be more cyclist and pedestrian friendly. This is an opportunity," said Anumita Roychowdhury, executive director (research and advocacy), CSE. Mehul Srivastava, who leads a cycling group in south Delhi, said new cyclists are joining the team for health reasons and also to reduce contact with other people. "There are those who now prefer to cycle to the local market. Many who were using cabs or auto-rickshaws for short commutes are also switching to cycling because they do not want to risk any exposure to the virus. Health has become a priority among people, but the infrastructure for cyclists is still poor," Srivastava said.

He said most parts of the city do not have dedicated cycle tracks and even in areas where they are located. Cyclists, he said, also often become victims of road accidents and crimes such as snatching and robberies.

Delhi traffic police data echoes cyclists' concerns. Data on road accidents over the past 10 years shows that of the total fatalities on Delhi's roads, cyclists and pedestrians make up 70%.

A senior Delhi traffic police officer said, "In lower income areas, people don't have a choice. The frequency of buses, which is their primary mode of transport, is low and so they prefer to cycle. Central and south Delhi areas have plenty of cycle groups with professional gear. But for the benefit of all classes, road infrastructure has to be safe. Sadly, that's not the case now," the officer said.

Experts say similar upward swings in cycling have been observed in cities abroad. Alejandro Schwedhelm, urban mobility associate at World Resources Institute (WRI) Ross Centre for Sustainable Cities, said the surge was seen in cities in China, Germany, Ireland,

the United Kingdom and the United States.

Aniket Tikoo, owner of Bikers Loft, a biking equipment store in Lajpat Nagar, said the sale of cycles has increased by 10% to 15% over the past two months, but it was too early to say if the rise would remain consistent in the coming months. "People are mostly buying multi-gear comfort hybrids and road bikes. So, business has been good," he said.

Hindustan Times | Delhi | July 26, 2020

Indian elite 'woos' pollution: Post-lockdown private cars preferred over public transport

As Indian cities continue to successively unlock themselves amidst Covid-19 pandemic, a major survey sponsored by the high profile Chicago-based MacArthur Foundation, and carried out by a top Indian environmental group, has found that in the post-lockdown period a whopping 34 per cent of those not owning vehicles would be buying new four wheelers, while 23 per cent said they would go in for two wheelers.

Results of the survey, which was undertaken by the Centre for Science and Environment, New Delhi, carried out among middle and large income groups, published in the report "Pandemic and Mobility: Lessons from the COVID-19 crisis for building solutions", authored by Anumita Roychowdhury, Anannya Das, and others, also show that the use of car in the post-lockdown period would also go up drastically, even as the use of public transport, especially metro would go down.

Among the respondents, 15 per cent were in the age bracket of 18-25 years; 57 per cent in 26-35 years; 13 per cent each in 36-45 years and 45-60 years; and 2 per cent in the age group above 60 years. Belonging to the higher and middle income groups, 27 per cent of the respondents earned more than Rs 1 lakh per month; 38 per cent between Rs 50,000 and 1 lakh; 24 per cent between

Rs 25,000 and Rs 50,000; and 11 per cent below Rs 25,000.

The report, which confines itself to responses from Delhi Nation Capital Region (NCR), underscores, "In the distance range of five-10 km for work trips, the use of cars is expected to increase from 20 per cent at pre-lockdown level to 33 per cent." At the same time, it says, "Metro usage will decline from 30 per cent to 10 per cent." Also, it adds, "Para-transit use will increase from 10 per cent to 15 per cent."

However, the survey finds that "below the five-km distance range, walking and cycling is expected to increase significantly from 14 per cent to 43 per cent; car usage would reduce from 23 per cent to 16 per cent; and metro usage will go down from 16 per cent to 5 per cent." There is a caveat, however: For this to become a reality, city authorities would need to "intervene immediately" to provide infrastructure in order to ensure a viable "walking-cycling distance radius."

Assessing the preferences for modes during different phases – initial six months after lockdown, and over one-two years and for a longer term – report says, "Within six months of post-lockdown, metro ridership is expected to decline from 37 per cent at prelockdown level to 16 per cent", and "the share of cars and two-wheelers would increase from 35 per cent to 47 per cent.", though, "encouragingly, walk and cycling share will increase from four per cent to 12 per cent."

However, report says, "In the long-term scenario, public transport share will increase, with total bus and metro share regaining and increasing from 44 per cent to 47 per cent." Also, the "intent to use personal vehicles shows an arrested trend – reducing from 35 per cent to 31 per cent." Further: "Walking and cycling share will also increase from four per cent in pre-lockdown to nine per cent in the long term."

It comments, "The survey results show that despite the initial setback to public transport and increased preference for personal vehicles, the preference for public transport and walking and cycling gains in the long run." In fact, preference for cars may "plateau" and "decline" over time. Here too there is a caveat: To make the scenario possible, "policy needs to respond to this intent and stimulate the dormant demand for good quality public transport, walking and cycling and reduce dependence on personal vehicles."

In fact, noting huge ifs and buts for the use of public transport facility in the longer run, the report says, "The respondents were specifically asked about their longer-term preferences if public transport systems... Majority of the respondents -- as many as 73 per cent -- preferred to move to public transport if systems meet high quality standards for services. Only about 22 per cent said that they will continue to use personal transport, while the rest would prefer to move to cabs and shared mobility."

At a Delhi-NCR wide level, close to 40 per cent do not have access to bus stops within 500 meters; and 69 per cent do not have access to metro stations within 500 meters

According to the report, "About 38 per cent have preferred public transport for reasons of connectivity; 23 per cent each for cost effectiveness and sustainability; and 16 per cent to avoid traffic congestions. This is a clear indicator for policymakers that a massive shift towards public transport, walking and cycling is possible if good quality and convenient public transport systems and well-designed walking-cycling infrastructure are made available."

It underlines, "One clear impediment to using public transport that is evident from the survey is that the majority of the respondents do not have convenient access to formal public transport nodes in this region. At a Delhi-NCR wide level, close to 40 per cent do not have access to

bus stops within 500 meters; and 69 per cent do not have access to metro stations within 500 meters. This will vary from city to city."

Pointing out that "this makes using public transport inconvenient and people become captive users of personal transport", the report says, only "about 34 per cent have access to a bus stop and 11 per cent have access to a metro within 200 meters", adding, "Only para-transit modes are available more widely and within close proximity."

This suggests the need for "economic reconstruction packages in cities need to be linked with transport and street-based infrastructure to improve access to transportation modes along with walking and cycling infrastructure", the report says, adding, it also "requires local area plans and appropriate infrastructure along with public amenities and public parks within neighbourhoods to enhance the experience."

Counterview | July 28, 2020

INDIA: With limited public transit, cycling picks up speed in Delhi, finds study

The reason for the cycling increase vary from limited public transport options to a preference for contactless modes of travel to keep the Covid-19 infection at bay. Nearly two-and-a-half months after Delhi started relaxing the lockdown norms put in place to contain the Covid-19 pandemic, roads of the national capital have started seeing a surge in the number of cyclists, a study has found.

The initial finding of the ongoing study by five researchers—all alumni of IIT-Delhi and IIT-Roorkee—shows that on at least 22 of the 56 stretches monitored, the number of cyclists has increased by 4% to 12%. The reason for the increase vary from limited public transport options to a preference for contactless modes of travel to keep the Covid-19 infection at bay, says the draft report.

P Shridhar, the road safety engineer heading the project, said the stretches were studied to find how commuting patterns and traffic volume have changed after the city came out of lockdown, imposed on March 25. The restrictions were eased gradually from the second week of May with public transport resuming in the capital on May 20. "Our study is focusing on commuting patterns since May 18, when the city started unlocking its economy. While the volume of private vehicles has increased, we also observed that the volume of cycles on arterial roads has gone up," said Shridhar, who is also a consultant for the governments of Karnataka, Gujarat and Tamil Nadu to make commuter friendly public spaces.

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commuting expenses," the study draft reads.

"For the middle and upper-class cyclists, who mostly own a private vehicle, the reasons for the switch are completely different -- they are using cycles for shorter distances, recreational purposes and also as a means to keep fit amid the pandemic scare," it said further. Based on their findings, the research team have assessed that in the coming year, road share of cyclists could go up by as much as 20% to 25%. Delhi government estimates show, there are nearly 1.1 million regular bicycle users in the city, but this figure is from before the pandemic.

A similar analysis by the Centre for Science and Environment (CSE) found the share of cyclists of total road commuters will rise from 4% to 12%. "The takeaway from this is that cities will have to be planned to be more cyclist and pedestrian friendly. This is an opportunity," said Anumita Roychowdhury, executive director (research and advocacy), CSE. Mehul Srivastava, who leads a cycling group in south Delhi, said new cyclists are joining the team for health reasons and also to reduce contact with other people. "There are those who now prefer to cycle to the local market. Many who were using cabs or auto-rickshaws for short commutes are also switching to cycling because they do not want to risk any exposure to the virus. Health has become a priority among people, but the infrastructure for cyclists is still poor," Srivastava said.

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choice. The frequency of buses, which is their primary mode of transport, is low and so they prefer to cycle. Central and south Delhi areas have plenty of cycle groups with professional gear. But for the benefit of all classes, road infrastructure has to be safe. Sadly, that's not the case now," the officer said.

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Mass Transit | July 31, 2020

India battling heat wave, worst locust invasion in decades amid coronavirus

As if the coronavirus wasn't sufficient, India grappled with scorching temperatures and the worst locust invasion in decades as authorities ready for the top of a monthslong lockdown regardless of recording hundreds of latest infections day by day.

This triple catastrophe drew biblical comparisons and compelled officers to attempt to steadiness the competing calls for of simultaneous public well being crises: safety from eviscerating heat but additionally social distancing in newly reopened parks and markets.

The heat wave threatens to compound challenges of containing the virus, which has began spreading extra shortly and broadly because the authorities started easing restrictions of one of many world's most stringent lockdowns earlier this month.

"The world won't get an opportunity to breathe anymore. The ferocity of crises are growing they usually're not going to be spaced out," stated Sunita Narain of New Delhi's Middle for Science and Surroundings.

When her 6-year-old son awoke with a parched throat and a fever, housekeeper Kalista Ekka needed to convey him to the hospital. However dealing with a deluge of COVID-19 sufferers, the physician suggested Ekka to maintain him at house regardless of boiling temperatures in the household's two-room house in a low-income neighborhood in South Delhi.

"The fan solely makes it hotter however we will't open the window as a result of it has no display screen," and thus no

protection in opposition to malaria and dengue-carrying mosquitoes, Ekka stated.

An Indian man selling earthen pots beneath a bridge drinks water in Ahmedabad, India.

An Indian man promoting earthen pots beneath a bridge drinks water in Ahmedabad, India.AP

In a close-by upmarket enclave crowded with walkers and joggers each morning and at nightfall — some with face coverings, some with out — neighbors debated the deserves of masks in a web-based discussion board.

Within the heat, "it is rather harmful to work out with a masks. So a Catch-22 scenario," stated Asmita Singh.

Temperatures soared to 118 levels Fahrenheit (47.6 levels Celsius) in the capital New Delhi this week, marking the warmest Could day in 18 years and 122 F (50 C) in the desert state of Rajasthan, after the world's hottest April on document.

India suffers from extreme water shortages and tens of hundreds of thousands lack operating water and air-con, leaving many to hunt aid below shady bushes in public parks and stepwells, the traditional constructions used to reap rainwater.

Although many individuals continued carrying masks correctly, others pushed them onto chins or had foregone them altogether.

Cyclone Amphan, an enormous tremendous storm that crossed the unusually heat Bay of Bengal final week, sucked up large quantities of moisture, leaving dry, scorching winds to type a heatwave over elements of central and northern India.

Health workers in personal protective suits ferry the body of a man who died of Covid 19 on a handcart for cremation in New Delhi, India.

Well being employees in private protecting fits ferry the physique of a person who died of Covid 19 on a handcart for cremation in New Delhi, India.AP

On the identical time, swarms of desert locusts have devastated crops in India's heartland, threatening an already susceptible area that's combating the financial value of the lockdown.

Exasperated farmers have been banging plates, whistling or throwing stones to attempt to drive the locusts away and generally even lighting fires to smoke them out. The swarms appeared poised to go from Rajasthan north to Delhi, however on Wednesday a change in wind route despatched them southward towards the state of Madhya Pradesh as an alternative.

Ok.L. Gurjar, a high official of India's Locust Warning Group, stated his 50-person group was scrambling to cease the swarms earlier than breeding can happen throughout India's monsoons, which start in July. In any other case, he stated, the locusts may destroy India's summer time crops.

In the meantime, India reported one other document single-day bounce of greater than 6,500 coronavirus instances on Thursday, pushing up the full to 158,333 confirmed instances and 4,531 deaths.

Prime Minister Narendra Modi's authorities is getting ready a brand new set of pointers to be issued this weekend, presumably extending the lockdown in worst-hit areas whereas selling financial exercise elsewhere, with unemployment surging to 25 %.

The sudden halt to the Indian financial system when the lockdown started March 25 has been devastating for every day laborers and migrant employees, who fled

cities on foot for his or her household houses in the countryside.

A woman waits for customers as she sells matkas, or an earthen pots, used to keep water cold during summers in New Delhi, India.

A lady waits for purchasers as she sells matkas, or an earthen pots, used to maintain water chilly throughout summers in New Delhi, India.AP

The federal government began operating particular trains for the migrants, however deaths on the rails due to hunger or dehydration have been reported. Others instantly put into quarantine facilities upon their arrival in house districts have examined optimistic for COVID-19, including to the burden of severely strained rural well being programs.

To leap begin the financial system, Modi's setting ministry has moved to decrease liabilities for industrial polluters and given personal gamers the precise to probe for coal and mine it. Low-cost oil will gasoline restoration efforts worldwide.

Indian environmental journalist Joydeep Gupta stated that the right storm of pandemic, heat and locusts present India should go inexperienced. He stated the federal government ought to implement insurance policies to safeguard biodiversity and provide incentives for inexperienced vitality to cut back greenhouse gases that trigger local weather change.

As an alternative, "the federal government is selling the identical sectors of the business which have induced the a number of crises in the primary place," he stated.

However Narain stated different authorities initiatives that increase federal agriculture employment, money switch and meals ration packages assist India deal extra successfully with its threats.

"It's constructing coping talents of the very poor to have the ability to take care of stress after stress after stress," she stated.

Gruntstuff | July 14, 2020

Greta Thunberg is the Winner of the First Gulbenkian Prize for Humanity

The first edition of the Gulbenkian Prize for Humanity has been awarded to Greta Thunberg. The young Swedish environmental activist was selected among 136 nominees (corresponding to 79 organizations and 57 personalities) from 46 different countries.

Thunberg's foundation will donate the award money of 1 Million Euros to charitable projects combatting the climate and ecological crisis and to support people facing the worst impacts, particularly in the Global South. Starting with giving €100.000 to the SOS Amazonia campaign, led by Fridays For Future Brazil to tackle Covid-19 in the Amazon, and €100.000 to the Stop Ecocide Foundation to support their work to make ecocide an international crime.

Jorge Sampaio, Chair of the Grand Jury of the Prize, has emphasized the broad consensus of this choice and pointed out "the way Greta Thunberg has been able to mobilize younger generations for the cause of climate change and her tenacious struggle to alter a status quo that persists, makes her one of the most remarkable figures of our days". Jorge Sampaio has also stressed her enormous responsibility in consolidating her pedagogical role and her leadership in the fight against climate change, as a condition for sustainable development, towards which the attribution of this Prize aims to contribute.

The Grand Jury, composed of internationally renowned personalities from the fields of science, technology,

politics and culture, has highlighted Thunberg's charismatic and inspiring personality, but also the force of her singular and distressing message capable of arousing disparate feelings, and her capacity to make a difference in the fight against climate change.

The President of the Calouste Gulbenkian Foundation, Isabel Mota, emphasized that "By awarding this Prize, the Foundation highlights its commitment to urgent climate action, fostering communities that are more resilient and better prepared for future global changes, while also protecting, in particular, the most vulnerable".

Greta Thunberg said: "I'm extremely honored to receive the Gulbenkian Prize for Humanity. We're in a climate emergency, and my foundation will as quickly as possible donate all the prize money of 1 million Euros to support organizations and projects that are fighting for a sustainable world, defending nature and supporting people already facing the worst impacts of the climate and ecological crisis — particularly those living in the Global South. Starting with giving €100.000 to the SOS Amazonia campaign, led by Fridays For Future Brazil to tackle Covid-19 in the Amazon, and €100.000 to the Stop Ecocide Foundation to support their work to make ecocide an international crime."

Greta Thunberg

Born in 2003, Greta Thunberg is a highly prominent international figure known for alerting to the existential crisis that humanity is facing because of climate change. She gave voice to the concerns of young generations about their future, which is at risk due to global warming, and has been on the spotlight for her youth but also for her direct and incisive communication. Her global influence is unprecedented for someone of her age. She was considered to be one of the 100 most influential personalities of the world by Time Magazine and awarded the title

“Person of the Year” by this magazine in 2019; the Forbes Magazine has also included her in the list of the World’s 100 Most Powerful Women of 2019 and she was nominated twice for the Nobel Peace Prize (2019 and 2020).

About the Prize and the Jury

The Gulbenkian Prize for Humanity, awarded annually, in the amount of 1 million euros, aims to recognize people, groups of people and/or organisations from all over the world whose contributions to mitigation and adaptation to climate change stand out for its novelty, innovation and impact.

The Grand Jury chaired by Jorge Sampaio, President of the Portuguese Republic from 1996 to 2006, is composed by personalities like Hans Joachim Schellnhuber (Founder and Director Emeritus of the Potsdam Institute for Climate Impact Research), Hindou Oumarou Ibrahim (President of Indigenous Women and Peoples Association of Chad), Johan Rockström (Director of the Potsdam Institute for Climate Impact Research and Professor at the University of Potsdam), Katherine Richardson (Coordinator of the Centre of Sustainability Science at the University of Copenhagen), Miguel Arias Cañete (former European Energy and Climate Action Commissioner), Miguel Bastos Araújo (Geographer, Pessoa Award 2018), Runa Khan (Founder and Executive Director of the Friendship NGO and Country Chair of Global Dignity Bangladesh) and Sunita Narain (Writer and environmental activist, Director of the Centre for Science and Environment, New Delhi).

A Committee of Specialists, presided by Miguel Bastos Araújo, has evaluated, in a first stage, 136 nominations and presented a shortlist of 10 nominees, for the final assessment of the Grand Jury. This Committee was composed of figures such as Arlindo Oliveira (Full Professor at the Department of Information Technology, Instituto Superior Técnico,

Lisbon), Carsten Rahbek (Director of the Centre for Macroecology, Evolution and Climate, University of Copenhagen), Rik Leemans (Director of the Environmental Systems Analysis Group, Wageningen University) and Viriato Soromenho Marques (Professor of Political Philosophy Teacher at the University of Lisbon).

Massis Post | July 21, 2020

With boiler blast, the Neyveli power station becomes a fiery grave

The thermal power station in Neyveli, Tamil Nadu, suffered a boiler blast resulting in the death of 13 workers who were involved in a routine maintenance operation.

The Neyveli plant is the only one in the country that uses lignite as fuel.

With an emphasis on cutting costs, the plant reportedly used inadequately trained manpower for the maintenance operations.

The blast brings into focus the laxity in industrial safety standards, which could result in morbidity, fatality and environmental pollution.

On July 1, what should have been a routine maintenance check in Unit 5 of the Thermal Power Station- 2 (TPS-2) of the NLC India Limited (NLCIL), formerly the Neyveli Lignite Corporation (NLC) in Neyveli, Tamil Nadu, turned deadly for the 23 men who were still inside the Unit. The boiler in the unit blew while the men were carrying out their work. The blast was so powerful that 13 workers died since then (10 reportedly are still in the hospital). It is only two months since a similar blast in the nearby Unit 6 of the same station had claimed five lives and injured three critically.

This is the latest sordid incident in a spate of industrial accidents in India since the Covid-19 lockdown. Since May 2020, there have been at least four industrial accidents, two in Neyveli and two in Andhra Pradesh's Visakhapatnam, claiming at least 26 lives and injuring many more. India's already poor record on industrial safety has reached a new low following these recent incidents. A disaster in waiting

Out of the 23 persons who were in the unit when the accident took place, only six were employees of NLCIL, while the remaining 17 were labourers employed by a contractor. Labour unions in Neyveli allege that these labourers are not advised on any protocols for health and safety.

"NLCIL employees attend some health and safety training sessions but nothing is organised for these contract labourers. Even when something is organised, because a lot of the NLCIL management is Hindi or English-speaking now, all the instructions are lost in translation. This is because the labourers, who are from nearby villages, understand only Tamil," said C. Sugumar of the Labour Progressive Front (LPF), Neyveli. The LPF is a labour union in Tamil Nadu that is associated with the political party, the Dravida Munnetra Kazhagam (DMK).

Sugumar, who is familiar with the operations at Neyveli, added, "Cleaning these units is not like general housekeeping, you need to know what to do. There is a layer of highly flammable slag and wastage lined inside the unit. The smallest spark because of electricity or any other reason can set the whole thing on fire."

The union leader also flagged cost-cutting leading to such dire situations. He said, "instead of the focus being on the work done well and safely, it is on work being done cheaply and fast."

NLC India Limited power plant in Cuddalore, Tamil Nadu. The boiler blast on July 1 has claimed the lives of 13 workers till now. Photo by Amirtharaj Stephen/PEP Collective.

NLC India Limited power plant in Cuddalore, Tamil Nadu. The boiler blast on July 1 has claimed the lives of 13 workers till now. Photo by Amirtharaj Stephen/PEP Collective.

No lessons learnt

Following the incident, the state police department are investigating the blast and have filed cases under various sections of the Indian Penal Code. "We have filed an FIR against unknown persons for culpable homicide and criminal negligence. A senior officer has been appointed to investigate the blasts. Apart from this, NLCIL have also shut down all the units in TPS-2 and have formed inquiry teams," said Sree Abhinav, Superintendent of Police, Cuddalore district. Since the district collector had assumed office only a day before the incident, he declined to comment on the issue.

In a press release issued immediately after the accident, NLCIL management stated that a high-level inquiry into the accident will be conducted under the leadership of a retired director of the National Thermal Power Corporation Limited (NTPC) and that an internal inquiry is also being conducted. They also stated that the person-in-charge of the unit at the TPS-2 has been suspended.

Following the boiler blast in May, NLCIL had announced similar measures but clearly to no avail, as a worse accident took place just months later. A senior engineer at NLCIL who has worked at the company for more than three decades, who did not wish to be named, told Mongabay-India, "These are extremely sophisticated equipment and need highly trained personnel to work on them. In recent times, people without the required education and training are allowed to take up these tasks and when a situation arises, they do not know how to respond. These lignite type boilers are a different ball game and are highly volatile. Those without familiarity with these systems are at risk when they go inside for maintenance work."

The senior engineer also raised the issue of ageing equipment which are in dire need of upgrading. He said, "Also, many

of the units are over 25-30 years old and are due for a life expansion programme (LEP), this has not been done either."

According to the report Heat on Power published by the Centre for Science and Environment (CSE), New Delhi, in 2015, a thermal power plant's efficiency drops drastically after 25 years. An earlier report in CSE's environmental magazine, Down To Earth, had found that a large number of units in Neyveli are older than 25 years. According to the National Electricity Plan 2018 published by the Ministry of Power, Government of India, both the units where the accidents took place produce 210 megawatts of power and are overdue for retirement (older than 25 years). They have remained operational because of prolonged delays in commissioning new units.

T. Swaminathan, retired professor of Chemical Engineering, IIT-Madras, resonated the engineer's concern. "The safety culture is extremely poor in Indian industry and these employees at Neyveli are the latest victims of this. The mechanical integrity of the systems should be regularly checked and there should be inspectors who visit the units on a periodic basis to make sure all safety norms are adhered to. In Tamil Nadu, this is seldom carried out properly. Also, with increasing outsourcing of work, the contractors should be held liable for not informing workers about safety protocols. Companies such as NLCIL should make sure that the contractors ensure workers' safety. When they are sending people to work in such precarious conditions, this is the least they can do."

As the senior engineer said, "Once the NLC used to be looked up to for its efficiency and success but sadly, this is not the case anymore. I'm afraid that if the systemic issues are not fixed soon, an even worse accident is just around the corner.

Mongabay | July 9, 2020

Majority of the 'mysterious' diseases are 'missed' diagnosis: experts

They highlight lack of proper training in outbreak investigations and poor investigational facilities at district level, they say

The majority of the so-called 'mysterious' diseases are 'missed' diagnosis which highlights the lack of proper training in outbreak investigations and poor investigational facilities at the district level, said experts while participating in the webinar on "Mysterious diseases: The failure of disease surveillance in India", organised by the Centre for Science and Environment (CSE), here on Monday. Vipin M. Vashishtha, paediatrician, Mangla Hospital and Research Center, Bijnor, said often autopsies and histopathological examination are not performed to understand the nature of the diseases and this coupled with lack of proper team approach, coordination and collaboration works against the halting and spread of mysterious diseases.

"What is alarming today is the declining interest in infectious diseases and in their control and prevention. We must remember that each of these mysterious diseases — perhaps perceived as 'diseases of the poor' — have a potential to turn into a COVID-19-like pandemic. Today, COVID-19 has shown us that there is no class divide: the 'diseases of the poor' can affect and ravage the rich as well with equal ferocity," said Sunita Narain, Director-General, CSE, who anchored the meet.

Novel zoonotics

She said every year unnamed and unidentified diseases put hundreds of people at risk in India. This is despite an elaborate system for disease surveillance. The meet discussed whether India can afford to be complacent in the face of this

onslaught of emerging and re-emerging diseases — many of them novel zoonotics.

Dr. Rajan R Patil, epidemiologist, said mysterious outbreaks are like terrorist attacks for the public health system.

"They will keep happening if we don't invest in good disease surveillance."

Concluding the meeting, Ms. Narain said we must have the wherewithal to find the causes of these diseases and that they should be caught before it happens.

"Medical community can collaborate and work with the media to investigate first alarms," she said.

Hindu | Delhi | July 27, 2020

Mystery diseases grip India, but surveillance is almost non-existent – finds new Down To Earth Investigation

IBG News | July 29, 2020

Most veggies, fruits have toxic pesticide residue

Here's how to get rid of those and ensure the produce you consume is clean and healthy

A balanced diet must include a good portion of fruits of vegetables for the nutritional value it adds to the human body.

However, according to a March-2020 report by the Environmental Working Group (EWG), an America activist group, close to 70% of the fresh foodstuff sold in the United States contains residues of toxic pesticides.

The EWG arrived at the conclusion after an analysis of the latest test data from the United States Department of Agriculture (USDA).

The list contains many popularly consumed fruits and vegetables as susceptible to retaining the toxins they were exposed to, including apples, strawberries, celery, grapes, spinach, peaches, imported nectarines, cucumbers, sweet bell peppers, cherry tomatoes and potatoes.

The EWG also lists some vegetables and fruits as least contaminable in other words, those least likely to hold pesticide residue.

These include pineapples, avocados, eggplant, frozen sweet peas, onions, papayas, kiwis, grapefruit, cantaloupe, cabbage, cauliflower and sweet potatoes.

In fact, an article on www.healthyandnatural-world.com even states that avocados make for the cleanest produce, with only 1% of the

produce showing any detectable pesticides.

Why it is more worrisome in India

While federal organisations in the US recommend buyers to go for products certified as organic, in India the situation is even more dismal.

According to some experts including natural farmers, even some of the organic produces in India have close to 30% toxic residues from the pesticides used on them during farming.

However, the good news is that toxins can be washed off from most produces. Centre for Science and Environment (CSE), a not-for-profit, public-interest research and advocacy organisation in India founded by the late environmentalist Anil Agarwal in 1980, states that diligently washing fresh produce in cold water can reduce close to 80% of toxic residues from the produce.

We found some more ideas on the website of the Healthy and Natural World (HNW) on how one can clean vegetable and fruits with some basic items available at home.

Vinegar and water to the rescue

Some toxins give in easily to a homemade mix of white vinegar and water. Make a solution of 10% vinegar and 90% water and soak your fruits and vegetables in it for about 20 minutes. Then, rinse the produce in fresh water. Your fruits and vegetables are ready to be savoured.

While it is recommended not to try this with fragile fruits with porous skin, such as berries, for they might absorb too much of the vinegar, many report there is no change in taste or feel of the fruit after soaking it in the above solution.

If you do not have white vinegar at home, you may use lemon instead.

Salt and water rinse

Another basic ingredient found in most kitchens that also work wonders on removing toxins from fresh produce is salt. As per the CSE, soaking fresh produce in a 2% saltwater solution for some time will help remove pesticide residues from its surface.

Vinegar, salt and water

As per HNW, the best way to remove toxic residues from cabbage is by immersing it in a solution of vinegar, salt and water. In fact, a 10% salt and water solution also turned in good results, says the magazine.

Baking soda makes a clean sweep

While a baking-soda-and-water solution might not really be effective in ridding a produce such as apple off toxins that have penetrated its skin or peel, it could still clean the produce a lot better than just plain water would.

Lemon and hot water

This one's for apples that a tiny layer of wax coated over it for the extra effect of looks. Once you have cleaned those beautiful looking apples in cold running water, wash them in a mixture of lemon juice and warm water. The warm water ensures the layer of wax on the apple's skin gets washed off.

Deccan Chronicle | July 21, 2020

What are GM Foods and how have they secretly become part of our diet

Too much bandwidth has been lost on describing what genetically modified foods or GM foods are. As per the definition provided by the World Health Organisation (WHO), foods that have been produced

using genetically modified organisms (GMO) are called GM foods. The genetic modification artificially alters the DNA structure of the food and claims to create better versions of a specific vegetable or fruit. This doesn't occur naturally and is carried out using genetic engineering technology. It might come as a shock that GM foods can also include processed items such as ready-to-eat snacks, oils as well as crops like soy, cotton, brinjal, mustard, potato, corn, rapeseed etc.

India is out of the top five countries producing the most GM foods in terms of crop area after the United States (US), Brazil, Argentina & Canada. According to a 2018 study released by the Centre for Science & Environment (CSE), 21 out of 65 food samples tested from Delhi, Gujarat and Punjab were found GM positive. Out of those 21 GM foods, 16 were imported food items from Canada, Thailand, Netherlands, United Arab Emirates (UAE) and the US. Based on the findings, here are some GM foods that have secretly become part of our diet. 9 out of 16 samples tested for oil both imported and domestically produced were found to contain traces of genetic modification. This included 4 out of 7 imported canola oil (made from rapeseed) from Canada and UAE and all 5 of cottonseed oil from India. The labels of these oils did not mention the GM ingredients, flouting the norms. Sole sample of crude cottonseed oil from India also tested GM positive. If you have been consuming imported Canola oil or cottonseed oil, there is a strong chance that you are already consuming GM foods. Approximately 50% of imported foods that contained breakfast cereals, popcorns, croutons, corn puffs, corn snacks, corn syrup, soy tofu and sweet corn tested GM positive. However, no packaged foods manufactured in India were found to contain GM traces. Two food items that covered this category entirely were soy and corn. No GM warning was furnished on the product labels. If you like to shop soy or corn-based packaged foods imported from the aforementioned

countries, chances are that GM foods have been a part of your diet.

Genetically modified crops like BT Brinjal, GM-Mustard and Protato (protein-rich potato) are also produced in India. However, the initiative to release BT brinjal to the common public was blocked in 2010. GM Mustard has not received permission from the authorities yet and the approval is in the pipelines. Even the protein-rich modified 'protato' is also due to receive final approval for consumption any day. If allowed, GM foods will quickly and quietly become part of our daily diet just like genetically modified tomatoes. 2 out of 8 samples tested for infant foods such as soy-based milk formulas, hypoallergenic infant formulas and other lactose-free infant formulas imported from Netherland and the US were found GM positive. Soy protein isolate, soy oil and corn starch were main GM constituents in this category. The product labels did not disclose the presence of GM food. If you have used soy or cornstarch-based imported milk formulas for your baby, you might have unknowingly given it GM food. According to WHO, GM foods have genes that have been modified and artificially inoculated. Therefore, there are many health concerns around it. If proper risk-assessment is not carried out for GM food before releasing it to the public, it can cause toxicity, allergies, nutritional disbalance and many unintended effects on the body. However, advocates of GM foods claim that they are safe for human consumption and are even more nutritious than non-GM foods. It is therefore recommended to avoid GM foods until government clears them after proper risk-assessment. Specific studies providing concrete evidence on the correlation between consumption of GM foods and health are required.

Times of India | Delhi | July 22, 2020

[Rice farming practices in Asia may be fuelling antibiotic resistance](#)

By spraying common antibiotics on crops, farmers are exacerbating disease risk in India, Nepal, Bangladesh and elsewhere. Farmers in parts of Asia are spraying antibiotics deemed "critical" for human medicine on rice crops, raising fears they may be fuelling antibiotic resistance, say researchers. A 32-country survey of agricultural advisers found that many are prescribing the common human antibiotics streptomycin and tetracycline for insect infestations, fungal diseases and as general protection, as well as for bacterial infections.

In some years, nearly 10% of the management recommendations for rice in one region contained an antibiotic, found the study, published today in the newly-launched journal CABI Agriculture and Bioscience.

The usage is "alarmingly high" according to Phil Taylor, co-author of the research and training manager for the global plant clinic network, Plantwise. "They use it like a general tonic almost," he said.

"These data appear to indicate that the use of antibiotics in crop production is more extensive than most of the literature would suggest," Taylor and co-author, Rob Reeder, write.

Streptomycin is deemed "critically important" for human medicine by the World Health Organisation; while tetracyclines are "highly important".* Antibiotics, and resistant bacteria, may remain in the harvested crop and enter the human food chain, especially in food that is not thoroughly cooked.

Additionally, after spraying, much of the antibiotic can remain unspent in the soil. There are growing concerns this creates a reservoir of resistance in the environment. The research provides rare data on the use of antibiotics in arable farming in the developing world and supports anecdotal reports of their widespread use on crops in Vietnam, Cambodia and China, as well as claims by a leading research and advocacy organisation in India, the Centre for Science and Environment that crop farmers are flouting national protocols and

liberally using streptomycin and tetracycline.

Erik Millstone, a science policy expert and specialist in food safety policy at the University of Sussex who was not involved in the study, said: "Food safety regulators nationally and internationally have been doing a sloppy job letting this slip under the radar and the very least I hope the publication of this paper achieves is triggering a wave of attention and action on the part of national and international regulatory authorities."

'Plant doctors'

The research was carried out by plant pathologists from the Centre for Agriculture and Bioscience International, an intergovernmental agricultural research and dissemination organisation. CABI, the parent organisation of SciDev.Net, trains grassroots agricultural advisers in lower-income countries, who are often employed by national agricultural ministries. Taylor and Reeder, Plantwise data manager, examined more than 430,000 consultation records these "plant doctors" submitted between 2012 and October 2018.

There were no records of antibiotic recommendations in any of the 12 African countries in the study, nor in most of the countries from South and Central America; and use in Eastern Mediterranean countries was low.

But in Southeast Asia, which, using the WHO categorisation, includes India and Nepal, and the Western Pacific, plant doctors regularly recommended antibiotics – most commonly for rice, followed by tomato and citrus fruit. While 65% of these recommendations were for bacterial diseases – over which experts are divided on efficacy – one in five were for insects or mites, against which antibiotics have no effect.

In many cases, especially in Southeast Asia, "the recommendations were identical regardless of the diagnosis," said the researchers.

"We speculate that the agricultural advisors in Southeast Asia routinely combine an insecticide with a fungicide

and an antibiotic in a single application so as to deal with the current issue and to prevent/control other problems not yet present or residing at a low level."

Reeder and Taylor said there was "enormous variation" between the six Southeast Asian countries in the study – Bangladesh, India, Myanmar, Nepal, Sri Lanka and Thailand – but national figures were not included.

The data supports reports of widespread use in some countries. Ricardo Oliva, an expert in plant resistance at the International Rice Research Institute in the Philippines, said he has often seen streptomycin on sale to farmers in markets in Vietnam and Cambodia. "You see the boxes thrown in the field," he said.

And in November, the Delhi-based Centre for Science and Environment reported on its visits to 15 farmers across India chosen to represent a variety of terrains and produce.

All acknowledged using streptomycin on their crops, according to Amit Khurana, director of the CSE's food safety and toxins programme. Subsequent interviews and desk research revealed that different agricultural boards and government colleges in a variety of states recommend their use.

Disease risk

The degree of risk is controversial.

Advocates of antibiotic use argue there is "no proven evidence of resistance having spread from plant pathogenic bacteria to human or animal pathogens despite 50 years of use", said Reeder and Taylor. But Jan Leach, an expert in plant-pathogen interactions at Colorado State University said transmission in the opposite direction – resistance genes from bacteria that infect humans have been found in plant pathogens – has been demonstrated, meaning that "we know that there is movement of antimicrobial resistance between plant pathogens and human pathogens".

"We see the spread of diseases all the time and the big concern is that if you get

these resistances into these pathogen groups and then they move from country to country, or in wind patterns...we don't know how widespread these things can become," said Leach.

Experts disagree about whether it is ever justifiable to use antibiotics in crops.

Common diseases such as rice bacterial blight can be devastating, said Leach.

"These are resource-poor farmers and they are dealing with very tiny pieces of land.

And if they lose their crop they don't have food for their families...so these diseases are bad and they have a high impact."

But antibiotics often do not work even against bacterial diseases. Leach said it is better to adopt new varieties bred for resistance to local diseases and use good management practices. Oliva added: "It's my personal opinion but I would never advise the use of antibiotics [on rice]."

The researchers highlighted the lack of data on antibiotic use on crops.

An investigation by the Food and Agriculture Organisation, World Organisation for Animal Health and World Health Organisation found that only 3% of countries did regular assessment of the types and amounts of antibiotic used on crops.

Regulations also vary widely. Many countries have no legislation and some encourage the practice as a valuable tool against infection, the investigation said. The European Union and Brazil do not approve any antibiotic as an active ingredient in pesticides; some countries, such as the United States, allow their use in emergencies.

Last year, the US Environmental Protection Agency controversially allowed farmers to spray hundreds of tonnes of human antibiotics, including streptomycin, in orchards to combat the disease citrus greening. The FAO convened an expert meeting in 2018 to assess the risks posed by antibiotics entering the soil and the environment.

Jeffrey Le Jeune, food safety and quality officer at FAO, said: "We don't have very much data to say what is the relative

contribution to the whole human exposure through crops. That's the bottom line.

"We do know that they are used on crops and then they get in the environment. We do know that you can find antimicrobial resistant organisms on foods of plant origin that are intended for animal feed or human consumption. And we do know some outbreaks of food-borne illnesses associated with vegetables have had antimicrobial resistant organisms.

"But is that a red herring? How did those resistant organisms get there? Was it because they used antibiotics or antimicrobials? Or was it because there were antimicrobial resistant organisms coming in the irrigation water from a faulty wastewater treatment plant? We don't know.

"The point is it needs to be looked at and evaluated... but I think you could be safe to say that if you don't need it you shouldn't use it."

The Joint FAO/WHO Food Standards Programme is drawing up a revised code of practice on antibiotic use in food production, which will include new components on plant health. Meetings and working groups are planned into 2021. Khurana, from India's CSE, added: "It's difficult to understand how the global scientific community is really not focussed on this. The FAO [needs to] show a similar kind of aggression [towards crop antibiotic use] to the way they are showing it on the animal side."

Scroll | July 23, 2020

CSE's new assessment of antibiotic misuse in dairy sector says milk is not safe

BATHINDA: Centre for Science and Environment (CSE) on Wednesday organized an online meeting and consultation of key stakeholders on antibiotic use in the Indian dairy sector and to know how healthy is the milk, which people consume.

The event was attended by experts from the Food Safety and Standards Authority

of India (FSSAI); National Dairy Development Board (NDDB); World Health Organization (WHO); Department of Animal Husbandry and Dairying; Central Drugs Standard Control Organisation and representatives from specialised educational and research institutions, civil society bodies and concerned departments from different states.

It was pointed out that India is world's largest milk producer producing 188 million tonnes in 2018-19. Urban areas consume 52 percent of this milk and the unorganised sector, comprising milkmen and contractors, caters to 60 percent of this consumer base; the remaining demand being met by dairy cooperatives and private dairies representing organised sector. Researchers point towards inadequate focus on testing for antibiotic residues in the milk collected by some state milk federations, which process it and sell packaged milk under various brands.

CSE has recently published its assessment of antibiotic use in the country's dairy industry and its findings are disturbing.

"We have found that antibiotics are extensively misused in the dairy sector; antibiotic residues remain largely untested in milk, an integral part of Indian diets, particularly of children. While we continue to struggle against Covid-19, we are staring at another pandemic like situation – that of antibiotic resistance fueled by the way we are producing our food, which has become chemical-intensive," said CSE director general Sunita Narain, speaking at the meeting.

The assessment shows that dairy farmers indiscriminately use antibiotics for diseases such as mastitis (infection/inflammation of the udder), a common ailment in dairy animals. Often, these include critically important antibiotics (CIAs) for humans – the World Health Organization (WHO) has warned that these antibiotics should be preserved in view of the growing crisis of antibiotic resistance. These CIAs include aminoglycosides and penicillins as well as third-generation cephalosporins and

fluroquinolones, which are considered highest priority critically important antibiotics (HPCIAAs).

These antibiotics, despite against law, are easily available without the prescription of registered veterinarian. Farmers often inject animals based on their own judgement of signs and symptoms of a disease without any veterinary supervision.

"Farmers often sell milk while the animal is under treatment, which increases the chances of antibiotic residues in the milk. While milk sold directly to consumers is not tested, contrary to what one would expect, processed milk sold in packets is also largely unchecked for antibiotic residues," says Amit Khurana, programme director, food safety and toxins programme, CSE.

"Information shared by various organisations and experts suggest that ethno-veterinary medicines, better management of sub-clinical mastitis and good farm management could contribute towards reducing antibiotic misuse," Khurana says.

Times of India | Delhi | July 30, 2020

Residues remain largely untested in milk. We are concerned, says CSE director general

Residues remain largely untested in milk. We are concerned, says CSE director general

Antibiotics are extensively misused in the dairy sector and its residues remain largely untested in milk, which is an integral part of Indian diets, particularly of children, noted a recently published survey report by the Centre for Science and Environment (CSE) which on Wednesday organised an online meeting on antibiotic use in the dairy sector. We are concerned. While we continue to struggle against COVID-19, we are staring at another pandemic-like situation — that of antibiotic resistance fuelled by the way we are producing our food, which has become chemical-intensive," said CSE director general Sunita Narain.

The meeting was attended by a wide spectrum of experts and participants from the Food Safety and Standards Authority of India (FSSAI), the National Dairy Development Board (NDDB); the World Health Organization (WHO), the Department of Animal Husbandry and Dairying, the Central Drugs Standard Control Organisation and representatives from specialised educational and research institutions, civil society bodies, and departments concerned from States.

Growing crisis of resistance

The CSE's assessment shows that dairy farmers indiscriminately use antibiotics for diseases such as mastitis (infection/inflammation of the udder), a common ailment in dairy animals. Often, these include critically important antibiotics (CIAs) for humans — the WHO has warned that they should be preserved in view of the growing crisis of antibiotic resistance.

Watch | 41% milk samples of poor quality, 7% samples unfit to consume says FSSAI survey

India is the world's largest milk producer — it produced a massive 188 million tonnes in 2018-19. Urban areas consume 52% of it, and the unorganised sector, comprising milkmen and contractors, caters to 60% of this consumer base; the remaining demand is met by dairy cooperatives and private dairies which represent the organised sector.

"The abused antibiotics — despite a law against it — are easily available without the prescription of a registered veterinarian and stocked at farms. Farmers often inject animals based on their own judgment of signs and symptoms of a disease without any veterinary supervision," noted the CSE in its report.

Inadequate focus

The CSE researchers also point towards inadequate focus on testing for antibiotic residues in the milk collected by some State federations, which process it and

sell packaged milk and dairy products under popular brands.

Also read: Milk: A1, A2 or entirely avoidable?

"Farmers often sell milk while the animal is under treatment, which increases the chances of antibiotic residues. While milk sold directly to consumers is not tested, contrary to what one would expect, processed milk sold in packets is also largely unchecked for antibiotic residues," says Amit Khurana, programme director, food safety and toxins programme, CSE
Hindu | Delhi | July 30, 2020

[CSE's new assessment of antibiotic misuse in dairy sector says milk is not safe | India News](#)
Whatsaup | Delhi | July 30, 2020

[CSE's new evaluation of antibiotic misuse in dairy sector says milk isn't protected | India Information](#)
Everyday Newsupdate | Delhi | July 30, 2020

[Is that milk safe? CSE's new assessment of antibiotic misuse in the dairy sector](#)
IBG News | July 31, 2020

As cases rise, surge in bio-waste raises a fresh challenge in Covid fight

Used protective gear, masks, gloves and syringes add to environmental concerns as well as financial costs of hospitals. There has been a near five-fold increase in biomedical waste generated on account of Covid, with used protective gear, masks, gloves and syringes adding to environmental concerns as well as financial costs of hospitals.

While the total quantity of waste being generated in the country due to Covid is not known, several states in order to meet the increased load have started outsourcing the collection of these items while also roping in spare incineration units in the cities to dispose of such material.

"We are disposing around 1,500 PPE kits a day across our group's hospitals. In normal times, we had one fifth the amount of present medical waste...We have to start thinking of reusability of these items or it will become a huge problem," said Alok Roy, Ficci health services committee and chairman, Medica Group.

The Central Pollution Control Board (CPCB), which had issued guidelines for Covid-19 waste management for hospitals, care and isolation centres has also started an app to record all biomedical waste being generated from hospitals.

"It is certainly a concern...We were among the very first ones who brought out the guidelines for medical waste disposal. We have proactively revised and improved our guidelines...Now implementation is the focus," said, Prashant Gargava, member secretary, CPCB.

While the CPCB app, being used in 27 states, has recorded generation of 60 tonnes of Covid waste everyday, the mayor of Municipal Corporation of Delhi-North, Jai Prakash said that 40-45 tonnes

is getting added daily from his area itself which includes the Lok Nayak hospital, one of capital's largest Covid facilities. He said that the medical waste collection has been outsourced to a private company since government capacity might fall short. "Now since home isolation, containment zones have increased, we also have to ramp up our capacity...We also mark the houses where people are quarantined to ensure proper waste collection," Prakash added.

CPCB too, taking note of the limited capacity available to handle biomedical waste of unprecedented volumes has allowed "other bio-hazardous waste facilities" to be roped in and also permitted disposal of waste in industrial incinerators wherever available.

"In rural areas, where common disposal facilities may not be available in the vicinity or transportation issues may not be adequate, we are suggesting deep burial," Gargava added.

CPCB has also suggested that medical waste such as masks and gloves at homes be stored in a paper bag for 72 hours before being disposed of in a separate bag.

Ramesh Kumar S, COO of Aster CMI Hospital, which started handling Covid-19 patients recently, has started following a strict protocol to manage Covid waste - they are packed in double-layered bags that are bar-coded and then picked up in a separate vehicle. From the hospital to the incinerator the waste can be tracked due to barcoding.

While detailed guidelines are in place, the bigger challenge is lack of awareness which has led to the problem of segregating waste at source putting garbage collectors at a risk.

"We have just finished an inspection. The systems are very well laid down and properly managed when the waste comes from a registered health care facility. However, since many people are in home

isolation, that's where the problem is," said Sunita Narain, director general, Centre for Science and Environment. Environmental experts are also concerned about the temporary health facilities that accommodate symptomatic patients. "The focus at these facilities is, from all accounts, more on infrastructure and on health care staff. Little or no attention is paid to the availability of trained staff, or the systems in place, to ensure safe disposal of contaminated waste," said Leena Srivastava, deputy director general-Science, International Institute for Applied Systems Analysis.

Not just care centres, crematoriums too are in the line of fire. CPCB for instance received complaints of PPEs being thrown around without any precaution in a south delhi crematorium.

The pollution control body is of the view that PPEs which are made entirely of plastic can be disinfected instead of getting incinerated in order to minimise the environmental impact.

Hospitals are trying to minimise the financial impact too by encouraging reuse of items wherever possible and avoid disposable sheets, patient robes among others.

Not surprisingly so, since in Mumbai, on an average a hospital bill to manage this waste has gone up more than five times to nearly Rs 400,000-450,000 a month from the pre-covid days.

Anoop Lawrence, Operations Head at Global Hospitals, Mumbai, said BMC has outsourced the job to manage Covid waste, and is charging an additional Rs 100 per kg of waste. "From food containers, to bed linen to patient dress, all are soaked in hypo solution first and then sent through the laundry cycle...As the patient load has kept on growing, these items are getting reused, but with care," Lawrence said.

Hospitals in Mumbai have requested the municipal authority to allow them to pass on a part of the cost to the patient, given that treatment charges are capped. Soon such a notification is expected where the

patient may bear a part of the cost of the Covid 19 waste to the tune of Rs 300-325 per day.

It has been an uphill task for the waste management firms too - finding manpower to do this dreaded job and managing the growing load.

Experts feel that while the government has recognised the role of urban local bodies in handling medical waste, whether they are being adequately trained and provided with protective gear will determine the success of such efforts.

"We now need to move our messaging one step further to create a mass sensitivity to practices of waste disposal...We also need to provide both guidance and PPE to rag-pickers and the sanitation workers across the country -- which while necessary will add to the waste being generated," Srivastava added.

Business Standard | Delhi | July 2, 2020

World's e-waste 'unsustainable', says UN report citing China, India and U.S

NEW DELHI/GENEVA (Reuters) - Across the river from Delhi's Red Fort, the grim neighbourhood of Seelampur lives off what consumers in the modern world throw away - their broken or obsolete electronic and electrical goods.

A scrap dealer piles up discarded TV sets before dismantling them at a scrap yard in Ahmedabad, India, July 2, 2020.

Home to one of the world's largest markets for e-waste, Seelampur exemplifies the challenge highlighted in a U.N.-led report released on Thursday.

The Global E-waste Monitor 2020 report found that the world dumped a record 53.6 million tonnes of e-waste last year. Just 17.4% was recycled.

"Even countries with a formal e-waste management system in place are confronted with relatively low collection and recycling rates," the report said.

China, with 10.1 million tonnes, was the biggest contributor to e-waste, and the United States was second with 6.9 million tonnes. India, with 3.2 million tonnes, was third. Together these three countries accounted for nearly 38% of the world's e-waste last year.

While the overall damage done to the environment from all the un-recycled waste may be incalculable, the message from the report was conclusive: "The way in which we produce, consume, and dispose of e-waste is unsustainable."

Global warming is just one issue cited by the report as it noted 98 million tonnes of carbon dioxide equivalents were released into the atmosphere as a result of inadequate recycling of "undocumented" refrigerators and air conditioners.

This year's coronavirus lockdowns have exacerbated the e-waste problem.

People stuck at home are de-cluttering, and because of the lockdowns there are few workers collecting and recycling the junk, Kees Balde, a senior programme officer with the sustainable cycles programme at the United Nations University, another contributor to the report, told Reuters.

NEW CONSUMERS, MORE JUNK

What is happening in India and China is symptomatic of a wider problem in developing countries, where demand for goods like washing machines, refrigerators and air conditioners is rising rapidly.

"In middle- and low-income countries, the e-waste management infrastructure is not yet fully developed or, in some cases, is entirely absent," the report said.

Dinesh Raj Bandela, deputy programme manager at the Centre for Science and Environment, a New Delhi-based research and advocacy body, said India's focus on e-waste had to go beyond collection, and manufacturers should be encouraged to produce consumer goods that last longer and are less toxic.

Although India is the only country in South Asia to draft legislation for e-waste, its collection remains rudimentary.

In Seelampur, the maze of filthy lanes are filled with scrap shops where thousands of people work, picking apart whatever is salvageable from the junk gathered from across north India.

Outside each shop there are piles of old monitor screens, desktop computers, broken landline telephones, mobile handsets, televisions, voltage stabilisers, air-cons, refrigerators, microwaves, vacuum cleaners and washing machines. Vines of old electric cable are strewn or rolled over the mountains of electronic trash.

Shopkeepers and workers are extremely suspicious of any outsider walking through the narrow lanes, especially journalists. Mohammed Abid, a scrap e-waste dealer, who was willing to speak, denied that ways of handling e-waste in Seelampur broke any laws or posed any dangers.

"There are certain jobs that create a lot of problem for the environment, but in this market no such work is done that affects the environment or increases the pollution – nothing of that sort is done here," he said, while the stench from a nearby open drain filled the air.

Reuters | July 3, 2020

[Housing and Urban Affairs Minister launches toolkit for Swachh Survekshan 2021](#)

Housing and Urban Affairs Minister Hardeep Singh Puri today launched the toolkit for Swachh Survekshan-2021, the sixth edition of the annual cleanliness survey of urban India conducted by Ministry of Housing and Urban Affairs. Addressing on the occasion, Mr Puri said, every year, the Swachh Survekshan is redesigned innovatively, to ensure that the process becomes more robust, with focus on sustaining the behaviour change.

He said, like in the last year, keeping in mind the Ministry's efforts towards

ensuring sustainability of the sanitation value chain, the Swachh Survekshan-2021 indicators focus on parameters pertaining to wastewater treatment and reuse along with faecal sludge. Mr Puri announced a new category of awards titled Prerak Daaur Samman as part of Swachh Survekshan-2021. The Prerak Daaur Samman has a total of five additional sub-categories -Divya (Platinum), Anupam (Gold), Ujjwal (Silver), Udit (Bronze), Aarohi (Aspiring) - with top three cities being recognized in each.

In a departure from the present criteria of evaluating cities on population category, this new category will categorize cities on the basis of six select indicator-wise performance criteria. These are segregation of waste into Wet, Dry and Hazardous categories, processing capacity against wet waste generated, processing and recycling of wet and dry waste, construction and demolition waste processing, percentage of waste going to landfills and sanitation status of cities. The Minister also touched upon how Swachh Survekshan has become a tool for citizen engagement in the spirit of a true Jan Andolan.

Secretary of Ministry of Housing and Urban Affairs Durga Shanker Mishra made a detailed presentation on the methodology and various parameters of Swachh Survekshan-2021. This year, the focus on citizen participation has taken a notch higher by introducing indicators that encourage innovations led by citizens, start-ups, entrepreneurs and Swachhata Champions amongst others.

A key highlight of the event was also the launch of the integrated Swachh Bharat Mission-Urban MIS portal. Over the years, digital innovations have always been at the forefront of the Mission enabling scaling up and better monitoring of outcomes along with increased citizen engagement. The launch of the integrated MIS portal is an effort by the Ministry to bring the numerous digital initiatives on a

single platform thus ensuring a unified and hassle-free experience for states and cities and leading the way towards the creation of not just a Swachh but a truly digital India.

The virtual event also saw the signing of the Engagement and Coordination Arrangement between the Ministry and the USAID which is a continuation of the Memorandum of Understanding on co-operation in the field of WASH that was signed between Government of India and USAID in 2015. It was followed by a webinar on 'Segregation at Source: Key to Solid Waste Management' which was attended by over 1,000 State and Urban Local Body officials and other stakeholders.

The workshop saw presentations from lighthouse cities such as Navi Mumbai, Surat, Khargone and Karad who showcased their source segregation models along with the release of a report 'Segregate, Segregate, Segregate' by the Centre for Science and Environment .

A workshop on 'Source Segregation: The Key to Solid Waste Management' was also organized on the sidelines and was attended by over 1,000 State and Urban Local Body officials and other stakeholders. Similarly, the crucial issues of legacy waste management and remediation of landfills have also been brought to the fore in this edition of Survekshan.

All India Radio| July 3, 2020

[Record 53.6 million tonnes of e-waste dumped globally last year, says UN report](#) **[Social Sharing](#)**

Just 17.4% of the world's discarded electronics was recycled

Across the river from the Red Fort in Delhi, India, the grim neighbourhood of Seelampur lives off what consumers in the modern world throw away — their broken or obsolete electronic and electrical goods.

Home to one of the world's largest markets for e-waste, Seelampur exemplifies the challenge highlighted in a UN-led report released Thursday. The Global E-waste Monitor 2020 report found that the world dumped a record 53.6 million tonnes of e-waste last year — equivalent to the the weight of 350 cruise ships the size of the Queen Mary 2, or enough to form a line 125 kilometres long. That's an increase of 21 per cent in five years, the report said.

Just 17.4 per cent of it was recycled, meaning that an estimated \$57 billion worth of gold, silver, copper, platinum and other high-value, recoverable materials used as components were mostly dumped or burned rather than being collected for treatment and reuse.

"Even countries with a formal e-waste management system in place are confronted with relatively low collection and recycling rates," the report said. According to the report, the amount of e-waste produced globally in 2019 is equivalent to the weight of 350 cruise ships the size of the Queen Mary 2, pictured. (Andrew Vaughan/The Canadian Press)

China, with 10.1 million tonnes, was the biggest contributor to e-waste, and the United States was second with 6.9 million tonnes. India, with 3.2 million tonnes, was third. Together these three countries accounted for nearly 38 per cent of the world's e-waste last year.

The new report also predicts global e-waste — discarded products with a battery or plug — will reach 74 million tonnes by 2030, almost a doubling of e-waste in just 16 years.

A charger that works in all new smartphones? EU pushes Apple to use same technology as rivals

E-waste is a health and environmental hazard because it contains toxic additives or hazardous substances such as mercury.

While the overall damage done to the environment from all the unrecycled waste

may be incalculable, the message from the report was conclusive: "The way in which we produce, consume and dispose of e-waste is unsustainable."

Global warming is just one issue cited by the report as it noted 98 million tonnes of carbon dioxide equivalents were released into the atmosphere as a result of inadequate recycling of "undocumented" refrigerators and air conditioners.

A worker scoops metal trimmings from electronic parts to be processed into metal alloy inside Integrated Recycling Industries at Calamba, Laguna, in the Philippines. The report said just 17.4 per cent of e-waste produced last year was recycled. (Cheryl Ravelo/Reuters)

This year's coronavirus lockdowns have exacerbated the e-waste problem.

People stuck at home are de-cluttering, and because of the lockdowns there are few workers collecting and recycling the junk, Kees Balde, a senior program officer with the sustainable cycles program at the United Nations University, another contributor to the report, told Reuters. New consumers, more junk

What is happening in India and China is symptomatic of a wider problem in developing countries, where demand for goods like washing machines, refrigerators and air conditioners is rising rapidly.

"In middle- and low-income countries, the e-waste management infrastructure is not yet fully developed or, in some cases, is entirely absent," the report said.

Electronic waste is pictured at a North Vancouver recycle depot in 2018. (Jonathan Hayward/The Canadian Press)

Dinesh Raj Bandela, deputy program manager at the Centre for Science and Environment, a New Delhi-based research and advocacy body, said India's focus on e-waste has to go beyond collection, and manufacturers should be encouraged to

produce consumer goods that last longer and are less toxic.

Although India is the only country in South Asia to draft legislation for e-waste, its collection remains rudimentary.

In Seelampur, the maze of filthy lanes is filled with scrap shops where thousands of people work, picking apart whatever is salvageable from the junk gathered from across north India.

Outside each shop there are piles of old monitor screens, desktop computers, broken landline telephones, mobile handsets, televisions, voltage stabilizers, air conditioners, refrigerators, microwaves, vacuum cleaners and washing machines.

As electric vehicles age, here's how the batteries are finding a second life

Vines of old electric cable are strewn or rolled over the mountains of electronic trash.

Shopkeepers and workers are extremely suspicious of any outsider walking through the narrow lanes, especially journalists. Mohammed Abid, a scrap e-waste dealer, who was willing to speak, denied that ways of handling e-waste in Seelampur broke any laws or posed any dangers.

"There are certain jobs that create a lot of problem for the environment, but in this market no such work is done that affects the environment or increases the pollution — nothing of that sort is done here," he said, while the stench from a nearby open drain filled the air.

CBC | July 3, 2020

Lockdowns have exacerbated e-waste crisis

Meena Janardhan

India, with 3.2 million tonnes, was the third biggest contributor to global e-waste according to the Global E-waste Monitor 2020 report released recently. The United

Nations (UN) report found that the world dumped a record 53.6 million tonnes of e-waste last year. Of this, just 17.4% was recycled.

China, with 10.1 million tonnes, was the biggest contributor to e-waste and the United States was second with 6.9 million tonnes. Together the three countries accounted for nearly 38% of the world's e-waste last year.

"Even countries with a formal e-waste management system in place are confronted with relatively low collection and recycling rates," the report said.

"Although India is the only country in South Asia to draft legislation for e-waste, its collection remains rudimentary," it added.

According to a recent ASSOCHAM-NEC study, India generated e-waste of about two million tonnes per annum, while it recycled about 438,085 tonnes per annum. The Centre for Science and Environment points out that the number of countries that have adopted a national e-waste policy, legislation or regulation has increased from 61 to 78 and includes India. While this is certainly a positive trend, it is far from the target set by the International Telecommunication Union to raise the percentage of countries with an e-waste legislation to 50%.

While the overall damage done to the environment from all the un-recycled waste may be incalculable, the warning message from the report was decisive, "The way in which we produce, consume, and dispose of e-waste is unsustainable." Global warming is just one issue cited by the report as it noted 98 million tonnes of carbon dioxide equivalents were released into the atmosphere as a result of inadequate recycling of "undocumented" refrigerators and air conditioners.

This year's coronavirus lockdowns have exacerbated the e-waste problem.

According to the report, people stuck at home are de-cluttering, and because of the lockdowns there are few workers collecting and recycling the junk. What is happening in India and China is symptomatic of a wider problem in

developing countries, where demand for goods like washing machines, refrigerators and air conditioners is rising rapidly.

"In middle- and low-income countries, the e-waste management infrastructure is not yet fully developed or, in some cases, is entirely absent," the report said. It estimated that the precious metals contained in this waste was worth \$57 billion in valuable metals like gold, silver, copper and platinum.

The UN report points out that in 2019, 82% percent of the world's e-waste was left to be dumped or burned rather than recycled. Asia generated the greatest volume of e-waste in 2019 — some 24.9 million tonnes, followed by the Americas (13.1 million tonnes) and Europe (12 million tonnes). Africa and Oceania generated 2.9 and 0.7 million tonnes respectively.

World e-waste production will reach 120 million tonnes per year by 2050 if current trends continue, according to UN statistics. E-waste is any discarded electronic component, including laptops, batteries, cellphones, solar panels and more. Recent studies reveal that around 50 million tons of e-waste are produced every year, leading up to an e-waste tsunami.

Currently considered the fastest-growing source of waste today, more than 6 kg of e-waste for every person was generated in the past few years. This is equivalent in weight to all the commercial aircraft ever built.

E-waste can be toxic and is not biodegradable. Globally, only 20% is dealt with appropriately. Rest ends up in landfills, or is disposed of by informal workers in poor conditions. E-waste in landfills contaminates soil and groundwater with metals such as lead, cadmium, beryllium, and mercury, putting food supply systems and water sources at risk.

It also exposes workers to these hazardous and carcinogenic substances and to health problems like bronchitis, Wilson's disorder, and kidney damage. Children and women are particularly vulnerable.

A Meticulous Market Research report states that currently, the overall collection and recycling rate for e-waste is very low (20%-25%) as compared to the total amount of e-waste generated, showing the improper documentation and collection methods across the world. The fate of majority of the e-waste generated is still unknown. In addition, the high cost of recycling e-devices results into generation of high amount of trashed e-waste. In most of the countries, e-waste is treated as the general waste which depicts lack of legislation in place, and lack of awareness about health and environmental hazards caused by e-waste. Thus, to overcome all these challenges, it is mandatory to keep high focus on e-waste management across the world.

Gulf Today | July 8, 2020

58,000 MT solid waste dumped daily without processing: Housing and Urban Affairs Ministry

Out of about 1,47,613 metric tonnes of solid waste generated daily across the States, 89,545 metric tonne (or 61 per cent) is processed while the remaining waste is dumped in the open. All statutory towns/cities of the country have been mandated under Solid Waste Management (SWM) Rules, 2016 for scientific disposal of its municipal solid waste. However, many municipal bodies continue to dump waste in open spaces, rivers, and nullahs. The data presented by the Ministry of Housing and Urban Affairs to Rajya Sabha in March this year shows that Chhattisgarh is the only State which process 90 per cent of the daily solid waste generated. Gujarat and Madhya Pradesh process 87 per cent of the waste followed by Himachal Pradesh and

Telangana (78 per cent). Rajasthan, Kerala and Goa fall in the category of States that process 70-72 per cent solid waste. Tamil Nadu processes 68 per cent of its waste. Andhra Pradesh and Punjab process 63 per cent and 61 per cent garbage respectively. Jharkhand and Nagaland process 60 per cent waste. All other States process less than 60 per cent garbage they generate daily. Meghalaya (4 per cent) and West Bengal (9 per cent) process less than 10 per cent of the waste it generates daily as per the data. Arunachal Pradesh is the only State which does not process any waste.

Land scarcity

Experts have pointed out that municipal bodies themselves are dumping waste onto landfill sites, which are overflowing. Open dumping of waste leads to polluting the surrounding land, groundwater and air. Many cities that running out of land to dump waste are transporting it to smaller towns, suburbs and villages.

"The country cannot be clean until it learns to manage its waste. Governments struggling against massive and ever-growing quantities of solid waste have learned a crucial lesson: there simply isn't any space for landfills in India today," stated New Delhi-based Centre for Science and Environment's recent report on waste segregation.

The report added that not only is land scarce, but people living near proposed landfill sites often protest against such projects, making them unviable or litigious. "This Not-In-My-Backyard (NIMBY) attitude is good news if it leads to the processing of waste, for reuse as compost or in recycling" CSE added.

Under Swachh Bharat Mission-Urban (SBM-U), Central assistance/grants-in-aid up to 35 per cent of the approved Solid Waste Management (SWM) project cost is provided to the States. So far, ₹5,109.82 crores have been released against the allocation of ₹7,365.82 crores under the SWM component.

Business Line | Delhi | July 16, 2020

Why Coronavirus Outbreak Is Piling Pressure On India's Biomedical Waste Disposal System

Protocol says used disposable masks, gloves, aprons, head covers et al should be incinerated or given a burial — at least 100 feet deep. This is not happening.

A stray dog fools around with a blue plastic coverall in a video shot in Coimbatore—endearing footage for those who know how playful dogs are, happily making a game out of anything. The image reflects a sinister side, too. Not of the dog, but of the creaking waste disposal system in a country struggling to contain an out-of-control contagion: the new coronavirus. Was the PPE suit flayed around by the dog contaminated, used in the fight against the COVID-19 outbreak? How did the dog get it? Did it fall from a passing ambulance? Or, was it discarded recklessly? The reason is not known, but it's the second instance of a PPE kit found on a Coimbatore road. Similar cases abound across India. "Masks and sanitiser bottles have become a common sight on roads," says Joginder Kumar, a garbage collector with the Municipal Corporation of Ludhiana. He empties out bins onto trucks and clears roads of this new kind of litter—worn masks, empty hand sanitiser bottles and, sometimes, discarded PPE kits too. "That spiky rascal could be hanging on to anyone of these," he says with a heavy sigh, making no pretense to hide the fear of catching an infection from such waste.

The Covid outbreak has put India's unsophisticated garbage treatment system—especially its inadequate handling capacity for biomedical waste—to a massive test. The nation of 1.3 billion people produced nearly 1,700 tonnes of biomedical waste a day between 2016 and 2018, according to Parliament data. That adds up to more than 600,000 tonnes a year—equivalent of a million full-size, adult African elephants stacked together on a weighing scale. In 2018, an

Assocham-Velocity joint study predicted that India will generate about 775.5 tonnes of medical waste a day by 2022, growing at a rate of about seven per cent. Data for 2019 and this year—a global pandemic year—are trickling in, but not quite adequate and comprehensive for publication. “No ground estimate on how much additional waste has been generated during the pandemic is done,” says Dinesh Raj Bandela of the Centre for Science and Environment.

The situation is grim and the government has taken note of it. The Prime Minister’s Science, Technology and Innovation Advisory Council (PM-STIAC) invited individuals, startups, corporate houses, entrepreneurs, and research institutions to a “COVID-19 Biomedical Waste Treatment: An Innovation Challenge”. They were asked to come up with solutions for collection, disposal/treatment of waste—for instance, masks, gloves, and PPEs used in hospitals, airports, railway stations, households, shops et al—generated during this pandemic. The government promised monetary support to the innovators. “We are looking for standalone units that could be installed in housing complexes, markets, etc,” an official says.

There is even a bigger challenge: the lack of waste etiquette among the people. So, what is medical waste? Broadly, any waste generated during diagnosis and treatment, which includes contaminated items such as human tissues, blood, body fluids, equipment (beddings, syringes, sharp objects, dressings, faeces, etc). In these Covid times, the definition has been broadened. The Central Pollution Control Board (CPCB) explains that waste that can infect people with coronavirus fall in Red and Yellow categories. RED bin—used PPE such as goggles, face shield, splash-proof apron, plastic coverall, hazmat suit, gloves, lab equipment like plastic vials, tubes, pipette tips etc. YELLOW bin—masks (the N95 included), head cover/cap, shoe cover, disposable linen,

gown, non-plastic or semi-plastic coveralls, faeces from COVID-19 patient using bed pans or disposable diapers. The pollution watchdog recommends fast disposal of such waste.

That brings to the fore the question of segregating waste. Is it done? “No comments,” is the CPCB official’s answer. There is lack of awareness among the people as well as ground-level garbage collectors. There have been instances of waste from “containment zones” or infection hotspots getting mixed with those from “safe localities” despite express directions to sanitation staff to separate the two. Besides, people hardly follow the rules, the standard operating procedure. So much so that, in Noida for instance, residents were asked to not throw used masks and gloves into dustbins; they should cut those into pieces, put them in a paper bag for three days before discarding them with regular garbage. Also, they are advised not to put biomedical waste such as disposable syringes, faeces or urine diapers, in the trash. “Society’s perception and practice of indiscriminate disposal of items can be a potential source of infection to municipal workers. People should dispose of used napkins, tissues, empty sanitiser bottles in a separate bag, to ensure the safety of municipal workers and ragpickers. It will ensure garbage collection and plastic recycling don’t get affected,” says Deepak Saxena, professor, Indian Institute of Public Health.

Photograph by Farhan Khan

But how much of it is recycled? How much of it reaches landfills? How much of it is incinerated to stop the spread of contagious diseases? The pollution board official says waste management is a state subject. Does that mean there’s no uniform or collective responsibility? The country has, according to the CPCB, more than 3,000 dump sites. But that’s not where hazardous medical waste should go. The protocol says used disposable

masks, gloves, aprons, head covers and so on should be incinerated or given a burial—at least 100 feet deep. India has over 1,200 registered plastic recyclers. But the PPE suits manufactured in India cannot be recycled. A company owner says: “Polypropylene is being used for these kits that are available and cheap.” Recycling of poly materials is high and India has no facility for this. Since coveralls are widely used now—from beauty parlours and salons to weddings and hospitals—the question is where will the waste go?

Biomedical waste disposal workers are not covered by insurance for Covid fighters.

No doubt, Kiran Kumar of Ahmedabad looks skyward and says a little prayer before leaving home to work—that self-assuring, empyrean safety shield against a pathogen invisible to the naked eye now ravaging the world. Kumar has a job as hazardous as, say, defusing an improvised explosive device with the timer ticking. The only difference is that this bomb is hidden, comes in clusters: the new coronavirus, or SARS-CoV-2. He is a public sanitation worker assigned to collect, segregate and dispose of biohazardous waste from hospitals treating COVID-19 patients. He and around 15,000 more like him risk contracting secondary infection every day from the plastic bags filled with used syringes, sharps, catheters, face masks, hazmat suits, and all conceivable clinical garbage. They cover up in overalls, but the risk they take is not covered—no insurance, poor pay, and no acknowledgement either from the government or people. Kumar works for a private biomedical waste management company. Fear stalks him at every step, every litter he picks up. But he can’t quit. In a shuttered economy, jobs are hard to come by.

The CPCB protocol mandates companies handling biomedical waste to ensure maximum safety to their workers—regular

sanitisation plus PPE, including three-layer masks, splash-proof aprons/gowns, gloves, gumboots and safety goggles. Well, that means the expenditure shoots up. “The operators are providing equipment and the measures have raised biomedical waste disposal costs from Rs 25-40 a kg to Rs 60-100 a kg. In some cases, even more,” says Vinod Kachhadia, president, Common Biomedical Waste Treatment and Disposal Facility Association of India. Workers are paid more, too, because “nobody wants to risk their lives”. The association is upset over the government’s attitude. The workers of biomedical waste plants are not part of the insurance scheme for those fighting COVID-19. The association wrote to the PM and several ministers. As Kachhadia waits for a response, he asks if the government will take responsibility of the family of a worker in case he catches Covid and dies? For the answer, the government and the people may have to de-clutter some of the litter fogging their perception about biomedical waste—the risk a contaminated coverall in a dog’s mouth poses to the masses.

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Outlook | July 17, 2020

<https://www.aljazeera.com/indepth/inpictures/pictures-india-landfill-site-covid-19-risk-scavengers-200726101601420.html>

In Pictures: India landfill site a COVID-19 risk for scavengers

Spread over 52 acres and rising 60 metres, site littered with used test kits, protective gear and blood-stained cotton. Mansoor Khan and his wife Latifa Bibi have been collecting scraps of plastic and other items at an enormous landfill site in the Indian capital for nearly 20 years. The \$5 they earn a day enable their three children to go to school, seeking a future better than the livelihoods their parents have been able to eke out. But over the past few months, increasing amounts of biomedical waste have been arriving at the dump - a result, experts say, of the novel coronavirus pandemic and a huge risk for those who work there. Spread over 21 hectares (52 acres) and rising more than 60 metres (197 feet), the site is littered with used coronavirus test kits, protective gear and medical dressings stained with blood and pus - among hundreds of tonnes of waste coming daily from facilities across the city, including small hospitals and nursing homes. Sifting through the rubbish with their bare hands, hundreds of scavengers, including children, expose themselves daily to a disease that has infected 16 million people globally and claimed over 600,000 lives. India has reported almost 1.4 million cases overall, behind only the United States and Brazil. Khan, 44, is aware of the dangers but feels he has little choice. "What if we die? What if we get this disease? But fear will not fill our bellies, that is why we have to do this work," he told Reuters news agency, standing outside his two-room house at the foot of a mountain of garbage. Bibi, 38, said she was worried about bringing the infection home to the couple's children, aged 16, 14 and 11.

"When I return from there, I feel afraid to enter my house because I have children at home. We are really afraid of this disease," she said.

Dinesh Raj Bandela, an expert in biomedical waste at the New Delhi-based Centre for Science and Environment, said there are clear protocols set by the national pollution regulator to dispose of biomedical waste.

But they are not always followed during the outbreak, he said, putting those who sift through landfills at risk of contracting coronavirus and other diseases, ranging from hepatitis to HIV.

Neither the North Delhi Municipal Corporation, which runs the dump, nor India's Central Pollution Control Board, immediately replied to requests for comment.

According to Bandela, the Indian capital used to produce nearly 600 tonnes of medical waste a day, but that has risen by 100 since the virus hit.

Aljazeera | July 27, 2020

Scavengers in India risk health to sift coronavirus debris

NEW DELHI: Mansoor Khan and his wife Latifa Bibi have been collecting scraps of plastic and other items at an enormous landfill site on the outskirts of New Delhi for nearly 20 years.

Their \$5 daily earnings each keep their three children at school, in search of a better future than their parents' lives amid the stench of rotting garbage.

But over the past few months, increasing amounts of biomedical waste have been arriving at the dump - a result, experts say, of the novel coronavirus pandemic and a huge risk for those who work there. Spread over 52 acres and rising more than 60 metres, the site is littered with used, plastic coronavirus test kits, protective gear and cotton stained with blood and pus - among hundreds of tonnes of waste coming daily from across

the Indian capital, including small hospitals and nursing homes. Sifting with bare hands, hundreds of scavengers including children expose themselves to a disease that has infected more than 15 million people globally and claimed over 600,000 lives. India has reported almost 1.2 million cases overall, behind only the United States and Brazil.

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Bibi, 38, said she was worried about bringing the infection home to the couple's children, aged 16, 14 and 11.

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The Dispatch | July 27, 2020

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Canadian researchers to develop first national database on effectiveness of medical...

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Waste collectors look for recyclable materials at a landfill site, during the coronavirus disease (COVID-19) outbreak, in New Delhi, India, July 9, 2020. Adnan Abidi/

Spread over 52 acres and rising more than 60 meters, the site is littered with used, plastic coronavirus test kits, protective gear and cotton stained with blood and pus – among hundreds of tonnes of waste coming daily from across the Indian capital, including small hospitals and nursing homes.

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Beta Canada | July 26, 2020

Indian Scavengers Risk Lives Amid Coronavirus debris

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A COVID-19 testing kit lies on the floor at a landfill

22 JUL 2020. NEW DELHI, INDIA.

REUTERS/ADNAN ABIDI

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A man wearing personal protective equipment pushes a trolley containing medical waste bags to a Bio-Medical...

17 JUL 2020. NEW DELHI, INDIA.

REUTERS/ADNAN ABIDI

A man wearing personal protective equipment pushes a trolley containing medical waste bags to a Bio-Medical Waste storage area.

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A young waste collector waits for a truck to offload rubbish onto a landfill

16 JUL 2020. NEW DELHI, INDIA.

REUTERS/ADNAN ABIDI

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Khan eats breakfast with his son Latif outside their house which is next to a landfill.

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Huffington Post | July 26, 2020

Why Coronavirus Outbreak Is Piling Pressure On India's Biomedical Waste Disposal System

Protocol says used disposable masks, gloves, aprons, head covers et al should be incinerated or given a burial — at least 100 feet deep. This is not happening.

A stray dog fools around with a blue plastic coverall in a video shot in Coimbatore—endearing footage for those who know how playful dogs are, happily making a game out of anything. The image reflects a sinister side, too. Not of the dog, but of the creaking waste disposal system in a country struggling to contain an out-of-control contagion: the new coronavirus. Was the PPE suit flayed around by the dog contaminated, used in the fight against the COVID-19 outbreak? How did the dog get it? Did it fall from a passing ambulance? Or, was it discarded recklessly? The reason is not known, but it's the second instance of a PPE kit found on a Coimbatore road. Similar cases abound across India. "Masks and sanitiser bottles have become a common sight on roads," says Joginder Kumar, a garbage collector with the Municipal Corporation of Ludhiana. He empties out bins onto trucks and clears roads of this new kind of litter—worn masks, empty hand sanitiser bottles and, sometimes, discarded PPE kits too. "That spiky rascal could be hanging on to anyone of these," he says with a heavy sigh, making no pretense to hide the fear of catching an infection from such waste.

The Covid outbreak has put India's unsophisticated garbage treatment system—especially its inadequate handling capacity for biomedical waste—to a massive test. The nation of 1.3 billion people produced nearly 1,700 tonnes of biomedical waste a day between 2016 and 2018, according to Parliament data. That adds up to more than 600,000 tonnes a year—equivalent of a million full-size, adult African elephants stacked together on a weighing scale. In 2018, an ASSOCHAM-Velocity joint study predicted that India will generate about 775.5 tonnes of medical waste a day by 2022, growing at a rate of about seven per cent. Data for 2019 and this year—a global pandemic year—are trickling in, but not quite adequate and comprehensive for publication. "No ground estimate on how much additional waste has been

generated during the pandemic is done,” says Dinesh Raj Bandela of the Centre for Science and Environment.

The situation is grim and the government has taken note of it. The Prime Minister’s Science, Technology and Innovation Advisory Council (PM-STIAC) invited individuals, startups, corporate houses, entrepreneurs, and research institutions to a “COVID-19 Biomedical Waste Treatment: An Innovation Challenge”. They were asked to come up with solutions for collection, disposal/treatment of waste—for instance, masks, gloves, and PPEs used in hospitals, airports, railway stations, households, shops et al—generated during this pandemic. The government promised monetary support to the innovators. “We are looking for standalone units that could be installed in housing complexes, markets, etc,” an official says.

There is even a bigger challenge: the lack of waste etiquette among the people. So, what is medical waste? Broadly, any waste generated during diagnosis and treatment, which includes contaminated items such as human tissues, blood, body fluids, equipment (beddings, syringes, sharp objects, dressings, faeces, etc). In these Covid times, the definition has been broadened. The Central Pollution Control Board (CPCB) explains that waste that can infect people with coronavirus fall in Red and Yellow categories. RED bin—used PPE such as goggles, face shield, splash-proof apron, plastic coverall, hazmat suit, gloves, lab equipment like plastic vials, tubes, pipette tips etc. YELLOW bin—masks (the N95 included), head cover/cap, shoe cover, disposable linen, gown, non-plastic or semi-plastic coveralls, faeces from COVID-19 patient using bed pans or disposable diapers. The pollution watchdog recommends fast disposal of such waste.

That brings to the fore the question of segregating waste. Is it done? “No comments,” is the CPCB official’s answer.

There is lack of awareness among the people as well as ground-level garbage collectors. There have been instances of waste from “containment zones” or infection hotspots getting mixed with those from “safe localities” despite express directions to sanitation staff to separate the two. Besides, people hardly follow the rules, the standard operating procedure. So much so that, in Noida for instance, residents were asked to not throw used masks and gloves into dustbins; they should cut those into pieces, put them in a paper bag for three days before discarding them with regular garbage. Also, they are advised not to put biomedical waste such as disposable syringes, faeces or urine diapers, in the trash. “Society’s perception and practice of indiscriminate disposal of items can be a potential source of infection to municipal workers. People should dispose of used napkins, tissues, empty sanitiser bottles in a separate bag, to ensure the safety of municipal workers and ragpickers. It will ensure garbage collection and plastic recycling don’t get affected,” says Deepak Saxena, professor, Indian Institute of Public Health.

Photograph by Farhan Khan

But how much of it is recycled? How much of it reaches landfills? How much of it is incinerated to stop the spread of contagious diseases? The pollution board official says waste management is a state subject. Does that mean there’s no uniform or collective responsibility? The country has, according to the CPCB, more than 3,000 dump sites. But that’s not where hazardous medical waste should go. The protocol says used disposable masks, gloves, aprons, head covers and so on should be incinerated or given a burial—at least 100 feet deep. India has over 1,200 registered plastic recyclers. But the PPE suits manufactured in India cannot be recycled. A company owner says: “Polypropylene is being used for these kits that are available and cheap.” Recycling of poly materials is high and

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The CPCB protocol mandates companies handling biomedical waste to ensure maximum safety to their workers—regular sanitisation plus PPE, including three-layer masks, splash-proof aprons/gowns, gloves, gumboots and safety goggles. Well, that means the expenditure shoots up. "The operators are providing equipment and the measures have raised biomedical waste disposal costs from Rs 25-40 a kg to Rs 60-100 a kg. In some cases, even more," says Vinod Kachhadia,

president, Common Biomedical Waste Treatment and Disposal Facility Association of India. Workers are paid more, too, because "nobody wants to risk their lives". The association is upset over the government's attitude. The workers of biomedical waste plants are not part of the insurance scheme for those fighting COVID-19. The association wrote to the PM and several ministers. As Kachhadia waits for a response, he asks if the government will take responsibility of the family of a worker in case he catches Covid and dies? For the answer, the government and the people may have to de-clutter some of the litter fogging their perception about biomedical waste—the risk a contaminated coverall in a dog's mouth poses to the masses.

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Outlook | July 29, 2020

Did lockdown improve quality of water in Indian rivers?

CHENNAI: Does lockdown make any difference to the quality of water in our rivers? No, if you go by a study conducted by the Centre for Science and Environment.

"Evidence suggests that the lockdown did not make any substantive difference to the water quality of rivers with respect to their biological load, as domestic wastewater still found its way into the rivers. It is clear that without sustainable city-wide sanitation for all, it is impossible to clean our rivers," said Sunita Narain, director general, CSE. She was speaking at a high-level virtual meeting held recently on how to achieve city-wide sanitation for making rivers pollution-free. Titled "Mainstreaming faecal sludge and septage management in Ganga basin", the meeting was co-hosted by the CSE and the National Mission for Clean Ganga (NMCG). Upendra Prasad Singh, secretary, department of water resources, river development and Ganga rejuvenation, ministry of jal shakti, chaired it.

Singh highlighted the importance of "effective on-ground work towards septage management by various states in tandem with the national guidelines". "It is critical to explore alternative solutions to address the challenges in sewerage management," he said.

"No solution can be called the complete solution -- to achieve city-wide sanitation, we must complement the existing capacity of sewage treatment with faecal sludge management practices, which will not only help in containing indiscriminate discharge of faecal sludge in the neighbourhood but also contribute to pollution abatement of our water bodies. It is time we scaled up the pilot initiatives across the country," said Rajiv Ranjan Mishra, director general, National Mission for Clean Ganga (NMCG).

Talking about the initiatives undertaken by the Odisha government, G Mathi Vathanan, principal secretary, H&UD department, Odisha, pointed out that compared to a centralised sewerage system, implementing faecal sludge and septage management (FSSM) was not only economical but also less time-consuming.

Odisha deserves special mention in this context. According to Vathanan, the pollution load in rivers has reduced since the state's 10 faecal sludge treatment plants became operational. Most of these plants are being run and maintained by women's self-help groups and transgender self-help groups. In one of the cities, members of SHGs are managing the whole sanitation chain from operating the public toilets and transporting faecal sludge to maintaining the FSTPs.

Narain and Suresh Rohilla, who put forth CSE's observations and experiences on the subject, explained how the SFD (Shit Flow Diagram) tool -- which helps in mapping the flow of excreta throughout a city-- works.

The CSE has joined hands with government agencies to promote SFDs as a viable initiative, and the first two phases of this promotion exercise have brought forth promising results.

Times of India | Delhi | July 26, 2020

Better city-wide sanitation required to improve river water quality, says environmental body

New Delhi/IBNS: While many have been pointing out the improvement in the air quality of cities during the pandemic induced lockdown, the water quality of the rivers have not shown any noticeable improvement, according to the Centre for Science and Environment (CSE).

"Evidence suggests that the pandemic-induced lockdown did not make any substantive difference to the water quality of rivers with respect to their biological load, as domestic wastewater still found its way into the rivers," said Sunita Narain, director general, CSE at a recent high-level virtual meeting, which discussed on how to achieve city-wide sanitation for making rivers pollution-free. "It is clear that without sustainable city-wide sanitation for all, it is impossible to clean our rivers," said Narain.

The meeting – titled 'Mainstreaming Faecal Sludge and Septage Management in Ganga Basin'-- was co-hosted by CSE and the National Mission for Clean Ganga (NMCG).

Upendra Prasad Singh, Secretary, Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti, chaired it.

Among the key speakers were Rajiv Ranjan Mishra, director general, NMCG; G Mathi Vathanan, principal secretary, H&UD Department, Odisha; Sunita Narain; and Suresh Kumar Rohilla, senior director, water and wastewater management, CSE. Over 300 participants attended the meeting, including chief secretaries and members of state pollution control boards of all states and key officials of NMCG and SMCG.

Said Rajiv Ranjan Mishra, who moderated the proceedings, "No solution can be called the complete solution -- to achieve city-wide sanitation, we must complement the existing capacity of sewage treatment with faecal sludge management practices, which will not only help in containing indiscriminate discharge of faecal sludge in the neighbourhood but also contribute to pollution abatement of our water bodies."

It is time to scale up the pilot initiatives across the country, said Mishra.

Upendra Prasad Singh said it was important to implement effective on-ground work towards septage management by various states in tandem with the national guidelines.

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Most of these plants are being run and maintained by women's self-help groups (SHGs) and transgender self-help groups; in fact, in one of the cities, members of SHGs are managing the whole sanitation chain from operating the public toilets and transporting faecal sludge to maintaining the Faecal Sludge Treatment Plants (FSTPs).

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Introducing the third phase of the programme, Rohilla said, "In Phase III, the NMCG will be the core partner of CSE in scaling up the use of SFDs for better planning, advocacy and monitoring progress of sanitation in cities."

The third phase of the SFD programme was virtually launched on this occasion.

India Blooms | July 26, 2020



संक्षिप्त समाचार

पैर चालित दो हैंड वॉश स्टेशन का उद्घाटन

मिर्जापुर। चुनार नगर में कोरोना से सुरक्षा के लिए पालिका परिषद व जलकल विभाग में सेंटर फॉर साइंस एंड एनवायरमेंट की ओर से पैर चालित दो हैंड वॉश स्टेशन का उद्घाटन बुधवार को पालिका परिषद अध्यक्ष मन्सूर अहमद व अधिशासी अधिकारी प्रतिभा सिंह ने किया। इस दौरान सेंटर फॉर साइंस एंड एनवायरमेंट के ई0 मनीष मिश्रा ने हाथ को कब कब और कैसे किस तरह धोना है, इसकी जानकारी लोगों को दिया। इस दौरान कर निरीक्षक अजीत सिंह, जल कल अवर अभियंता सौरभ सिंह, सफाई निरीक्षक मिथलेश, व लाल मणी यादव, प्रधान लिपिक शैलेस आदि मौजूद रहे।

डीएम एसपी ने किया जिला कारागार का निरीक्षण

मिर्जापुर। जिलाधिकारी सुशील कुमार पटेल व पुलिस अधीक्षक डा0 धर्मवीर सिंह के द्वारा आज दोपहर लगभग दो बजे के आस-पास पूरे दल-बल के साथ जिला कारागार पहुँच कर औचक निरीक्षण किया गया। निरीक्षण के दौरान प्रत्येक बैरकों को देखा गया तथा मेस, कारागार परिसर, कारागार के चिकित्सालय, आदि का निरीक्षण किया गया। इस दौरान कोविड-19 के दौरान कोरोना वायरस के बढ़ते संक्रमण के रोशम व बचाव के दृष्टिगत साफ-सफाई रखने, प्रत्येक कैदी को मास्क लगाने एवं सोशल डिस्टेंसिंग बनाये रखने के बारे में जानकारी दी गयी तथा कोरोना संक्रमण से बचाव व सावधानी हेतु आवश्यक कार्यवाही हेतु जेल अधीक्षक को दिया गया। इस दौरान क्षेत्राधिकारी नगर के अलावा भारी संख्या में पुलिस बल उपस्थित रहे।

स्पीकर पर नाच गाना के दौरान मारपीट, आधा दर्जन लोग घायल

मिर्जापुर। मंगलवार को रात्रि समय करीब 9.30 बजे थाना चील्ह क्षेत्रान्तर्गत ग्राम भोगाव स्थित चोरी माता के स्थान पर स्पीकर पर नाच गाना के दौरान दो पक्षों में हुई मारपीट में आधा दर्जन लोग घायल हो गए। सूचना पर मौके पर पहुंची पुलिस ने घायलों को इलाज के लिए जिला अस्पताल में भर्ती कराया है। बताया जाता है कि प्रथम पक्ष के लोगों को द्वितीय पक्ष द्वारा मना किया गया, जिसे लेकर दोनों पक्षों के मध्य विवाद हो गया। जिसमें प्रथम पक्ष के विजय कुमार पुत्र सीताराम उम्र करीब 50 वर्ष, अविनाश भारती पुत्र विजय कुमार उम्र करीब-22 वर्ष, विकास भारती पुत्र विजय कुमार उम्र करीब 28 वर्ष, शुभम पुत्र अजय उम्र करीब 19 वर्ष, अजय कुमार पुत्र सीताराम उम्र करीब 40 वर्ष व द्वितीय पक्ष के लोलारक पुत्र हबलाल उम्र करीब 40 वर्ष घायल हो गये। सूचना पर थाना प्रभारी चील्ह व चौकी प्रभारी टेढ़वा द्वारा मय फोर्स मौके पर पहुंच कर घायलों को उपचार हेतु मण्डलीय चिकित्सालय सदर भेजवाया गया एवं अन्य अग्रेतर वैधानिक कार्यवाही की जा रही है।

हान पर कारनामा का जांच करवाए। रिपोर्ट आने से पहले ही उसकी मौत हो गई। रिपोर्ट आने पर उसे पॉजिटिव

महिला, शहर कोतवाली के रामबाग का एक युवक, देहात कोतवाली के

351 एड्स गैट हा। जल टोक होकर अपने फ कोना वायरस से अ

आपसी सोहार्द बकरीद व रक्षा

जलकल संगठनदाता, चुनार कोतवाली पारिषद, रक्षाबंधन व बकरीद के लेकर बुधवार को बैठक हुई। जिसमें बहादुर सिंह ने चुनाव लड़ने की मिसाल सोहार्द के साथ पर्व को। बकरीद की उन्नीस कहा कि संपन्न कर ली जा भीड़ न इकट्ठी हो। एसडीएम ने संक्रमण के गतिविधियां निषिद्ध सुशील कुमार चुनार के लोग जिन्हें त्वोहार मनाते आ रक्षाबंधन व सोमवार को एक का सम्मान करने प्रभारी निरीक्षक ने कहा कि मा पर नजर रख को दे।

पैरचालित हैडवाश यूनिट मशीन का उद्घाटन

जलकल संगठनदाता, चुनार (मिरजापुर) : लगभग बढ़ते कोरोना संक्रमण को रोकथाम के लिए नगर पालिका परिषद कार्यालय व जलकल विभाग में पैर चालित दो हैडवाश मशीनों का उद्घाटन किया गया।

बुधवार को नगर पालिका के चेयरमैन मंसूर अहमद ने इसका उद्घाटन करते हुए कहा, हैडवाश स्टेशन से पालिका कर्मियों समेत यहाँ आने वाली जनता को काफी सुविधा मिलेगी। पैरचालित मशीन की बजाह से लोग नल को हाथ लाकर नहीं छुएंगे। सेंटर फॉर साइंस एंड

एनवायरमेंट ने वे दो हैडवाश स्टेशन लगवाए हैं। ईओ प्रतिभा सिंह ने कहा, पालिका प्रशासन सफाई व्यवस्था के लिए प्रयास कर रहा है।

वहीं जलकल अभियंता सौरभ सिंह ने जलकल में लगाए गए यूनिट का उद्घाटन किया। सोएसई के प्रतिनिधि ई. मनीष मिश्रा ने हाथ को कब व कैसे धुलना है इसके बारे में जानकारी दी। सफाई निरीक्षक लालमणी यादव ने बताया कि यदि हाथ धुलने के लिए नल को छुआ जायेगा तो संक्रमण फैलने का रिस्क बढ़ जाता है।

बोले, बिजली की समस्या कराएं

ट्रेन से कटकर अज्ञात महिला की मौत

भास्कर न्यूज़, मिर्जापुर। रेलवे स्टेशन मिर्जापुर के किलोमीटर संख्या 736/42 पश्चिम की तरफ सबरी फाटक के पास एक अज्ञात महिला रन ओवर हो गई। इस सूचना पर रात्रि अधिकारी उपनिरीक्षक प्रविंद्र कुमार मय हमराह हेड कांस्टेबल रविंद्र सिंह यादव व कांस्टेबल विनय कुमार यादव एवं महिला आरक्षी बबिता कुमारी के वास्ते आवश्यक कार्रवाई हेतु घटनास्थल पर पहुंचा। विवाहित मृतका की उम्र लगभग 30 वर्ष है। मृतका के शिनाख्त का प्रयास किया जा रहा है।



दो हैण्ड वॉश स्टेशन उद्घाटित

भास्कर न्यूज़, मिर्जापुर। चुनार नगर में कोरोना से सुरक्षा के लिए पालिका परिषद व जलकल विभाग में सेंटर फॉर साइंस एंड एनवायरमेंट की ओर से पैर चालित दो हैण्ड वॉश स्टेशन का उद्घाटन बुधवार को पालिका परिषद अध्यक्ष मंसूर अहमद व अधिशासी अधिकारी प्रतिभा सिंह ने किया। इस दौरान सेंटर के ई मनीष मिश्रा ने कब कब और किस तरह हाथ धोना है, इसकी जानकारी लोगों को दी। इस दौरान कर निरीक्षक अजीत सिंहए जल कल अवर अभियंता सौरभ सिंह, सफाई निरीक्षक मिथलेश, लाल मणी यादव, प्रधान लिपिक शैलेस आदि मौजूद रहे।

सीएसई ने लगवाए दो पैर संचालित हैडवाशिंग स्टेशन

अमर भारती संवाददाता

बिजनौर। सेंटर फॉर साइंस एंड एनवायरमेंट (सीएसई) जोकी बिजनौर नगर पालिका परिषद की मल व कोष प्रबंधन में सहायक संस्थान है, बिजनौर में कोविड के दृष्टिगत पालिका परिषर में सफाई कर्मियों एवं अन्य आने जाने वाले परिजनो के लिए पैर संचालित 2 हैड वॉशिंग स्टेशन महीवार कर रही है। यह हैड वॉशिंग स्टेशन बुधवार को पालिका एवं कलक्ट्रेट डट परिषर में स्थापित किए जाएंगे। जिलाधिकारी रमाकांत पाण्डेय से हैडवाश मशीन का उद्घाटन किया तथा कहा छीएस में सीएसई की धन्यवाद करते हुए कहा कि पैर संचालित हैड वॉशिंग स्टेशन हाथों द्वारा संक्रमण को फैलने से काफी

सक्षम होगा। वहीं संस्था के प्रतिनिध हर्षवर्धन यादव ने कहा संस्था द्वारा समय समय पर जनता को जागरूक करने के लिये इस तरह के अन्य कार्य भी किये जाएंगे। कलक्ट्रेट डट एवं नगर

पालिका बिजनौर में लगने से ये यहाँ के कर्मियों को भी संक्रमण से सुरक्षित रखेगा एवं जो आने वाले जनता है उसको भी हाथ धोने की व्यवस्था के रूप में काफी कारगर है।

खं सफाई, गंदगी से फैलता है संक्रमण

जिले के नामित नोडल अधिकारी ने तरकापुर मोहल्ले में निरीक्षण कर लोगों से बातचीत कर दिया संदेश

समाज न्यून एमसी

बचाव और उपचार पर लोगों से भागी सचेद्योग

मिर्जापुर। जिला अधिकारी एवं निरीक्षण अधिकारी अमर भारती ने निरीक्षण के दौरान कुछ घरों में जा कर लोगों से बातचीत कर लोगों को सचेद्योग दिया। उन्होंने कहा कि कोविड-19 के फैलने से बचने के लिए लोगों को सफाई और सचेद्योग करना चाहिए। उन्होंने कहा कि कोविड-19 के फैलने से बचने के लिए लोगों को सफाई और सचेद्योग करना चाहिए। उन्होंने कहा कि कोविड-19 के फैलने से बचने के लिए लोगों को सफाई और सचेद्योग करना चाहिए।

कूड़ा एकत्रित करने के स्थान अनुपयुक्त

नोडल अधिकारी ने किया निरीक्षण

जिला अधिकारी ने निरीक्षण के दौरान कुछ घरों में जा कर लोगों से बातचीत कर लोगों को सचेद्योग दिया। उन्होंने कहा कि कोविड-19 के फैलने से बचने के लिए लोगों को सफाई और सचेद्योग करना चाहिए। उन्होंने कहा कि कोविड-19 के फैलने से बचने के लिए लोगों को सफाई और सचेद्योग करना चाहिए। उन्होंने कहा कि कोविड-19 के फैलने से बचने के लिए लोगों को सफाई और सचेद्योग करना चाहिए।

New global order (or disorder)

It's a time for cooperation and trust, so that local and global action can be decisive and meaningful

Sunita Narain

It's for the world to come together. But it's a time when the world is falling apart. It's a time for global institutions to have a loud voice. But it's a time when they are most feeble. It's a time for cooperation and trust, so that local and global action can be decisive and meaningful. But it's a time when partisan, divisive, and hurtful politics is ruling — across nations and within nations.

Just think. All the crises we see before us today — from air pollution to climate change, from coronavirus to locust attacks that are now destroying the fields of farmers — are about pollutants and

viruses that know no boundaries. The virus — today's corona — jumped from animals to humans in some wet market in China. But no longer is that market in China part of the shadowy, secretive world. The virus has moved so fast that within some six months, the entire world has been infected; over 10 million cases and counting, and no country has been spared. The contagion has already claimed over 550,000 lives.

Worse, when you think of the prospects in the future, it is clear that countries will remain connected and life in air bubbles. Closing boundaries to travellers other than "safe" countries will be difficult to sustain. Already, we have seen this in the US, where gains made by states like New York in containing the virus were lost as the infection load jumped elsewhere. It's the same in India; it will be the same everywhere. Bubble-wrapping countries to fight the contagion will be, at best, a short-term solution. In the long run, the world needs to come together to get rid of this virus, or at least contain it.

India's locust problem — severe and crippling for farmers — is a direct result of

climate change impacts, where the weather has turned weird and extreme. The frequency and intensity of cyclones have intensified; rainfall has become variable; and, as a result, breeding grounds for this desert critter have expanded. It is fast turning into a Biblical-scale scourge. But here again, India can do little to control the problem on its own. The most fertile breeding grounds of locusts are today in the Horn of Africa, where governments are struggling with lack of finances and equipment to control insect numbers. These will then fly with the changing wind patterns — literally — and make new homes in our world. We need regional cooperation — between countries of eastern Africa, the Arabian Peninsula, Iran, Pakistan, and India. We

need global institutions with heft and credibility to drive this agenda — bring countries together and provide financial and technical assistance to contain the insect.

I don't even need to explain the imperative of global action on climate change — it is a no-brainer. The atmosphere is one; emissions of greenhouse gases know no boundaries. I want to stress the need for global cooperation — and trust between nations. The agreement to act will be built on nations doing what is best in the common interests of the world. This happens only when they know that the agreement is equitable, fair, and proportionate. So, trust is crucial.

Yet, this word is so passé that it is hard to even write about it. But trust is where effective action boils down to — people have to trust their governments and institutions and then take the harsh actions that are being mandated for, say, controlling Covid-19. Otherwise, it will not work.

We are at a crucial point in world history. The key global institution is the United Nations (UN), which was set up after World War II. It then spawned many agencies and agreements. But over the years, it has made fatal mistakes — never standing up to power and is facing death by bureaucracy and expanding budget lines. Just think how the UN Framework Convention on Climate Change has decided to postpone critical discussion on what is today's, and tomorrow's, most catastrophic global challenge till the end of 2021. What an absolute abdication of its role and responsibility!

We also have the powers in a dog-cat-fight for global domination — China vs the rest. It is not about trade alone; it is also about the new global order (or disorder). Let's not beat about the bush on this. It is clear that China has made massive inroads into the world's economy — and this is across the poor and rich world. It has also no qualms about using fear and coercion as the means to achieving its ends. Already, we know with Covid-19, there is the growing view that effective control of the virus only comes with strong-arm tactics and not "weak-kneed" democracy.

The answer, I hope, will be clear: Fixing weaknesses in democracy is not about less, but more democracy. It means investing in the local, on the one hand, and global community, on the other. It is about that compact that will keep the world safe; but most importantly, it will keep democracy and the rights of human beings and the environment at the centre of our universe. Nothing less should be acceptable. Not now. Not tomorrow.

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Just think. All the crises we see before us today — from air pollution to climate change, from corruption to local attacks that are now destroying the fields of farmers — are about politicians and viruses that know no boundaries. The virus — today's corona — jumped from animals to humans in some wet market in China. But no longer is that market in China part of the shadow, secretive world. The virus has moved so fast that within some six months, the entire world has been infected, over 10 million cases and counting, and no country has been spared. The contagion has already claimed over 550,000 lives.

Worse, when you think of the prospects in the future, it is clear that countries will remain connected and life is in bubbles. Closing boundaries to travellers other than "safe" countries will be difficult to sustain. Already, we have seen this in the US, where gains made by states like New York in containing the virus were lost as the infection had jumped elsewhere. It's the same in India. It will be the same everywhere. Bubble-warring countries to fight the contagion will be, at best, a short-term solution. In the long run, the world needs to come together to get rid of this virus, or at least contain it.



SUNITA NARAYAN

I don't even need to explain the imperative of global action on climate change — it is a no-brainer. The atmosphere is one, emissions of greenhouse gases know no boundaries. I want to stress the need for global cooperation — and trust between nations. The agreement to act will be built on nations doing what is best in the common interests of the world. This happens only when they know that the agreement is equitable, fair, and proportionate. So, trust is crucial.

Yet, this world is so poised that it is hard to even write about it. But trust is where effective action boils down to — people have to trust their governments

and institutions and then take the harsh actions that are being mandated for, say, controlling Covid-19. Otherwise, it will not work.

We are at a crucial point in world history. The key global institution is the United Nations (UN), which was set up after World War II. It then spawned many agencies and agreements. But over the years, it has made fatal mistakes — never standing up to power and is facing death by bureaucracy and expanding budget lines. Just think how the UN Framework Convention on Climate Change has decided to postpone critical discussion on what is today's, and tomorrow's, most catastrophic global challenge till the end of 2021. What an absolute abdication of its role and responsibility!

We also have the powers in a dog-cat-fight for global domination — China vs the rest. It is not about trade alone. It is also about the new global order (or disorder). Let's not beat about the bush on this. It is clear that China has made massive inroads into the world's economy — and this is across the poor and rich world. It has also no qualms about using fear and coercion as the means to achieving its ends. Already, we know with Covid-19, there is the growing view that effective control of the virus only comes with strong-arm tactics and not "weak-kneed" democracy.

The answer, I hope, will be clear: Fixing weaknesses in democracy is not about less, but more democracy. It means investing in the local, on the one hand, and global community, on the other. It is about that compact that will keep the world safe, but most importantly, it will keep democracy and the rights of human beings and the environment at the centre of our universe. Nothing less should be acceptable. Not now. Not tomorrow.

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हमें भविष्य की ओर अग्रसर होना चाहिए क्योंकि कोविड-19 की इस रात का सवेरा भी अवश्य होगा



आज जब हम स्वास्थ्य संकट के चरम पर पहुंच चुके हैं तो हमें काम करने के नए तरीके ढूंढने होंगे। आवश्यकता है ऐसे रचनात्मक उत्तर ढूंढने की जो कई चुनौतियों से निपट सकें...

सुनीता नारायण। कोरोना संक्रमण की वजह से हमें इंसानियत के सबसे अच्छे और बुरे, दोनों पहलू देखने को मिल रहे हैं। सबसे पहले तो न केवल दिल्ली, बल्कि विश्वभर से हवा के साफ होने की खबरें आईं। ग्रीनहाउस गैस उत्सर्जन में गिरावट के भी संकेत प्राप्त हुए। इसके अलावा मानवीय दृढ़ता, समानुभूति व इन सबसे बढ़कर स्वास्थ्य तथा आवश्यक सेवाओं के लिए काम करने वाले लाखों लोगों द्वारा बिना किसी स्वार्थ के कार्य करने का प्रमाण प्राप्त हुआ। इस वायरस के खिलाफ चल रहे युद्ध को किसी भी सूरत में जीतने व लोगों की जान

बचाने का जज्बा ही कोविड-19 की लड़ाई का हॉलमार्क बनेगा। तो वहीं दूसरी तरफ, इस वायरस से लड़ने के क्रम में हमारे द्वारा इस्तेमाल हो रही प्लास्टिक की मात्रा में आशातीत वृद्धि हुई।

देश में कई शहर हैं, जो अब कचरा अलग करने की प्रक्रिया बंद कर रहे हैं, क्योंकि लगातार बढ़ते मेडिकल कचरे और प्लास्टिक कीव्यक्तिगत सुरक्षा किट (पीपीई) की संख्या के सामने सफाई कर्मचारी बेबस हैं। तो कह सकते हैं कि हम इस लड़ाई में पीछे भी जा रहे हैं। इसके अलावा, लोग सार्वजनिक परिवहन के साधनों का प्रयोग नहीं करना चाहते। उन्हें डर है कि भीड़भाड़ वाले सार्वजनिक स्थानों पर संक्रमण का खतरा बढ़ जाएगा। इसलिए, लॉकडाउन खुलने के बाद सड़कों पर निजी वाहनों की संख्या में बढ़ोत्तरी हो रही है।

यह वह समय भी है जब हम मानवता को उसके सबसे बुरे रूप में देख रहे हैं। चाहे गरीबों को पैसे एवं भोजन उपलब्ध कराने में हुई देरी हो, प्रवासी मजदूर हों या फिर वे लोग जिन्होंने समय पर चिकित्सकीय मदद नहीं मिल पाने की वजह से अपने सगे-संबंधी खो दिए, इन दिनों यह सब देखने को मिला। इन हालातों के बाद भी हमें भविष्य की ओर अग्रसर होना चाहिए क्योंकि कोविड-19 की इस रात का सवेरा भी अवश्य होगा और आज जब हम इस स्वास्थ्य संकट के चरम पर पहुंच चुके हैं, हमें काम करने के नए तरीके ढूंढने होंगे। हम हालात के सामान्य होने का इंतजार नहीं कर सकते, क्योंकि तब यह न तो नया होगा और न ही अलग।

आवश्यकता है तो बस ऐसे रचनात्मक उत्तर ढूंढने की जो कई चुनौतियों से एक साथ निपट सकें। उदाहरण के लिए, शहरों में होने वाले वायु प्रदूषण को लें। हम जानते हैं कि हवा में विषाक्त पदार्थों के

उत्सर्जन के लिए वाहन सबसे अधिक जिम्मेदार हैं। अब हम ऐसा क्या करें जिससे प्रदूषण लॉकडाउन वाले दौर के स्तर पर ही रहे? यह भी सच है कि ऑटोमोबाइल उद्योग बड़े पैमाने पर वित्तीय संकट झेल रहा है। ऐसे में यह वक्त एक अवसर बन सकता है। अगर सरकार अपने पुराने वाहनों को नए से बदलने के लिए सब्सिडी देने की स्मार्ट योजना तैयार करे तो यह गेम चेंजर साबित हो सकता है। यह भी सच्चाई है कि सार्वजनिक परिवहन के बिना हमारे शहर ठप हो जाएंगे। हमें अब जाकर इसके महत्व का अहसास हुआ है। जरूरी है कि भविष्य में ऐसे शहरों का पुनर्निर्माण हो जो साइकिल चालकों एवं पैदल चलने वालों को भी साथ लेकर चले। जहां तक उद्योगों व उनसे होने वाले प्रदूषण की बात है तो अगर हम यहां ईंधन के तौर पर कोयले की जगह प्राकृतिक गैस या बिजली का प्रयोग करें और वह बिजली प्राकृतिक गैस एवं हाइडेल, बायोमास इत्यादि जैसे स्वच्छ साधनों से मिले तो स्थानीय स्तर पर प्रदूषण में कमी तो आएगी ही, साथ ही साथ जलवायु परिवर्तन पर भी लगाम लगेगी। यह सब संभव है लेकिन यह इस विश्वास पर आधारित है कि हम एक बेहतर कल चाहते हैं। कोविड-19 केवल एक भूल या दुर्घटना नहीं है, बल्कि उन कार्यों का परिणाम है जो हमने ऐसी दुनिया के निर्माण के लिए किए, जो असमान और विभाजनकारी थे। तो इस मुगालते में न रहें कि कल बेहतर होगा, यह और बेहतर हो सकता है लेकिन तभी जब हम स्वयं इस दिशा में कदम उठाएंगे।

Jagran | July 19, 2020

Politics of recycling plastic

It is reported that prior to the 2018 ban, 95 per cent of the European Union's and 70 per cent of the US's plastic waste collected for recycling was sold and shipped to China

Sunita Narain

Covid-19 is all-subsuming; it makes difficult thinking or acting on issues that made up our world yesterday and would stay in our world of tomorrow. One such issue is that of plastic — the most ubiquitous substance in our lives that fills up our land and oceans, polluting them and adding to our health stress. The current health emergency has normalised the use of plastic as we use more and more of it as protection measures against the virus. Plastic protection gear — from gloves and masks to body suits — so critical in this “war” against Covid-19, will also contribute to the mountains of trash in our cities if they are not incinerated in properly controlled and managed medical waste disposal facilities.

The politics of plastic is wrapped up in a benign word called “recycling”. The plastic industry globally has successfully argued that we can continue to use this highly durable substance because once we throw it, it will be recycled. Never mind that nobody knows what this means. When China came up with its 2018 National Sword Policy to stop imports of plastic waste for “re-processing”, the rich nations woke up to some harsh realities. Ships of plastic waste were turned away from many other countries as well, including Malaysia and Indonesia. Nobody wanted this waste. They had enough of their own to deal with.

It is reported that prior to the 2018 ban, 95 per cent of the European Union's and 70 per cent of the US's plastic waste collected for recycling was sold and shipped to China. The dependence on China meant that recycling standards had become slack — food waste was mixed with plastic and the industry excelled in creating new products, design, and

colours of the waste. All this meant that waste was more contaminated, making recycling difficult. So much so that even China, which can create business from nothing, found it unprofitable to reprocess it.

India's plastic waste problem is not as huge as the rich world, but it is growing. The latest annual report of the Central Pollution Control Board on plastic waste tells it all — while rich states like Goa produce as much as 60 grams of plastic per capita per day; Delhi is catching up with 37 grams per capita per day. The national average is around 8 grams per capita per day. In other words, as societies become more affluent, they will become more wasteful. This is the ladder of wealth we must not aspire to climb.

However, given the huge litter of plastic we can already see in our cities, it is clear we cannot get sanguine about the fact that we will catch up — collect more, recycle more. This will not work, unless we can think differently and act decisively. Something that is sorely missing today.

Prime Minister Narendra Modi made a powerful statement on Independence Day last year, calling on us to give up the habit of using plastic and promising that his government would announce significant plans for reduction. But his government is doing pretty much the reverse.

And again, the politics is about recycling. The industry has, once again, managed to convince policymakers that plastic waste is not a problem because we can recycle virtually everything. It's a bit like tobacco — if we stop smoking, farmers will be affected. If we stop using plastic, the recycling industry — run by small units, working often in the informal sector, and with the poorest people who work in a most abysmal condition — will collapse. Jobs will be lost.

Let's first discuss as to what happens to the waste that cannot be recycled. All studies (limited as they are) show that the plastic waste in drains or in landfills comprises the least recyclable material — this is multi-layered packaging (food stuff of all kinds), sachets (guthka or shampoo), and plastic bags. The 2016 Plastic Management Rules recognised this and said sachets would be banned and all multi-layered plastic use would be phased out in two years. In 2018, this was fatally amended — now only waste that is non-recyclable, and if there is any of this at all, needs to be phased out. This is not to say that theoretically multilayered plastic or sachets cannot be recycled — they can be sent to cement plants for energy recovery or used in road construction.

But everyone knows it is nearly impossible to first segregate, collect, and then transport these empty, soiled packages. So, business continues as usual. Our garbage problem does not go away. The second issue is: What do we really mean by recycling? The fact is that recycling plastic needs careful segregation at household level; this puts the onus on us and the local bodies. So, it's time we dismembered and took apart the world of recycling. I will discuss this further with you in the coming weeks.

Business Standard | Delhi | July 27, 2020

Business Standard | Delhi | July 27, 2020

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The writer is at the Centre for Science and Environment
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Jindal School of Environment Sustainability Partners with 20 Organizations Globally

The Jindal School of Environment and Sustainability (JSES), the newly established ninth school of O.P. Jindal Global University has forged substantive collaborations with 20 international and Indian organizations working on environmental and sustainability issues for its undergraduate students. These collaborations will enable the students to get a practical understanding of ecological and conservation issues through work experience and will result in internship and placement opportunities.

JSES has confirmed collaborations with 20 leading organizations, which will provide research and internship opportunities to the students enrolled in the B.A. (Hons.) in Environmental Studies. The world is headed towards a climate crisis and students must have hands-on experience in working towards a greener future. The 20 organizations in collaboration with JSES are: The World Wildlife Fund, Pacific Environment, World Resource Institute, MC Mehta Foundation, Environment Support Group, Global Policy Insights, Toxics links, Tagore Society for Rural Development, Navdanya Foundation, Indian Council for Enviro – Legal Action, Delhi Greens, Envipol, Green Munia, Dhiway – Research, Uneako, Centre for Science & Environment, Rajputana Society of Natural History, Future group – CSR, Hyundai Electric and the Directorate of Environment & Climate Change.

These collaborations will enable JSES students to undertake internships at these organizations, thereby adding to their understanding of environmental and sustainability issues. Consequently, graduates of JSES will have multifarious career opportunities at international, national, regional, state and local government institutions and agencies,

NGOs and the private sector, where corporations and industry also need expertise in developing projects that require environmental impact assessments.

The Founding Dean of the Jindal School of Environment and Sustainability, Professor (Dr.) Armin Rosencranz, taught climate change, energy and environmental law and policy for 20 years at Stanford University and brings great experience and knowledge to JSES. Dean Rosencranz did his undergraduate studies at Princeton University and obtained three postgraduate degrees, JD, MA and PhD from Stanford University. Announcing this major initiative to empower the UG students who will be pursuing B.A. (Hons.) in Environmental Studies at JSES, Dean Rosencranz observed, "This is a landmark initiative promoted by the Jindal School of Environment & Sustainability (JSES). Rarely ever in the world of universities, that a new school has developed such an opportunity to its undergraduate students, at the time of the commencement of the school. By attracting internationally qualified faculty members and pooling together interdisciplinary scholars under a single school, JSES is positioning itself as a producer of knowledge and shaper of careers in environment, climate change and energy, wildlife protection and the broader issues of sustainable development. The organisations with which JSES has established these collaborations are leading in the field of environment and sustainability and will help promote experiential learning for the students who will be pursuing the B.A. (Hons.) in Environmental Studies."

The Jindal School of Environment and Sustainability (JSES), the ninth school of the O.P. Jindal Global University was set up in 2019 with an aim to address environmental education through its newly established B.A. (Hons.) in Environmental Studies, which will commence classes in September 2020. The curriculum of the

programme incorporates seven aspects of environmental studies: (i) ecology and biology; (ii) demography and science; (iii) human and environment interaction; (iv) climate change; (v) renewable energy; (vi) environmental laws; and (vii) forests and wildlife to provide a holistic education in environmental studies.

Environment and Sustainability is an evolving discipline that covers many aspects of our daily lives. A primary goal of the Jindal School of Environment And Sustainability is to offer undergraduate students a concentration in environmental studies with an opportunity to explore how humans interact with the environment, including physical, biological, philosophical, social and legal elements. This includes forests and other public spaces, land use, all forms of energy, climate change, air, water and toxic chemical pollution, wetlands and delta management, transport and transport fuels, sustainability, environmental crimes, biodiversity and wildlife protection, food security, urban environmental issues, natural resources conservation and management, corporate social responsibility, environmental justice, and norms of international environmental law and policy.

The Week | July 8, 2020

Jindal School of Environment & Sustainability Partners with 20 Organizations Globally

Collaborations Offer Internships and Work Experience Opportunities to Jindal Students to Address Environmental Issues Sonipat, 7 July 2020: The Jindal School of Environment and Sustainability (JSES), the newly established ninth school of O.P. Jindal Global University has forged substantive collaborations with 20 international and Indian organizations working on environmental and sustainability issues for its undergraduate students. These collaborations will enable the students to get a practical understanding of ecological and conservation issues through work

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Outlook | July 8, 2020

India: Modi's War on Science

2019 was a mixed year for Indian Science and Technology. The bittersweet Chandrayaan-2 Mission was a partial failure in the absolute sense, but a success in the relative sense. The PSLV-C44, Kalam SAT, Microsat-R, CARTOSAT and Mission Shakti were major leaps in aerospace engineering. India also became the world's third-largest producer of Scientific articles, according to NSF statistics. However, there were several steps back as far as the scientific temperament of the Political circles is concerned.

Science and Politics

The incumbent regime of India helmed by the majority BJP Party has long cherished the idea of Hindu resurgence, mocked modernisation as 'westernisation', and accused the West of robbing India of its heritage, wealth and intellectual capital. Since its inception, the BJP has championed the cause of Hindutva, a quasi-martial Hindu-nationalist ideology disregarding and unfounded in the core tenets of Hinduism but claiming to be based in it. The ideology seeks to establish a Hindu nation-state bringing back the archaic Hindu social order, and incorporating certain other widely-disputed idealistic, moralistic elements they claim to be rooted in Indian history. With the assumption of its reins by Narendra Modi however, rationality has waned further, as patronisation runs rampant, threatening to drive India to a post-truth society and redirecting the mainstream narrative to suit its ideological mould. In order to serve its partisan

interests, the BJP has attempted to rewrite history, belittle and trivialise scientific progress, and take alternative epistemic narratives to the forefront.

This is an annual roundup of the incumbent regime's Scientific claims, statements and factual Tours-de-Force. It puts in perspective the affinity, or the lack thereof, of the ruling BJP Government towards Science.

Former terror accused Member of Parliament Sadhvi Pragya Singh Thakur stated in April that "A mixture of gau mutra (cow urine) and other cow products cured my cancer". Had it been true though, there would have been little compulsion for her to visit a number of top (Western-style modern) hospitals, and undergo three surgeries. Note that she said that the cow products "cured" her cancer and not that they "helped cure" it – suggesting that they wholly accomplished the cure. Her conviction in alternative (traditional) medicine seldom explains her prompt and frequent hospitalisation in modern hospitals, even for relatively minor ailments and indispositions. Her publicly proclaimed beliefs seldom seems to be concordant with her personal practice. While a handful of peer-reviewed publications have proposed and in some cases, affirmed, the therapeutic potential and health benefits of cow urine, such studies are far from being well-established and biochemical reaction-mechanically substantiated.

In August, she alleged that the demise of former Finance Minister Arun Jaitley was the result of the Opposition using a "Maarak Shakti" (Fatal Power – a curse or hex of sorts). She stated that she believed a holy-man's proposal that the Opposition party had used a curse against the BJP. The case of Air Pollution

Union Environment Minister Prakash Javadekar stated that pollution is not linked to the shortening of life in India. "No Indian study has shown pollution

shortens life. Let us not create fear psychosis among people," he told the Parliament in December.

The Global Burden of Disease Study 2017 titled "Impact of air pollution on deaths, disease burden and life expectancy across the states of India" says that in 2017, 12.5 per cent of total deaths, i.e. 1.24 million in India were attributable to air pollution, including 0.67 million from ambient particulate matter pollution and 0.48 million from household air pollution. Of these, more than half the mortalities were in people younger than 70. Notably, the study was funded by Bill & Melinda Gates Foundation and Indian Council of Medical Research – the latter of which is under the Union Ministry of Health and Family Welfare.

"The researches estimated that if the air pollution level in India was less than the minimum causing health loss, the average life expectancy in 2017 would have been higher by 1.7 years, with this increase exceeding 2 years in the north Indian states of Rajasthan, Uttar Pradesh and Haryana as the pollution levels in these states were higher than the rest of the nation.", reported India Today.

According to the Findings from the Global Burden of Disease Study 2017 Booklet's Potential loss of life averted through reduction of exposure to key risk factors, 2040 plot, reduction in Exposure to Ambient Particulate Matter Pollution would expectedly prevent 40,000,000 Years of Life Lost. The amount of life years predicted by forecast trends to be salvaged by reduction in exposure to particulate pollution is greater than that accomplished by curtailing alcohol use or cutting down on high cholesterol, to the same extent. Respiratory ailments, as Pulmonary Infections, Tuberculosis, Bronchitis, Silicosis, Asbestosis, etc., a majority of which are frequently caused due to ambient air pollution, are consistently a top leading cause of deaths, especially among infants. Lower

Respiratory infection was the 4th leading cause of death, while Chronic Obstructive Pulmonary Disease (COPD) ranked on the 7th rung. Various studies have linked air pollution to Lower Respiratory Infection and COPD, either as a causative, risk-enhancer or an aggravator. An article in the world's most reputed and prestigious Science journal Nature, that says "Household air pollution is responsible for 2.9 million annual deaths and causes significant health, economic and social consequences, particularly in low- and middle-income countries."

The "Estimates of the global, regional, and national morbidity, mortality, and aetiologies of lower respiratory infections in 195 countries, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016", also includes data from the government of India and comprehensively elucidates the statistics of mortality owed to lower respiratory infections. "Childhood wasting remains the leading risk factor for lower respiratory infection mortality among children younger than 5 years, responsible for 61.4% of lower respiratory infection deaths in 2016 (95% UI 45.7–69.6). Interventions to improve wasting, household air pollution, ambient particulate matter pollution, and expanded antibiotic use could avert one under-5 death due to lower respiratory infection for every 4000 children treated in the countries with the highest lower respiratory infection burden.", states the study.

The WHO and the British Lung Foundation compile and affirm the staggering hazards posed by air pollution to public health, particularly among children. "Air pollution driven by the burning of fossil fuels cuts global average life expectancy by nearly two years per person, according to a first-of-its-kind study by the University of Chicago's Energy Policy Institute (EPIC). A 2017 report by the Global Commission on Pollution and Health identified pollution as the leading cause of death and disability in

the world. But researchers at EPIC have now further established that emissions of airborne particulate matter – "a mixture of small particles and liquid droplets in smoke that can affect the heart and lungs if inhaled – pose the single biggest threat to human health globally", the WTTW reports says.

"Over the past two decades, the concentration of fine particulates increased by 69 percent on average across India. As a result, sustained exposure to particulate pollution now reduces the life expectancy of the typical Indian citizen by 4.3 years compared to 2.2 years in 1998", the Air Quality Life Index India Fact Sheet states. The Indian side

As for Javadekar's selectivism and proclivity for "Indian studies", here's a report by a reputed Indian Think Tank Centre for Science and Environment that shows that air pollution has curbed the longevity of the average Indian by 2.6 years. "Air pollution is now the third highest cause of death among all health risks ranking just above smoking in India. This is a combined effect of outdoor particulate matter (PM) 2.5, ozone and household air pollution.

"Due to this combined exposure, South Asians, including Indians are dying early – their life expectancy has reduced by over 2.6 years. This is much higher than the global tally of reduced life expectancy by an average of 20 months. While globally a child born today will die 20 months sooner on an average than would be expected without air pollution in India they would die 2.6 years earlier," the document says. The staggering findings elucidated that outdoor and household air pollution together are causing deadly diseases. Anyhow, a simple Google Search would suffice to yield study-after-study refuting his statement.

But then the Chief Minister of Uttarakhand already had a handy solution back in July,

none other than the Right-wing's Panacea – Cows. If Mr. Trivendra Singh Rawat is to be believed, the cow is the only animal that exhales oxygen and caressing and massaging it is a remedy for respiratory ailments. Fifth Grade Science Textbooks would suffice for one to know that a cow exhales carbon-dioxide. In some cases, a Third Grade Textbook would serve the purpose as well.

India's Union Minister of Railways and Commerce Minister Piyush Goyal attending a Board of Trade meeting in September made a farrago of justifications – a befuddling jumble of excuses, defences, distortions and arbitrary catharses.

While making a statement on the GDP calculations, Goyal said, "Don't get into the calculations that you see on television...don't get into those maths. Maths have never helped Einstein discover gravity. If he [Einstein] had only gone through structured formulae and what was past knowledge, I don't think there would have been any innovation in the world."

The 9th Grade government-prescribed Textbook of Science discusses the phenomenon of gravitation. It deals with the Universal Law of Gravitation and sheds light on Newton's discovery of gravity. He happens to be an All-India second rank holder in CA Final Chartered Accountant and second rank holder in Law in Mumbai University. He has participated in Leadership Programs at Yale, Oxford and Princeton. He is said to have been a brilliant student in his schooltime, which speaks volumes about the effectiveness of the Indian education system.

While the Minister of Commerce, misattributed the discovery of gravity further in time, in an address, the HRD Minister Ramesh Pokhriyal regressed to the Ancient Age, attributing the discovery of gravity to Indian Scriptures, in August. He also said that the sage Rishi Pranav was the first to discover atoms and

molecules, a week after he had claimed ancient Indian medical practitioner Charaka discovered them. While it is true that atomism, as a philosophical belief had prevailed in Ancient Hindu Schools for centuries before the Common Era, its proponents, as Kanada, didn't propose a rigorous theoretical model, but just put forth a simple belief that the universe was composed of discrete, indivisible elementary units. Kanada's period of existence is quite dubious, placed between the 6th and 2nd century BCE. The Greek philosophers and thinkers Leucippus and his pupil Democritus belonged to the 5th century BC, while Charaka belonged to the 3rd century BCE, leaving room for contention as to who was the pioneer. Perhaps, Pokhriyal was confusing Charaka for Charvaka (Carvaka), a materialist-hedonist philosopher/school who incorporated elements of atomism in his writings. The 8th century BCE sage Aruni is said to have propounded the first documented case for atomism in his treatise. In the 7th century BCE, Carvaka, Jain and Ajivika schools of Hindu Philosophy prominently featured atomist hypotheses. Scholars have time and again suggested a bilateral influence, exchange and involuntary diffusion of theories between Ancient India and Greece. Pokhriyal (of 'Astrology is the topmost Science', 'Astrology dwarves Science', 'Transplant in ancient India', and 'Ancient sage conducted a nuclear test' fame) was formerly the Chief Minister of Uttarakhand and has made notoriously unsubstantiated claims on multiple occasions, whether inside the Parliament or outside it.

As the HRD Minister, Ramesh Pokhriyal 'Nishank' (a Master of Arts, author and poet who for some reason, likes to prefix 'Doctor' before his name and be referred by his nom-de-plume 'Nishank' meaning doubtless) is tasked with managing and supervising the Education sector. Speaking at the 65th Convocation at IIT Kharagpur, one of India's five top Engineering and Science institutions, he claimed that Indian engineers built the

Ram Setu (formerly Adam's Bridge, a chain of limestone shoals between India and Sri Lanka), glorified Sanskrit, and exalted other impertinent mythical feats as Lord Shiva consuming the Cosmic Poison, the Halahala, thus saving the Universe. When his statements left the audience stupefied, he actively and provocatively elicited a response, obliging them to break into a round of applause. "In future, if we develop talking computers, then you have to prove it (through research) that Sanskrit is the most scientific and appropriate language for talking computers," he said while terming Sanskrit as 'dev vani' (voice of the Gods). As a Sanskrit enthusiast, although I can affirm that the objectivity, flexibility, adaptability, clear and well-structured grammar and one-to-one spelling-to-pronunciation mapping, make Sanskrit a scientific language, I can also affirm with as much conviction that it has its non-idealities, ambiguities and incongruities, albeit fewer than other languages. While one can contend that its extensive, rich vocabulary, systematic grammatical structure and multilateral freedoms might explain why some speculate that its nature renders it suitable for programming, there is absolutely no formal proof of it being the most suitable language for developing advanced computers in. In fact, there hardly exists an estimate, let alone a measure or index that quantifies the suitability of real-world languages for programming.

The BJP's affairs with Sanskrit are far from occasional. "BJP MP Ganesh Singh (BA, MA, LLB) on Thursday claimed that as per a research done by a U.S.-based academic institution, speaking Sanskrit language on a daily basis boosts the nervous system and keeps diabetes and cholesterol at bay. Participating in a debate on the Sanskrit universities bill, he also claimed that according to a research by U.S. space research organisation NASA, if computer programming is done in Sanskrit, it will be flawless. More than 97% of the languages

in the world, including few Islamic languages, are based on Sanskrit, Mr. Singh said", the Hindu reported.

While the first claim is so ridiculous, it doesn't even merit a due dialectic refutation, the second is just another instalment in a series of arbitrary scapegoating of NASA – the Hindu right's favourite arbitrary shoulder-mount of their jingoistic guns. It's the third figure that needs attention – as it is a half-truth, a most dangerous lie, that is rooted in some form of truth. It can be debunked by simple math using another statistic. While Sanskrit is the origin of almost all North Indian Languages, it actually is Sanskrit's predecessor Proto-Indo-European that is really the matriarch of all Indo-European languages. Even then, a good share of languages in the world belong to Australasoid tribes and non-Eurasian natives. For example, various forest-dwelling indigenous groups in Papua New Guinea had over 800 languages alone. So let us use this tiny island to expose this statistic. There currently are about 6500 languages in the world. If 830 of them, about 12% are indigenous New Guinean languages, that means there is no way 97% languages can originate from Sanskrit, the language of the Indo-Aryans. There is no "Islamic language" as such, and Arabic has in no way descended from Sanskrit, while Persian is a grand-nephew of Sanskrit, originating from Proto-Indo-Iranian, the intermediary between P.I.E. and Sanskrit.

Science and the cultural issue

The problem however does not lie merely in misquoting instances, facts and figures or warping truths – the realm problem lies in the alienation of the scientific method. When leaders in the regime talk of 'Science', they do not actually comprehend and envision it as a systematic corpus of knowledge based on experimentation and observation, but rather as a vague mystical sort of power that helps perform fantastic feats. They rid Science of its innate objectivity of

method and calculation, and arbitrarily fabricate a loose corpus of disorganised, mutually-unrelated speculation and hearsay.

The indistinction of history and mythology and inability, nay unwillingness to distangle method from belief, faith and indoctrination has led to a quasi-post truth society. Trump-esque bashing of journalism as fake-news, fostering of right-wing conspiracy-pedaling fake-news outlets, and exploitation of the inflammatory and instigative potential of social media. Glorification of the ancient Indian past, and scapegoating of foreign migrants and invaders as the ones who destroyed the grand scheme and holistic, utopian sociocultural political order, is an integral cog in the regime's propaganda machine. The damage dealt by these obvious falsehoods is of an insidious nature – native and foreign public conviction in even genuine and commendable achievements of the ancient Indians is diluted, the noise prevents academic rigour from becoming pronounced, hinders research, and the crywolf tendency clouds people's judgement. For example, the sheer ridiculousness of the outlandish proposition that Indians had mastered head-transplants and plastic surgery overshadows and diverts attention from the fact that two millennia prior, a medical practitioner called Sushruta had actually pioneered and attained fine mastery in a number of surgical techniques.

The propaganda is not merely verbal and unsystematic – the regime has sponsored academic and industry research into bovine products, instated subject as 'bovine engineering' into curricula, diverted funds towards these ends, devoted important chairs and administrative designations in institutions to pseudo-scientists and academicians with a tainted, blotted conspiratorial and predatory record, and infiltrated the premier Science and Engineering institutions of the country. The prestigious

scientific congregation – a global academic convergence, the Indian Science Congress was turned into a laughing stock and drew international flak, boycott and ridicule, three years in-a-row.

Proclamations ranged from the dubious to the outright bizarre – ancient flying machines, propositions to rename Gravitational waves as 'Modi waves', ancient test tube babies based on scriptural evidence, and refutals of Newton and Einstein. These were disseminated from the same podia that were graced by Ivy League academicians and esteemed laureates. Before he was the Prime Minister, Narendra Modi had frequently endorsed pseudo-scientific views and purported ancient esoteric sciences – amongst others attesting to claims of the existence of plastic surgery and reproductive genetics. Mythological scriptural verses are frequently cited from public podia by ministers and leaders, glorifying the so-called 'Golden Age' or 'Vedic Age' of harmony, prosperity and affluence and coordinated with the hypothetical construct of integral, undivided India i.e. "Akhand Bharat", and its intimately related concept of "Hindu Rashtra" (Nation of the Hindus).

Glorification of the ancient period has thus become an indirect and harmless-seeming pernicious means of conveying xenophobic innuendos of reverting to a Hindu-exclusive caste-stratified society or at least a hierarchical social order under the command and paramountcy of Hindus. Moreover, the misinformation is contagious. The national ego-stroking and stoking of patriotic sentiments has elicited responses from even the well-educated and qualified strata of society. Propaganda outlets have mushroomed over the course of Modi's Prime Ministerial tenure, and enjoy demographically widespread subscription. Meanwhile, academic cronyism is ongoing, and even traditional secular and socialist bastions have been infiltrated by the regime's toddlers and stooges. Any voices of argumentation are starved of funding and stifled.

Conspiracies, the occult, and the arcane, and speculations constitute the meat of mainstream India news programming. The media seldom reports academic research, but is preoccupied with extensively entertaining motley hypothetical scenarios as alien invasions, asteroid impacts and nuclear wars. Hysteria is dealt at length around the prime-time. It is not uncommon to switch on the TV and encounter a dichotomy – either snippets and vignettes of movies, celebrity gossips, and showbiz (even featuring replays of popular daily soap episodes), or an anchor exploring mythologically suggested or remotely hinted-at sites in the wilderness and temples, idols, pilgrimage sites and water bodies where “miracles” happen. Anchors can be seen hosting debates between clerics and logicians, and priests and scientists over obviously-refutable supersititious claims. At other times, they can be seen flying in poorly-morphed renditions of “ancient Indian aircraft” or digital reproductions of Indian Air Force’s fighter jets. At the time of the recent solar eclipse, Indian mainstream television media outlets, no matter how gigantic or prestigious were unanimous in pedaling superstition and “scientifically-justifying” them. The superstitions and justifications included emission of special “negative-rays” from the Sun exclusively at the time of the eclipse whose effects range from putrefying exposed or even existent food, to the supposed risk posed to pregnant women.

Recently, BJP Party members have espoused bovine products as a cure for COVID-19, indicating that novelty and unfamiliarity of a phenomenon is hardly a deterrent to their arbitrary linking and attribution. In fact, the social media response of Indians to the feared paranoia-inflicting epidemic testifies to the depth of seepage of the propaganda. Chauvinistic posts and ideas now spontaneously emanate from common individuals, not only media outlets. The preventive corpse-incineration of victims,

the preference of folding hands over handshake, and meat-aversion hysteria unfolding in the wake of the COVID-19 scare are being used to glorify the Indian customs of ritual cremation, namaste, and vegetarianism. Modi’s call to clank together utensils and crockery to appreciate doctors was interpreted as an adroit scheme to supposedly disinfect the air by “antiviral positive vibrations” – even fake news of NASA somehow acknowledging the viral cover’s decrease over the nation was extensively encountered. Social Media runs rampant with widely-circulated claims of NASA and UN declaring various Indian superlatives – “NASA ne bhi maanaa (NASA too concedes)” is the Indian Right Wing’s handiest buzzword, even when they pronounce it as “Naasaa” and none of them can expand it correctly. Fake satellite images and news of International bodies declaring the Indian national anthem the best in the world are shared and endorsed even by some of the well-educated class. Claims of cow-urine consumption eradicating the infection are ubiquitous. Such is the depth of the penetration of the sentiment, that not even a humanity-imperiling pandemic is spared the scope of being used to celebrate nationhood and romanticise the bygone ages and mythical era.

Cow urine distillate-based hand sanitisers are flying off the shelves. Now, the characteristic manic reverence for a cow may seem pervasively harmless – ridiculous but harmless. But, come to think of it, it serves multiple ends. BJP has not just used it as an implement to win elections, it has shifted the entire political discourse and the barycentre of the political compass with it! Consider this: the rapidly dwindling Indian National Congress – the prime Opposition Party could make a comeback by winning the Madhya Pradesh State Election, after its Chief Ministerial candidate promised even more cow-protective, godmen-patronising and othet so-called “Soft-Hindutva” measures than his BJP counterpart.

The overall fabric of the nation has been damaged and the discourse has been pinned at a skew. Provoked or Self-initiated mobilisation and deployment of rural, unemployed youth to spontaneously attack anyone carrying cattle under suspicion of them being beef-cattle smugglers is a convenient way for imbuing youth with a sense of purpose, duty, importance, and fulfillment. This also helps stoke the embers and fuel the fire of animosity between the beef-averse Hindu community and the beef-consuming Abrahamic faiths. Hindu youth in rural and suburban North India often organise as manually-armed goons, that patrol streets assailing everyone from social activists (on suspicion of them being converting missionaries) to cattle transporters to unmarried or interfaith couples.

"To develop the scientific temper, humanism and the spirit of inquiry and reform", is the 8th Fundamental Duty delineated in the Constitution of India. If only the BJP Parliamentarians considered them as much the citizens of the country, as the leaders of the citizens, they would have internalised the Fundamental Duties and acted accordantly, in the Parliament and in public.

EuroScientist | July 17, 2020

87 killed, 2.5 million affected by floods in India's pandemic-hit Assam state

Severe floods triggered by monsoon rains have affected 2.5 million people in India's Assam state, struggling already to contain the Covid-19 virus that has been infecting more than 1,000 people every day for the past week in the tea-producing region. India's Central Water Commission on Wednesday issued a "severe flood alert" and said water levels in rain-swollen rivers such as Kopili would rise further in the state bordering Bangladesh.

Assam's largest river, the Brahmaputra, which pours down from Tibet, was menacingly overflowing.

"By tomorrow evening, Brahmaputra is expected to rise by 16 centimeters (6.2 inches) compared to this afternoon," the commission said on Wednesday.

At least 87 people have drowned in boating accidents or been killed by landslides in the past two weeks.

At least 2.5 million others have been displaced by the flooding, according to the Assam Disaster Management Authority. At least 2,300 villages were under water and crops have been destroyed across 25 million acres of flooded farmland.

Some 48,000 people were sheltering in overcrowded government buildings on higher land with little or no physical distancing measures in place.

Floods a result of bad planning

Assam government minister Himanta Biswa Sarma said his administration was helpless even as the weather office forecast widespread rains in Assam and 11 nearby Indian states this week.

"An earthen embankment cannot resist water pouring (out) from Brahmaputra so we called for a scientific solution but the solution has not yet reached our hands," he told India Today TV station.

Sunita Narain, who heads Centre for Science and Environment, a Delhi-based research and advocacy group, blamed the floods in Assam on bad planning.

"The flood management strategy in India has to change from controlling rivers, which is this very masculine way of managing nature, to actually learning to live with floods," she told the station. The environmentalist also alleged political corruption had contributed to the problem in Assam, India's largest tea-growing state.

Popular wildlife park sinks, rare rhinos killed in floods

The floods also killed 120 wild animals in Assam's Kaziranga National Park, home to tigers, elephants and the world's largest population of rare one-horned rhinoceroses.

At least nine of the park's 2,400 rhinos have drowned.

"At present 80 percent of the national park is under water," said park director P. Sivakumar as minister Sarma took a tour of the submerged Kaziranga, a Unesco World Heritage site.

Covid-19 virus spreads in flooded Assam
Assam is also in grave difficulty with the Covid-19 virus spreading rapidly among its 30 million people.

The state reported the highest single-day spike of 1,680 new cases in 24 hours, taking the tally to 26,772 cases and 64 deaths so far.

Last week, India posted more than one million confirmed cases, the third highest in the world after Brazil and the United States.

The monsoon floods have also wreaked havoc in Nepal, with at least 110 people killed since June and more than one million displaced.

At least 81 people have also died in adjoining Bangladesh with a third of the country under swirling floods.

RFI | July 23, 2020

A mix of digital and physical events brings Terra Madre to every corner of the world!

The Terra Madre Salone del Gusto 2020 Journey Begins, A Six-Month global edition to give voices to the local communities, with digital and physical widespread events around the world.

THIS YEAR'S WILL BE THE LARGEST EDITION OF TERRA MADRE SALONE DEL GUSTO EVER. WE WILL USE ALL OUR STRENGTH TO SHOW THAT THERE ARE THOUSANDS OF COMMUNITIES, MADE UP OF PEASANTS, ARTISANS, PRODUCERS, FISHERMEN, WHO DEVELOP AN ECONOMY AT THE SERVICE OF COMMON GOODS ALL OVER THE WORLD. And in a certain sense, they will host Turin and Piedmont in every corner of the world: thousands of people carry the event, the territory and the ideas that flourish here in their hearts ». It is with these words, pronounced by the

president of Slow Food, Carlo Petrini, that the countdown for the 2020 edition of Terra Madre Salone del Gusto starts, which will open on October 8th and will continue for six months with a completely different format than usual.

Slow Food today announced a completely revolutionized format for its most important event dedicated to the future of food, Terra Madre Salone del Gusto. The event will show its resilient spirit by adapting to the new conditions imposed by the Covid-19 emergency: it will be a six-month journey that includes an extraordinary calendar of initiatives: a mix of innovative digital formats and diffuse physical events that unite the thousands of nodes of the Slow Food network and its million activists, as well as many other organizations, institutions and businesses.

From October 8 and for the following six months, the digital formats of Terra Madre will be hosted on a digital platform. This platform is a strategic tool developed to deal with the new measures imposed on physical gatherings of people all over the world. Terra Madre will end with the Slow Food International Congress, scheduled to take place in Turin in April 2021, during which Slow Food delegates will express all their ideas for the future of food that have arisen from the six-month journey of the event.

What's new for the 2020 edition of Terra Madre?

Thanks to its diffuse events all over the world, this will be the largest and widest-ranging edition ever: in terms of the number of countries involved (almost 160!), of participants, the quantity of "actions for change" which will be put into effect by a million of activists across the world. Moreover, in the new geography of Terra Madre, Slow Food will put political borders between states and regions into the background and focus attention on four global ecosystems (highlands, water

lands, lowlands, and urban lands). Slow Food activists will analyze the various shared frailties, problems, solutions, and opportunities of these ecosystems, framing the debate as part of the fight against the ongoing climate and environmental crisis, which remains the greatest threat to the future of humanity.

What's the theme of the 2020 edition?

Our Food, our Planet, our Future. Our relationships with our food – how we produce it, distribute it, choose it and eat it – have enormous impacts on our planet, and consequently, our future. At Terra Madre, we will try to understand where we are going, and to identify the corrective action needed to ensure a better future... because we are running out of time!

The food system has been deeply affected by the Covid-19 pandemic. The impacts on the supply of and demand for food have had serious consequences on the four pillars of food security: availability, access, utilization, and stability. So how is it possible to feed the planet and guarantee good, clean and fair food for all? Slow Food has the answer: biodiversity. The association maintains that the only way forward is through the promotion of biodiversity in all its forms: from invisible bacteria to the largest species, as well as the diversity of human knowledge and cultures. This mission is more timely and urgent than ever. And in order to fulfill this mission, we believe that Terra Madre is necessary.

How will the platform work?

The platform will be completely free; all visitors need is an internet connection. It provides a catalog of conferences, forums, webinars, e-learning courses and workshops, a section dedicated to the showcase and e-commerce of products (where producers will be able to upload videos, pics, and info about their activities), a Premium section dedicated to the press and a Business-to-Business

section dedicated to exhibitors. Content will be provided in different languages.

Some new formats developed for the 2020 edition include:

Food talks -> a collective framework of the future we want and need: 15-minute talks on specific issues by special guests, as well as farmers, producers, and cooks, who will offer their visions of the environment, agriculture, and food.

How it's made → video activities where you'll discover new skills and satisfy your curiosities—even ones you didn't know you had.

The Relay on Oct 10 → a miniseries in five parts that crosses continents and time-zones with a global dialog on the big questions of our age: the climate and environmental crisis; migration as a consequence of the degradation of natural resources; equity, inclusion, and justice; the devastation of the Amazon rainforest and the battles of indigenous people for their rights.

Terra Madre World → curious to see what your local Slow Food network is organizing? From September, a great world map will light up with Slow Food events organized by our activists worldwide.

Special Guests at Terra Madre

Among the people we have invited, the following have already confirmed their participation:

Sunita Narain. Indian environmentalist and activist. She was included in a list of the 100 most influential people in the world by Time magazine in 2016.

Dan Barber. Chef at the Blue Hill restaurant in Greenwich Village, New York, and New York Times columnist who writes about agricultural revolution.

Larissa Mies Bombardi. Professor at the University of São Paulo, she is particularly focused on human and agricultural geography, and on the use of pesticides in Brazil.

Fritjof Capra. Austrian physicist, economist, and writer. He has worked on sustainable development, ecology, and the theory of complexity.

Dave Goulson. Professor of Biology at the University of Sussex, his specialist subjects are ecology and the conservation of insects (with a focus on the decline of pollinators)

Carolyn Steel. British architect and prominent exponent of the urban ecosystem.

Paul Collier. British economist and Professor of Economics and Public Policy at the Blavatnik School of Government. In his opinion, capitalism must necessarily be ethical to function.

Franco Farinelli, former professor of Geography at the University of Bologna and Professor at the Universities of Geneva, Los Angeles (UCLA), Berkeley (UCB), and the Sorbonne in Paris.

Some of the issues up for discussion at Terra Madre (videos)

Qun Sun, China (member of the Slow Food Executive Committee) talks about Covid-19 and the need to rethink our Relationship with Nature

Dali Nolasco Cruz, Mexico (coordinator of the Indigenous Terra Madre network in Latin America and the Caribbean) talks about indigenous peoples, women, poverty and biodiversity

Jorrit Kiewik of the Netherlands (Executive Director of Slow Food Youth Network) talks about the European Green New Deal and the role of youth in the Farm to Fork strategy

Kathryn Underwood, USA (board member of Slow Food USA) talks about equity, inclusion and justice

Edie Mukiibi, Uganda (vice-President of Slow Food) talks about migration: reasons and solutions

Carlo Petrini, Italy (founder and President of Slow Food) talks about how the economy of communities is our future

Need more information? Check out the Terra Madre press kit!

Register here to have access to the Premium content dedicated to the press

You can download the Terra Madre Salone del Gusto 2020 presentation here.

You can find a selection of pictures from the last edition here.

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Slow Food is a worldwide network of local communities founded in 1989 in order to counteract the disappearance of local food traditions and the spread of fast-food culture. Since then, Slow Food has grown to become a global movement that involves millions of people in more than 160 countries and works so that we can all have access to good, clean and fair food.

Terra Madre Salone del Gusto is an event organized by the City of Turin, Slow Food, and the Region of Piedmont in cooperation with MIPAAF (Ministry of Agriculture, Food and Forest Policy of Italy) and MATTM (Ministry for Environment, Land and Sea Protection). It has been made possible thanks to its many sponsors, including Agugiaro&Figna, Astoria, BBBell, Bormioli, Compagnia dei Caraibi, Lavazza, Liebherr, Pastificio Di Martino, Quality Beer Academy, San Bernardo, UniCredit. With the support of Compagnia di San Paolo, Fondazione Cassa di Risparmio di Torino, and Associazione delle fondazioni di origine bancaria del Piemonte. With the contribution of IFAD and UE. In collaboration with SANA.

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India Today :CSE

Spokesperson : Sunita Narain

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Conversation with Sunita Narain DG, CSE Panel Discussion over Assam flood fury

<https://youtu.be/tuBp1qLOOLY>