

“What helps you persevere is your resilience and commitment.” Roy T. Bennett

NATIONAL**GOVERNMENT BANS USE OF PETCOKE AS FUEL**

The Directorate General of Foreign Trade banned the use of imported petcoke as fuel.

Use of Petcoke is allowed only for cement, lime kiln, calcium carbide and gasification industries, when used as the feedstock or in the manufacturing process on actual user condition.

The decision to modify its ban was largely due to the government's submissions that petcoke is used as an ingredient and not as fuel in the cement industry.

The sulphur is mostly absorbed in the process of cement-making.

Hence the Court has relaxed its ban on the use of petroleum coke (petcoke) and allowed cement and limestone industries to use it.

The Supreme Court ruled a judgment banning use of the fuel in and around New Delhi. This impacted cement companies, which account for about three-fourths of the country's petcoke use.

Petroleum coke, the bottom-of-the-barrel leftover from refining Canadian tar sands crude and other heavy oils, is cheaper and burns hotter than coal.

But it also contains more planet-warming carbon and far more heart- and lung-damaging sulphur.

India's imports of petcoke have declined this year as cement companies substituted some of their petcoke with coal to avoid production delays due to pollution-related policy changes.

As the world's largest consumer of petcoke, India imports over half its annual petcoke consumption of about 27 million tonnes, mainly from the United States.

India is the world's biggest consumer of petroleum coke, which is a dark solid carbon material that emits 11% more greenhouse gases than coal, according to the Carnegie-Tsinghua Center for Global Policy.

CHIEF ELECTION COMMISSIONER RULED OUT POSSIBILITY OF SIMULTANEOUS ELECTIONS IN FOUR STATES.

Chief Election Commissioner O.P. Rawat ruled out the possibility of holding simultaneous elections to the Lok Sabha and the State Assemblies this year along with polls to the Assemblies of four States.

Mizoram is due for elections in December, as the term of the Assembly ends on December 15.

Mizoram is followed by Chhattisgarh, Madhya Pradesh and Rajasthan.

Reasons:

Simultaneous polls pose too big a legal and logistical challenge to be implemented now.

Simultaneous elections would demand a massive increase in the number of electronic voting machines (EVMs) and voter-verifiable paper audit trail (VVPAT) units.

Ensuring the VVPATs everywhere poses a logistical challenge.

Altering the term of an Assembly needs an amendment to the Constitution.

Simultaneous elections will require the use of 24 lakh EVMs, needing the procurement of 12 lakh EVMs and an equal number of VVPAT units.

These figures ought to give pause to the clamour to hold simultaneous Assembly elections with the next Lok Sabha polls.

The BJP President Amit shah has written to the Law Commission favouring simultaneous polls.

Arguments in favour of the concept:

The country is perpetually in election mode, resulting in a lack of adequate focus on governance.

The scattered polling results in extra expenditure.

Way ahead:

Wide political consensus, as well as legislative cooperation from various parties at the Centre

and in the States, is required for holding simultaneous elections.

It would be more productive for political parties to focus on basic electoral reforms and find ways to curb excessive election expenditure.

HEALTH POLICIES TO COVER MENTAL ILLNESS

Insurance regulator IRDAI has issued a circular directing insurers to cover mental illness, which has reached serious proportions in the country.

The Mental Healthcare Act, 2017 — which came into force from May 29 — has made it mandatory to provide “for medical insurance for treatment of mental illness on the same basis as is available for treatment of physical illness”.

But to date, none of India’s 33 insurers has introduced a product that covers ailments such as depression, schizophrenia, and bipolar disorder, even though such covers are commonplace in many countries.

The change has been long overdue. This is being seen as a progressive step. This will ensure a life of dignity to those who have mental health issues. It will create awareness, acceptance, and inclusion of mental illness as any other physical ailment. It will ‘normalise’ diagnoses, by reducing associated myths and stigma.

Mental health conditions have always been in the list of exclusions of health insurance policies. The only exceptions to this have been the coverage of development conditions such as autism and Down’s syndrome by the National Health Insurance Scheme, and a few private schemes like Star Health Insurance’s cover for autistic children.

As per the Mental Healthcare Act, mental illness means a substantial disorder of thinking, mood, perception, orientation or memory that grossly impairs judgement, behaviour, capacity to recognise reality or ability to meet the ordinary demands of life. It also includes mental conditions associated with the abuse of alcohol and drugs, but does

not include mental retardation which is a condition of arrested or incomplete development of mind of a person. The Act further states that every person with mental illness will be treated as equal to persons with physical illness when it comes to healthcare, including health insurance.

GANGA STRETCHES IN BENGAL UNFIT FOR BATHING

A recent map published by the Central Pollution Control Board (CPCB) has revealed that water of the Ganga stretches in Bengal is so polluted that it is even unfit for bathing.

The map was published after the National Green Tribunal (NGT) asked the National Mission for Clean Ganga (NMCG) authorities to set up display board along the banks of the Ganga to indicate whether the water fit for bathing or drinking.

The development comes at a time when the Centre has claimed that the Namami Gange project, has achieved considerable success.

The graphic map marks the areas where the water of the Ganga is unfit for bathing with red dots.

Apart from Kolkata, the other affected stretches of the Ganga are located in the districts of Howra (Uluberia, Shibpur), Hooghly (Tribeni, Serampore), North 24 Paraganas (Palta, Dakhineswar), Nadia (Nabadwip) and Murshidabad (Gorabazar, Behampore, Khagra).

The CPCB guidelines upon which the map is based are given below.

- States that water is fit for bathing when the amount of fecal coliform bacteria, found mainly in human faeces, is not more than 2,500 most probable number (MPN) per 100 ml.
- Dissolved oxygen is not more than 5 mg per litre
- Bio chemical oxygen demand is less than 3 mg per litre
- The pH level-measurement of how acidic the water is, between 6.5 to 8.5.

Apart from West Bengal, the water of the Ganga is also unfit for bathing in States such as Uttar Pradesh and Bihar.

While, Uttarakhand remains the only exception with 11 stretches of the Ganga being fit for bathing along with Ara town in Bihar.

West Bengal Pollution Control Board (WBPCB) claimed that the State is located at the downstream of the Ganga it receives all the pollutants which accumulates in the river from States in the upstream.

A renowned river expert, also pointed out that coliform bacteria, mainly found in sewage, is a major cause for concern due to its large presence in the Ganga.

DATA LOCALISATION

US technology giants plan to intensify lobbying efforts against stringent Indian data localisation requirements, which they say will undermine their growth ambitions in India.

U.S trade groups, representing companies such as Amazon, American Express and Microsoft, have opposed India's push to store data locally. That push comes amid rising global efforts to protect user data but is one that could hit planned investments by the firms in the Indian market, where the companies currently have limited data storage.

Data localization is the act of storing data on any device that is physically present within the borders of a specific country where the data was generated. Free flow of digital data, especially data which could impact government operations or operations in a region, is restricted by some governments. Many attempt to protect and promote security across borders, and therefore encourage data localization.

Goals set in the Draft National Digital Communications Policy 2018, along with various government notifications and guidelines such as Reserve Bank of India's notification on Payment Data Storage 2018, and the Guidelines for Government Departments for Contractual Terms related to

Cloud Storage 2017, show signs of data localisation.

The rationale behind such mandates has been attributed to various factors, such as: securing citizen's data, data privacy, data sovereignty, national security, and economic development of the country. The extensive data collection by technology companies, due to their unfettered access and control of user data, has allowed them to freely process and monetise Indian users' data outside the country.

Stricter localisation norms would help India get easier access to data when conducting investigations, but critics say it could lead to increased government demands for data access. Technology firms worry the mandate would hurt their planned investments by raising costs related to setting up new local data centres.

Greater use of digital platforms in India for shopping or social networking have made it a lucrative market for technology companies, but a rising number of data breaches have pushed New Delhi to develop strong data protection rules.

Also, minimal or deregulated governance on critical data, due to absence of localisation requirements, could be detrimental to India's national security as data would be outside the purview of existing data protection legislation. The ineffectiveness of Mutual Legal Assistance Treaties (MLATs) in this realm aggravates such government fears.

In addition to these, India also aspires to become a global hub for, among others, cloud computing, data hosting and international data centres, all of which are prompting the government to enact data localisation requirements for accelerating the nation's economic growth, especially in the sphere of digital technologies.

Way ahead:

Though these policy goals are justifiable, a deeper analysis is required to determine the possible adverse spill-over effects on relevant stakeholders in case a faulty roadmap is adopted to achieve them.

Adequate attention needs to be given to the interests of India's Information Technology Enabled Services (ITeS) and Business Process Outsourcing (BPO) industries, which are thriving on cross-border data flow.

SCIENCE AND TECH

SUCCESSFUL FLIGHT TESTS OF SMART ANTI AIRFIELD WEAPON (SAAW) AND ATGM 'HELINA'

Smart Anti Airfield Weapon (SAAW)

Indigenously designed and developed guided bombs Smart Anti Airfield Weapon (SAAW) were successfully flight tested from IAF aircraft at Chandan range.

The weapon system was integrated with live warhead and has destroyed the targets with high precision. The telemetry and tracking systems captured all the mission events.

This weapon is capable of destroying variety of ground targets using precision navigation.

The weapon has undergone eight developmental trials till date and performance of system for different ranges under multiple launch conditions has been demonstrated.

HELINA:

Indigenously developed Helicopter launched Anti-Tank Guided Missile 'HELINA' has been successfully flight tested from Army Helicopter at 1400hrs in the ranges of Pokhran.

The weapon system has been tested for its full range.

The 'HELINA' weapon system released smoothly from the launch platform has tracked the target all through its course and hit the target with high precision.

All the parameters have been monitored by the telemetry stations, tracking systems and the Helicopters.

The Missile is guided by an Infrared Imaging Seeker (IIR) operating in the Lock on Before Launch mode.

It is one of the most advanced Anti-Tank Weapons in the world.

INDIA BUILDING NEW FIGHTER JET

First flight of Advanced Medium Combat Aircraft (AMCA), India's next indigenous fighter, is expected in 2032. Development work on the jet is under way.

The new fighter programme is important as technologies coming in through that will flow into the AMCA project.

The aircraft will be powered by the same GE-414 engine on the LCA Mk-2 variant which is in the design phase.

A GE-414 produces 98kN thrust compared to 84kN thrust of the GE-404 engine which is on the LCA Mk1.

This is India's only fifth generation aircraft programme following the decision not to go ahead with the fifth generation project with Russia.

The AMCA will feature geometric stealth and will initially fly with two GE-414 engines.

Two major ways of making a military platform stealthier: – Geometric stealth and Material stealth.

In geometric stealth, the shape of the aircraft is designed at such angles so as to deflect away maximum radar waves thereby minimizing its radar cross section.

In material stealth, radar-absorbing materials are used in making the aircraft which will absorb the radio waves thus reducing the radar footprint.

The AMCA will initially be based on geometric stealth, while the material stealth can be used at a later stage.

The Indian Air Force has given land to the DRDO to set up facilities for the project.

The objective is to build on the capabilities and expertise developed during the development of the light combat aircraft (LCA) and produce a medium fifth generation fighter aircraft.

There are three critical technologies that need to be developed-stealth, thrust vectoring and super cruise.
