

CURRENT AFFAIRS

WEEKLY

WEEK-4
DECEMBER
2020

MAINS

- GS-I** ● Moon controls release of methane in Arctic Ocean: Study
- GS-II** ● Indian Foreign Policy and Its Aspirations: Institutional Design Matters
 - Hate speech repudiates right to equality: SC
- GS-III** ● Policy responses to smokeless tobacco (ST) in India during the COVID19 pandemic
 - Five Years of the Paris Agreement: India's Green Investment
- GS-IV** ● Ethics in Media: A Thing of the Past?

PRELIMS

- GEOGRAPHY** ● Geminids Meteor Shower
- HISTORY** ● 50th anniversary of 1971 India-Pakistan war
- ECONOMY** ● Gender violence drops, but prevalence remains high in bigger states: NFHS-5
 - India slips 17 spots down to 111th rank
 - India Slips to 131 in Human Development Index Ranking
 - US puts India back on Currency Manipulation Watchlist
- ENVIRONMENT** ● Air pollution factor in girl's death
 - Char Dham project responsible for landslide in Uttarakhand?
 - Coal here to stay, but measures can cut down emissions by 22%
 - Kerala: Forked Fanwort blooms in Kozhikode

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The current affairs articles are segregated from prelims and mains perspective, such separation is maintained in terms of structure of articles. Mains articles have more focus on analysis and prelims articles have more focus on facts.

However, this doesn't mean that Mains articles don't cover facts and PT articles can't have analysis. You are suggested to read all of them for all stages of examination.

CURRENT AFFAIRS ANALYST

WEEK- 4 (DECEMBER, 2020)

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SECTION: A

(MAINS)

CURRENT AFFAIRS

MOON CONTROLS RELEASE OF METHANE IN ARCTIC OCEAN: STUDY

CONTEXT

As per a latest study lead by University in Tromso (UIT), the moon has a role to play in ‘controlling’ the amount of methane gas released by the Arctic Ocean.

◎ BACKGROUND

- For thousands of years, the Arctic Ocean has been naturally releasing enormous amounts of methane into the atmosphere—a fact not widely known.
- Methane is a potent greenhouse gas and its release can significantly impact the global climate.
- The world's oceans are large reservoirs of this gas, where it is stored in the form of solid methane hydrates within the seafloor.
- Climate experts have been warning the world that these leaks can intensify as the ocean warms up.
- This way, we may enter into a self-accelerating loop of more emissions—more warming—more emissions.
- While anthropogenic activities continue to contribute to growing methane concentrations in the atmosphere, the current study indicates that Earth's sole natural satellite—the Moon—may also be contributing in some form.
- Although ocean methane emissions are considered to be widespread their dynamics and the physical processes behind their evolution are little understood.
- Given the impact of methane as a greenhouse gas, the dynamic of oceanic methane emissions, which could potentially reach the atmosphere, introduces a non-negligible doubt on the global budget of atmospheric methane.

● Use: It is used

- to produce heat and electricity around the world
- to produce other important gases like hydrogen and carbon monoxide and carbon black, in chemical reactions

- Large quantities of methane are stored in the Arctic in **natural gas deposits, permafrost**, and as undersea **clathrates**.
- Methane deposits in permafrost and hydrates are considered to be very sensitive in the expansive shallow-shelf regions, because with the relatively low pressures it would only take a small temperature change to release large amounts of methane.
- The potential for this gas to escape the ocean, and contribute to the greenhouse gas budget in the atmosphere, is an important mystery that scientists are trying to solve.
- The total amount of methane in the atmosphere has increased immensely over the past decades.
- The Arctic is considered ground zero in the debate about the vulnerability of frozen methane deposits – which have been called the “**sleeping giants of the carbon cycle**” – in the ocean, and if releases were to exceed a tipping point, it could increase the speed of global heating.

◎ ANALYSIS

How Arctic Ocean leaks methane?

- In the field of methane emission research today, the Arctic is one of the most important regions worldwide.

Methane

- Methane (CH₄) is a colorless, odorless, and highly flammable gas.
- It is the main component in natural gas, which is used to generate electricity and heat homes around the world.
- It can be produced naturally and synthetically, and when burned in the presence of oxygen, it produces carbon dioxide and water vapor.

Sleeping giants of the carbon cycle

- Scientists estimate 1,400 gigatonnes of carbon are locked up in subsea hydrates (frozen methane and other gases) under Arctic submarine permafrost, some of which could be vulnerable to global heating.
- If large volumes were released, this could rapidly destabilise the climate because methane is a potent greenhouse gas with a warming effect 80 times stronger than carbon dioxide over a 20-year period.
- Scientists have thus listed Arctic hydrate destabilisation as one of four most serious scenarios for abrupt climate change.

- This possibility – sometimes referred to as the ‘clathrate gun hypothesis’ – has been the basis for doomsday scenarios of runaway warming that tips the Earth towards a hothouse state.
- However, several studies suggest such fears are exaggerated.

What are the sources of methane in Arctic Ocean?

There are two potential sources of methane in the Arctic.

- **Methyl clathrate:** The first source of methane is called methyl clathrate. Methyl clathrates are molecules of methane that are frozen into ice crystals.
 - ▶ They can form deep in the Earth or underwater, but it takes very special conditions, with high pressure and low temperature, to make them.
 - ▶ If the temperature or pressure changes, the ice that imprisons the methane will break apart, and the methane will escape.
- **Presence of organic material:** The other major source of methane in the Arctic is the organic matter frozen in permafrost, which contains a lot of carbon.
 - New methane is continuously being produced because the Arctic regions are rich in organic material that is decomposed by microbes in the sediment.
 - The activity of these microbes and thus the biological release rates of methane are also stimulated by increases in temperature.

How moon controls the release of methane?

- The moon controls one of the most formidable forces in nature—the tides that shape our coastlines.
- Tides, in turn, significantly affect the intensity of methane emissions from the Arctic Ocean seafloor.

Tides and Moon

- High and low tides are caused by the Moon.
- The Moon's gravitational pull generates something called the tidal force.
- The tidal force causes Earth—and its water—to bulge out on the side closest to the Moon and the side farthest from the Moon. These bulges of water are high tides.

What are the observations made?

- **Vulnerable to slight pressure change:** The gas accumulations, which are in the sediments within a meter from the seafloor, are vulnerable to even slight pressure changes in the water column.
 - ▶ Low tide means less of such hydrostatic pressure and higher intensity of methane release.
 - ▶ High tide equals high pressure and lower intensity of the release.
- It is the first time that this observation has been made in the Arctic Ocean. It means that slight pressure changes can release significant amounts of methane.

What are the major implications of the findings?

The findings have two major implications.

• Methane emission

- ▶ The first concerns the amount of methane the Arctic Ocean may be releasing into the atmosphere.
- ▶ Methane is an extremely potent greenhouse gas. Once released into the atmosphere, it has 86 times the warming potential of carbon dioxide before it decays to the latter after one or two decades.
- ▶ It is currently generated by human activities like fossil fuel production and transportation, livestock agriculture and the decay of organic material in landfills.
- ▶ But there is also concern that, as the planet warms, it could be released by the thawing of frozen gas deposits in the Arctic Ocean known as hydrates.
- ▶ Now, the new study provides evidence that Arctic Ocean methane release is occurring more often than previous observation techniques have revealed.

• Interaction of global warming with sea level rise to influence Arctic Ocean methane release

- ▶ The second implication has to do with how global warming will interact with sea level rise to influence Arctic Ocean methane release.
- ▶ While higher temperatures mean greater thawing, the fact that greater water pressure reduces the height and volume of gas releases may mean that sea level rise partly counterbalances the impact of warming.

Which method is used?

- The observations were made by placing a tool called a **piezometer** in the sediments and leaving it there for four days.

Piezometers

- Piezometers are the geotechnical sensors that are used to measure pore water pressure (piezometric level) in the ground.
 - Piezometers or pore pressure meters are the pressure transducers that are installed beneath the ground to measure the sub-surface piezometric level within groundwater level, soil, or rock.
- It measured the pressure and temperature of the water inside the pores of the sediment.
 - Hourly changes in the measured pressure and temperature revealed the presence of gas close to the seafloor that ascends and descends as the tides change.
 - The measurements were made in an area of the Arctic Ocean where no methane release has

previously been observed but where massive gas hydrate concentrations have been sampled.

- These observations imply that the quantification of present-day gas emissions in the Arctic may be underestimated.
- High tides, however, seem to influence gas emissions by reducing their height and volume.

◎ CONCLUSION

Our Earth systems are interconnected in ways that humans are still learning about. And here comes the current study which reveals one of such interconnections in the Arctic: The moon causes tidal forces, the tides generate pressure changes, and bottom currents that in turn shape the seafloor and impact submarine methane emissions.

INDIAN FOREIGN POLICY AND ITS ASPIRATIONS: INSTITUTIONAL DESIGN MATTERS

CONTEXT

The Indian diplomatic architecture is undertaking a much-needed overhaul, with the seven verticals, new divisions, and technology upgrade through NEST. However, there remain issues and areas of reform, which necessitate a deeper examination

◎ BACKGROUND

- Indian diplomacy has seen monumental changes over the centuries.
- These transformations have allowed the country to cope with the changing demands of external affairs.
- As the MEA prepares itself to meet the aspirations of a 21st-century India, it is clear that the process of evolution in its institutional underpinnings will have to be a constant one.
- Globally, the country wants to remain a relevant and influencing power on vital issues ranging from digital technologies to the space and cyber commons, climate sustainability to fair trade.
- Now, the External Affairs Ministry have set into motion a series of structural changes to bring the ministry up to speed with the increasingly complex and diverse needs of India's foreign policy.
- This is the first major overhaul in the ministry in nearly five decades.

◎ ANALYSIS

How history shaped India's Foreign Services?

- In 1783, the Board of Directors of the East India Company passed a resolution at Fort William, to create a department that would help "relieve the pressure" on the **Warren Hastings** administration in conducting its "secret and political business".
 - Those were difficult times for the East India Company, having just barely saved face against the Maratha Empire in the **First Anglo-Maratha War**, and losing to **Hyder Ali** in the South.
 - The British Parliament was about to pass the **Pitts India Act, 1784**, which would further limit the independent powers of the East India Company.
- This department expanded its outreach to diplomacy, to finally become the IFS.
- By 1843, the British were powerful. Only Punjab was left to be conquered.

- By then, however, the East India Company, through a series of Charter Acts, had become a shadow of its past self.
- The British found it necessary to restructure the foreign department for better management, and **Governor General Ellenborough**, therefore, carried out administrative reforms and created four departments:
 - Foreign
 - Home
 - Finance
 - Military
- By September 1946, India had come close to Independence. Hence, there was a need for a different name and a different structure for a newly formed country.
- The **Indian Foreign Service** was created for India's diplomatic, consular and commercial representation overseas.

What are India's current aspirations?

- Today, the global order is far different than what it was 50 years ago, when the Cold War was at its peak, memories of World War II were still raw, and India had decided not to align itself with either of the two superpowers.
- The India of 2020 has aspirations of becoming a key global power, with the ability to project its clout far beyond its borders.
- Through wider global engagement, India is aiming to be a rule-maker, and not merely a rule-taker.

What factors influences Indian foreign policy?

India's foreign policy is shaped by five broad factors viz. geography; strategic culture; India's requirements and goals; global and regional challenges; and resources.

- Geography:** The most important factor is India's geographic location. India's immediate neighbourhood and how well the country manages it, has the greatest influence on how effectively the country can interact with the rest of the world.

- **Strategic culture:** India's strategic culture shaped by its history, its philosophy which emphasizes non-aggressive behaviour, and traditions have influenced foreign policy making significantly.
- **Aims and objectives:** The country's requirements and goals, which have been changing with the times, also impact external affairs.
- **Global and regional challenges:** Global and regional challenges are another aspect in the shaping of foreign policy.
- **Resources:** Also, the resources (human skills and funds) available to the country, have a significant impact on the performance of that country in the global stage.

What are the new verticals of MEA?

- As 2020 began, the MEA undertook a major overhaul, empowering seven different Additional Secretaries and reorganising their tasks along verticals like culture, and trade and development, amongst others.
- These verticals will have career diplomats at the level of Additional Secretaries and above. With this overhaul, administrative tasks were segregated from diplomacy.
- The seven verticals are designed to give more power to Additional Secretaries, thereby, taking pressure off the Secretaries to handle the big ticket issues.
- The following are the seven verticals of the MEA:
 - Cultural Diplomacy
 - Economic and Trade Coordination
 - Multinational Organisations and Global Summits
 - Development Partnership
 - West Asia and Africa
 - Indian Ocean and Indo-Pacific
 - Europe
- With such a restructuring, the MEA seeks to define the future path of Indian diplomacy. In the restructuring plans, the MEA is also bringing in experts from the private sector and non-profit bodies as well.

Quick details:

- **Nature:** The new structure will be more corporate in nature.
- **Head:** Each of these verticals will be headed by the equivalent of 'political directors' at the additional secretary level.

- **Objective:** The idea behind the concept is to decentralise the present pyramid-like structure, to separate routine foreign policy work from strategic projects.

How will the new verticals define the future path?

- **Emergence of soft power:** The verticals of cultural diplomacy, economic and trade coordination—and, to some extent, multinational organisations and summits—will lead India's rally to fortify its soft power.
- **Permanent seat in UNSC:** In addition, by focusing on multinational organisations and global summits, India's claim to a permanent seat at the United Nations Security Council will only get bolder.
- **Partnership for development:** The Development Partnership vertical, meanwhile, can work in two ways.
- **Technology-friendly:** First, India could enlist the assistance of other countries for projects like the Smart Cities Initiative where Indian cities work with foreign cities to become "smart", i.e., become more technology-friendly.
- **Building Infrastructure for neighbours:** Second, India can help neighbouring countries like Afghanistan, Bangladesh, Bhutan and Nepal in building infrastructure.
- **Controlling vital regions:** Complete dedicated verticals for West Asia and Africa, the Indian Ocean and Indo-Pacific, and Europe signify India's seriousness in cooperating with countries in these regions.
 - For example, India would want to continue the upward trajectory in its ties with **Gulf** countries like the **UAE** and **Saudi Arabia** at a time of great regional flux in the **Middle East**.
 - Africa, meanwhile, is becoming a centre of power rivalry as China expands its economic footprint in the continent.
 - The Indian Ocean and the larger Indo-Pacific region is another geography where Indian interests are at stake.

Importance of Indian Ocean

- Indian Ocean Sea Lanes of Communication (SLOCs) are considered among the most important in the world
- 80 percent of the world's seaborne trade in oil transits through Indian Ocean choke points, 40 percent passing through the Strait of Hormuz, 35 percent traversing the Strait of Malacca, and 8 percent through the Bab el-Mandab Strait.

- This is the reason for China's interest in controlling Indian Ocean SLOCs—to protect its energy interests and the Maritime Silk Route.
- This, in turn, raises India's concerns in the region, giving the country reason to work towards building closer relations with the island states of the Indian Ocean region through organisations like the Indian Ocean Commission, in which it is an observer.

How 'NEST' will fill the present technology gap?

- In the technological era of the 21st century, the MEA decision to create a new division called NEST (New and Emerging Strategic Technologies) is most timely.
- NEST is to serve as the **nodal agency** for issues pertaining to new and emerging technologies.
- It will engage in technology diplomacy by ensuring collaboration with different partners in emerging fields like 5G, cloud computing, and artificial intelligence.
- It will help improve India's external technology policy in coordination with domestic stakeholders and in line with India's national security goals.
- It will also assess any international legal implications of new technologies and thus contribute to better policymaking.

What are the structural challenges in this policy sector?

- **Infrastructure issues:** In this emerging new world, the Ministry of External Affairs (MEA) can no longer maintain its Cold War-era institutional infrastructure.
- **Over burdened:** The Secretaries of each department and the Cabinet Minister have been overworked, the Additional Secretaries carry the burden of daily administrative tasks and no new policies and actions can be discussed.
- **Outdated practices:** The ministry's management and functioning structure remains out of sync with modern-day practices when the world has moved on from the Cold War era.

What should be India's further approach?

- **Strengthening institutional infrastructure:** Getting the institutional design right is key for effective policymaking and given the scale and scope of global transformation.
- **Management of differences:** The country must seek greater alignment based on converging interests with the U.S., soft balancing through management of differences with China.
- **Cooperation with middle powers:** Cooperation with middle powers to maintain a regional order that does not pose a strategic challenge to India.
- **Synergy in coordination:** The multilateral organisations and summits' vertical will have to be in coordination with other ministries and federal units, to ensure synergy in their efforts.
 - **For example,** India's Intended Nationally Determined Contributions (INDCs) in accordance with its commitments to the Paris Climate Agreement, need to be worked out by the Ministry of Environment, Forests and Climate Change, and the Ministry of New and Renewable Energy.
 - Only then will this vertical be able to represent India in a more informed manner in future summits.
- **Improving relations with South Asian nations:** Similarly, issues related to India's relations with its South Asian neighbours should be addressed by individual federal units to remain updated on the various activities that are happening across the country's borders, including the BBIN corridor (Bangladesh-Bhutan-India-Nepal).
 - The likelihood is that there will be a push for the development activities being taken up by the countries of SAARC (South Asian Association for Regional Cooperation) and BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation).

🕒 WRAPPING UP

Through its seven verticals, the MEA seems to be focusing on soft-power diplomacy, neighbourhood-focused development, enhancing India's profile in multilateral groups and international summits apart from countering adversaries. The aim of the restructuring is to ensure that these objectives are achieved in a much more synergistic fashion than in the past.

HATE SPEECH REPUDIATES RIGHT TO EQUALITY: SC

CONTEXT

- The concept of “hate speech” was highlighted in the recent judgement given by the Supreme Court in the case **Amish Devgan v/s union of India**.
- The judgment delivered by a bench comprising Justices A M Khanwilkar and Sanjay Khanna discussed the distinctions between “hate speech” and “free speech”, the need to criminalise “hate speech” and how it repudiates the right to equality.

◎ BACKGROUND

- The Supreme Court refused to quash multiple FIRs in the case against **journalist Amish Devgan** for his alleged defamatory remarks against **Sufi saint Khwaja Moinuddin Chisti**, observing that “persons of influence, keeping in view their reach, impact and authority... owe a duty and have to be more responsible”.
- ▶ **News18** anchor Devgan made the alleged defamatory remarks against the Sufi saint in his news debate show, ‘Aar Paar’, on 15 June this year.
- ▶ Seven FIRs were filed against Devgan in Rajasthan, Telangana, Maharashtra and Madhya Pradesh.

Who was Sufi saint Khwaja Moinuddin Chisti?

- According to History, Khwaja Moinuddin Chishti was a **13th-century Sufi mystic saint** and philosopher who travelled across South Asia, before eventually settling in Ajmer, where he died.
- Khwaja Moinuddin Chishti passed away in 1236 AD. He was almost 114 years old and his sacred mortal remains are what constitute his tomb in Ajmer Sharif Dargah.
- Among the Sufi shrines, the shrine of Sufi saint Moinuddin Chishti in Ajmer is one of the most popular.

creed, religion, sex, gender identity and linguistic preference etc.

- The court clarified that dignity, in this context of hate speech, it does not refer to any particular level of honour or self respect as an individual.

◎ ANALYSIS

What is Hate Speech?

- Hate speech constitutes a criminal charge under **Section 153A**, which is the offence of promoting communal disharmony or feelings of hatred between different religious, racial, language or regional groups or castes or communities.
- 153B of the Indian Penal Code categorises the offence of promoting religious, racist, linguistic, community or caste hatred or incites any religious, caste or any other disharmony or enmity within India, through any speech either in written form or spoken.

United Nations on Hate Speech

- According to the **United Nations**, ‘hate speech is defined as any kind of communication in speech, writing or behaviour, that attacks or uses pejorative or discriminatory language with reference to a person or a group on the basis of who they are, in other words, based on their religion, ethnicity, nationality, race, colour, descent, gender or other identity factors.’

How is it regulated in India?

- The SC refused to quash multiple first information reports (FIRs) against Amish Devgan.
- The Court observed that “persons of influence, keeping in view their reach, impact and authority... owe a duty and have to be more responsible”.
- The judgment states that it is necessary to draw a difference between “free speech” and “hate speech”
- The court observed that the object of criminalising hate speech is to protect the dignity of an individual and to ensure political and social equality between different identities and groups regardless of caste, creed, religion, sex, gender identity and linguistic preference etc.
- **Section 298** of the IPC, similarly, classifies the offence of uttering words with the deliberate intent to wound the religious feelings of any person.
- Likewise, **Section 505** of the IPC, criminalises the act of delivering speeches that incite violence.
- **Sections 295A** and **509A** also have similar provisions.
- The **123(3A) of the Representation of the People Act, 1951**, also criminalises hate speech by election candidates.
- In 2014, while addressing a Public interest Litigation

seeking guidelines for regulating Hate Speech, the Supreme Court made certain observations.

Important SC Judgements

- **Shreya Singhal v. Union of India:** Issues were raised about Section 66A of the Information Technology Act, 2000 relating to the fundamental right of free speech and expression guaranteed by Article 19(1) (a) of the Constitution, where the Court differentiated between discussion, advocacy, and incitement and held that the first two were the essence of Article 19(1).
- **Arup Bhuyan vs State of Assam:** The Court held that a mere act cannot be punished unless an individual resorted to violence or inciting any other person to violence.
- **S. Rangarajan Etc vs P. Jagjivan Ram:** In this case, the Court held that freedom of expression cannot be suppressed unless the situation so created are dangerous to the community/public interest wherein this danger should not be remote, conjectural or far-fetched. There should be a proximate and direct nexus with the expression so used.

What are the elements of hate speech?

- The SC judgement elucidated three elements of hate speech that legislatures and courts can use to define and identify hate speech:
 - Content-based element
 - Intent-based element
 - Harm-based element (or impact-based element)

What is the difference between hate speech and freedom of speech?

- The Indian Constitution, under **Article 19(1) (a)** provides the right to freedom of speech and expression.
- However, under **Article 19(2)**, the constitution also provides for the **reasonable restrictions against free speech** in the interests of sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality or in relation to contempt of court, defamation or incitement to an offence.
- Hate speech is considered a **reasonable restriction on freedom of speech and expression**.

Will the reasonable restriction take away the liberty of an individual?

- The critics of restricting freedom of speech often argue that it would amount to taking away the liberty of an individual.

- However, under the guise of exercising intrinsic rights, many perpetrate the crime of hate speech, giving rise to an air of distrust, and terror.
- It must be understood that liberty is there for everyone.
- If in the name of free speech, a Hate Speech is given which marginalizes certain persons, then the liberty of those is taken away.

Law Commission of India on 'liberty' and 'freedom of speech

- In the **267th Report** of Law Commission of India, it was stated that
- *"Liberty and equality are contemporary and not antithetical to each other. The intention of having the freedom of speech is not to disregard the weaker sections of society but to give them an equal voice. The intent of equality is not to restrain this liberty but to balance it with the necessities of a multicultural and plural world, provided such constraint does not unduly infringe on the freedom of expression. Thus, incitement to not only violence but also to discrimination has been recognized as a ground for interfering with freedom of expression."*

Is there any International Law regime around Hate Speech?

- International human rights law has set standards by which states are supposed to adhere to strong directives against hate speech in their respective jurisdictions.
- Even though the essential right to free speech is a fundamental right, it also has certain reasonable restrictions that go with it.
- **International Covenant on Civil and Political Rights (ICCPR):** As per **Article 19(3)** of the ICCPR, the right of freedom of speech can be regulated in order to honour the rights of others and in the interest of public order, public health or morals.
 - Article 20(2) of the ICCPR also declares that any advocacy of national, racial, or religious hatred that constitutes incitement to discrimination, hostility or violence shall be prevented by law.
- **European Convention on Human Rights:** Similarly, **Article 10(2) of the European Convention on Human Rights**, provides reasonable duties and restrictions during the exercise of one's fundamental right to free speech.
- **United Nations Strategy and Plan of Action on Hate Speech:** The United Nations Strategy and Plan of Action on Hate Speech provides that member states must identify and support actors who challenge hate speech. They are also mandated to build capacity and develop policies to address hate speech.

- **Rabat Plan of Action:** The Rabat Plan of Action, that was adopted by experts after a series of consultations that were convened by the United Nations Office of High Commissioner for Human Rights (OHCHR) derived authoritative conclusions and strong recommendations for the implementation of Article 20(2) of the ICCPR.

◎ CONCLUDING THOUGHTS

Hate speech needs to be understood as the starting point or origin of marginalizing a particular class of persons under 'fear of threat'. It should not be protected in the name of freedom of speech, otherwise, it will lead to violation of principles on which Indian democracy is built on.

POLICY RESPONSES TO SMOKELESS TOBACCO (ST) IN INDIA DURING THE COVID19 PANDEMIC'

CONTEXT

Smokeless tobacco products use is increasingly becoming a serious health issue in India.

◎ BACKGROUND

- India is amongst the world's largest consumers of tobacco in widely varied smoked and smokeless forms.
- India has the second largest number of tobacco users (268 million) in the world.
- Nearly 1.2 million Indians die every year from tobacco-related diseases, of which 1 million deaths are due to smoking, over 200,000 due to second hand smoke exposure, and over 35,000 due to smokeless tobacco use.
- Nearly 27% of all cancers in India are due to tobacco usage. The total direct and indirect cost of diseases attributable to tobacco use was a staggering Rs 1,82,000 crore which is nearly 1.8% of India's GDP.

◎ ANALYSIS

What is smokeless tobacco?

- Smokeless tobacco (SLT) is defined as a product that contains tobacco, is not smoked or burned at the time of use, and commonly consumed orally or nasally.
 - Some of the popular products in India include *khaini*, *gutkha*, *zarda*, betel quid with tobacco, tobacco tooth powder, tobacco toothpaste, etc.
- These products can be placed in the mouth, cheek or the lip and are sucked or chewed.
- Harmful Chemicals**
 - Smokeless tobacco contains nicotine, which is highly addictive.
 - Smokeless tobacco is also known to contain 28 carcinogens, including very high levels of tobacco-specific nitrosamines (TSNAs).
 - TSNAs are known to be some of the most potent carcinogens present in chewing tobacco, snuff and tobacco smoke.
 - Other cancer-causing substances in smokeless tobacco are known to include:
 - Formaldehyde
 - Arsenic
 - Cadmium
 - Radioactive polonium-210

The burden

- Smokeless tobacco (ST) products constitute the dominant form of tobacco consumption in the country.
- It has been estimated that ST use resulted in over 350,000 deaths in India in 2010, and nearly three-fifth of these deaths occurred among women.
- Although well over 100 countries across the world report the use of different ST products among adults.
- 85 percent of the ST-related disease burden from conditions such as oral cancer and cardiovascular disease are faced by populations in South and Southeast Asia.
- India alone accounts for 70 percent of the global ST-related burden from these serious and often life-threatening diseases.

Why it is widely consumed?

- Early initiation to smoking:** At present, 18 is the minimum age of purchasing tobacco products, which leads to early initiation to smoking.
- Easy availability and affordability:** Easy availability and affordability of ST products compared to smoking products and restrictions on smoking in public places have intensified the ST consumption.
- Socially acceptable:** Unlike smoking, which is generally considered a taboo, ST use is more socially acceptable, especially for women in the country.
- Cultural issue:** Many ST use practices are also imbibed within the region's culture and tradition and tend to be passed down from one generation to another.
 - In some slum dwellings in New Delhi, children as young as six years of age have been found to be regular users of ST products

What are the health effects of smokeless tobacco?

Smokeless tobacco is associated with many health problems. Using smokeless tobacco:

- **Addiction:** It can lead to nicotine addiction. It can cause nicotine poisoning in children
- **Cancer:** It can cause cancer of the mouth, esophagus, and pancreas
- **Mouth disease:** It is also associated with diseases of the mouth
- **Pregnancy issues:** It can increase risks for early delivery and stillbirth when used during pregnancy
- **Risk for death:** It may increase the risk for death from heart disease and stroke

What are the policy responses in India?

Recognising the harmful risks, several policy responses relevant to ST control have been put forth in India since March 2020 to mitigate the spread of COVID-19. These started with sub-national orders in some states and districts to prohibit the regional manufacture and sale of ST products.

- **Nation-wide appeal:** In April 2020, the Indian Council of Medical Research (ICMR) issued a nation-wide appeal, asking the general public to refrain from consuming ST and spitting in public places.
- **Making spitting, a punishable offence:** In the same month, the Indian government issued a national directive for COVID-19 management, which specified public spitting as a punishable offence that would incur fines. Since spitting usually accompanies ST consumption, this applied directly to ST use practices.
- **Prohibiting the use:** States and union territories (UTs) were also given additional authority under the Epidemic Disease Act 1897, the Disaster Management Act 2005, and under various provisions of the Indian Penal Code (IPC) 1860, to prohibit use of ST and spitting in public places during the pandemic.

However, tracking of these different policies at the state level against the pandemic timeline has not been carried out till date.

How States control the usage of ST?

- **Pan-India ban:** Beginning in 2012, all states in India banned the manufacture, sale and distribution of the ST product, *gutkha*, under an Act issued by the Food Safety and Standards Authority of India (FSSAI).
 - ▶ According to this Act, *gutkha* was defined as a food product, and should therefore not contain any tobacco.
 - ▶ In some states, this ban also extended to other oral products containing tobacco.
- **Stricter implementation:** In the wake of the pandemic, there seem to be provisions for stricter

implementation of these existing measures. For example-

- ▶ Maharashtra has allowed the state police to register a non-bailable offence against the sale and purchase of *gutkha* and flavoured tobacco, which has been made possible under provisions of the IPC and other additional Acts mentioned in the last section.
- ▶ In Uttar Pradesh, the ban was briefly extended to *paan masala* without tobacco but lifted in May 2020.
- ▶ While the central government had also issued nation-wide prohibitions on all ST sales in public places during the second phase of the national lockdown, states were able to reopen ST vends during the third phase.
- ▶ In Rajasthan, the rationale provided for this change was that the prohibition was leading to an increase in the black market for tobacco and that livelihoods of the poor were getting affected.
- Unlike an existing ban on smoking in public places, public use of ST was not banned in India, with the exception of some states – **Maharashtra became the first state in India to ban the use of ST** in public places in 2014; in some states like UP, the ban was for certain public places such as government offices, etc.
- However, in dealing with the pandemic, there now seems to be a uniform ban on all public use of ST across all states since April 2020.
- While policies against public spitting (including ST) existed pre-COVID in many local jurisdictions, these now seem to uniformly extend to all states, keeping in line with the advisory issued by the Ministry of Health and Family Welfare in April 2020.
- Recently, the Jharkhand government has made it mandatory for its employees to file affidavits stating that they will not consume tobacco in any form.

WHO Framework Convention on Tobacco Control (WHO FCTC)

- The WHO Framework Convention on Tobacco Control (WHO FCTC) is the first international treaty negotiated under the auspices of WHO.
- It entered into force on 27 February 2005. It has since become one of the most rapidly and widely embraced treaties in United Nations history.
- The WHO FCTC was developed in response to the globalization of the tobacco epidemic and is an evidence-based treaty that reaffirms the right of all people to the highest standard of health.

- The Convention represents a milestone for the promotion of public health and provides new legal dimensions for international health cooperation.
- India has been a Party to the WHO Framework Convention on Tobacco Control (WHO FCTC) since 2005.

Value Addition

- India is the world's **2nd** largest producer of tobacco with an estimated annual production of around 800 million kgs.
- Tobacco occupies a meagre 0.24% of the country's total arable land area.
- It is grown largely in semi-arid and rain-fed areas where the cultivation of alternative crops is economically unviable.
- Tobacco is grown in the following 13 States in India:

- | | |
|------------------|-----------------|
| ➤ Andhra Pradesh | ➤ Maharashtra |
| ➤ Assam | ➤ Odisha |
| ➤ Bihar | ➤ Tamil Nadu |
| ➤ Chhattisgarh | ➤ Telangana |
| ➤ Gujarat | ➤ Uttar Pradesh |
| ➤ Karnataka | ➤ West Bengal |
| ➤ Madhya Pradesh | |

◎ CONCLUSION

The current pandemic has changed peoples' attitudes towards the use of ST and people are now more receptive to ST control measures. A greater understanding of these aspects would be useful for informing the future direction of ST control policies in the country. The time may be right for focusing the efforts on how best to apply policy measures for effective ST control in India.

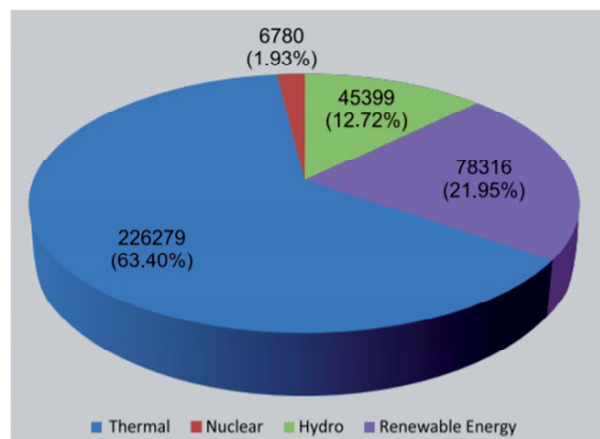
FIVE YEARS OF THE PARIS AGREEMENT: INDIA'S GREEN INVESTMENT

CONTEXT

As the world completes five years of the historic Paris Climate Agreement, India has called for greater global investment in the country's clean energy future.

◎ BACKGROUND

- In the five years since nearly 200 nations signed the historic Paris Climate Agreement, the world has made major progress in transitioning to clean energy.
- India, the world's fourth largest renewable energy market, has been one of the leaders in this transition.
- India has grown its renewables capacity by 250% in just the last five years and plans to expand it by another 500% to reach 450 gigawatts by 2030.
- However, to meet India's ambitious climate goals a huge increase in investment is required.
- Today, the world's third largest greenhouse gas emitter, India is also one of the most vulnerable countries when it comes to the adverse impacts of climate change.
- Investing in a green economy can accelerate recovery from the public health crisis, reduce air pollution, and help avert climate disasters such as draughts, extreme heat waves, and coastal flooding already taking a toll on life and health in the country.



- As per 2019's annual report published by the Ministry of New and Renewable Energy (MNRE) – Government of India (GOI), thermal power plants accounted for a little over 63% of the total installed power capacity in the country at the end of 2018-19 fiscal year.
- Thermal power was followed by contributions from renewables other than hydro power at 21.95%, further followed by hydro power and nuclear power – standing at 12.72% and 1.93% of the total installed electricity capacity, respectively.

◎ ANALYSIS

What are India's goals?

- As a signatory to the Paris Climate Agreement, India is committed to increasing its share of renewable energy capacity to 450 GW by 2030.
- As of September 30, 2020, India has an installed renewable energy capacity of 89 GW.
- Recently, at the G20 summit, Prime Minister Narendra Modi said that India would not only meet its Paris Accord targets but will also exceed the targets.

What is India's current energy mix?

- India is now the 5th largest market for renewable energy in the world, 4th largest market for wind and 3rd largest market for solar in the world only behind China and US.

The progress in renewable sector

- India ranked third in **EY Renewable Energy Country Attractive Index 2019**.
- In 2019, India installed 7.3 GW of solar power across the country, establishing its position as the third-largest solar market in the world.
- Installed renewable power generation capacity has increased at a fast pace over the past few years, posting a CAGR of 17.33% between FY14-FY20.
- Power generation from renewable energy sources in India reached 127.01 billion units (BU) in FY20.
- The renewable energy will account for 55% of the total installed power capacity by 2030.
- As of September 30, 2020, the installed renewable energy capacity stood at 89.22 GW, of which solar and wind comprised 36.05 GW and 38.12 GW, respectively.

- Biomass and small hydro power constituted 10.14 GW and 4.73 GW, respectively.

What has led to the growth?

The growth of the sector has been largely driven by a gamut of factors such as

- favourable policy and regulatory framework for accelerated growth of renewable
- providing incentives and subsidies for faster adoption
- streamlining the approvals and clearance processes for land
- regulatory and connectivity approvals

Why the focus is on renewable energy?

- **No or low greenhouse gases:** The combustion of fossil fuels for energy results in a significant amount of greenhouse gas emissions that contribute to global warming. Most sources of renewable energy result in little to no emissions.
- **No or low air pollutants:** Instead of polluting the environment, renewable energy meets the objectives of a circular economy.
- **Low costs:** Renewable energy is less affected by geopolitical crises, price spikes or sudden disruptions in the supply chain, as it is often produced locally.
- **Employment generation:** The largest part of renewable energy investments is spent on materials and workmanship to build and maintain the facilities, rather than on costly energy imports.
- **Accessibility:** In many parts of the world, renewables represent the lowest-cost source of new power generation technology, and costs continue to decline. Especially for cities in the developing world, renewable energy is the only way to expand energy access to all inhabitants, particularly those living in urban slums and informal settlements and in suburban and peri-urban areas.

Resilient, dispatchable and adaptable

- Now amidst the current pandemic situation, one of the segments that has not been affected or the least affected by it has been the renewable energy segment and rightly so.
- Renewable Energy has defied the difficulties caused by the pandemic, proving robust growth versus other conventional power sources as the whole process of power generation in renewable energy generation is automated with no physical supply of fuel.

- This has proven that renewable energy is resilient, dispatchable and adaptable and is definitely the future of energy.

What challenges are interrupting the growth?

Whilst the renewable energy sector in India has become both infrastructurally and financially healthy in the past 10 years, it also needs to overcome a few challenges to ensure continued growth.

- **Uncertainty of energy source:** The intermittent nature of wind and solar pose a challenge in integrating their assets into the grid and in ascertaining grid stability.
- **At the mercy of nature:** While conventional power plants—that are coal-based or large hydro—have the ability to vary the generation as per need, renewable generation is more at the mercy of nature.
- **Lack of access to energy:** There is the challenge of access to energy. The fact is that even as the grid reaches everywhere, the light does not.

How is the situation globally?

- As per the **International Energy Agency's Renewables 2020 report**, driven by China and the United States, net installed renewable capacity will grow by nearly 4% globally in 2020, reaching almost 200 GW.
- Globally, renewables are expected to overtake coal and become the largest source of electricity generation in 2025 and may supply one-third of the world's electricity.
- Hence, this growing focus and shift towards renewable energy underline the relevance and importance of the green energy markets more than ever before.

What are recent Government initiatives to boost renewable energy sector?

Some initiatives by Government of India to boost India's renewable energy sector are as follows:

- In August 2020, the government announced plans to offer land near its ports to companies for building solar equipment factories.
- India plans to add 30 GW of renewable energy capacity along a desert on its western border such as Gujarat and Rajasthan.
- Rajasthan Government, in Budget 2019–20, exempted solar energy from electricity duty and focused on the utilization of solar power in its agriculture and public health sectors.
- The Government of India has announced plans to

implement a US\$ 238 million **National Mission on advanced ultra-supercritical technologies for cleaner coal utilisation.**

- Indian Railways is taking increased efforts through sustained energy efficient measures and maximum use of clean fuel to cut down emission level by 33% by 2030.
- **Real-time electricity market:** India's recently launched **real-time electricity market**, coupled with the green market, offers a significant opportunity to integrate renewable energy in the most efficient and competitive manner.
- **High Efficiency Solar PV Modules:** The Union Cabinet recently approved Rs 4,500-crore PLI scheme for 'High Efficiency Solar PV Modules'. This money would be disbursed by to the nodal ministry of new and renewable energy (MNRE). The move is expected to give a boost to domestic manufacturers.

What is the need of the hour?

- **Scale up investment:** India needs to significantly scale up investment if it has to meet its goals of increasing renewable energy capacity fivefold to reach 450 gigawatts by 2030.
- **Robust green market:** With the increasing penetration of renewable power, a robust green market is required to address the intermittency issues linked with green power adoption.

- **Policy efforts:** In particular, the country require concerted policy effort, including on the following:
 - ▶ demand creation for renewable energy
 - ▶ revenue certainty for renewable energy power projects
 - ▶ risk reduction for development, construction, and operation of these projects
 - ▶ system integration of variable and intermittent renewable energy supply
- **Goal oriented measures:** Going forward, the introduction of new segments such as green day-ahead market, long-duration green contracts, contract for difference (CfD), etc, will play a crucial role in furthering sustainability goals.
- The new segments will also ensure that all the renewable energy generated within the country is dispatched in the most efficient manner through a pan India wide exchange-based energy markets.

◎ CONCLUSION

India's renewable energy expansion has helped bring down the costs of renewable energy worldwide. The country needs much more of the catalytic financial innovations for attracting private investment at required scale. Increasing clean energy investment in India is essential to achieve, and go beyond, its Paris Agreement goals and help the world stay on course to limiting warming to the levels where we still have a future.

ETHICS IN MEDIA: A THING OF THE PAST?

CONTEXT

Democracy cannot be successful without free press or media, which is very essential, as it is the voice of the people. But media shall not fall as a victim to some monetary or any other temptations, and shall keep on honestly serve the people.

◎ BACKGROUND

"Were it left to me to decide whether we should have a government without newspapers, or newspapers without a Government, I should not hesitate a moment to prefer the latter."

- Thomas Jefferson

- Media is considered as the fourth pillar of democracy and as such, it plays a great role in the overall development of the country. It is considered as the backbone of a country as it provides overall information regarding different aspects like political, economic, and social.
- Ethics is a branch of philosophy that deals with what is right and what is wrong based on moral values.
- If we talk of media, ethics have forms the basis of journalism as people form perceptions based on the things which they see over media.
- With technological developments, ethical practices in Indian media are facing continues challenges. It has become common things of denoting media companies as one belonging to the left-wing or the right-wing.
- Media trials have also evolved as one of the greatest challenges faced in this country directly affecting the judicial system of the country.

◎ ANALYSIS

How India media expanded?

- The Bengal Gazette* was the first news paper which was started by James Augustus Hickley in year 1780 in India.
- This was followed by the publication of newspapers like *The India*, *The Calcutta Gazette*, *The Madras Gazette* Courier and *Bombay Herald* in the coming years.
- But after the **first freedom struggle of 1857**, the number of newspapers that appeared in different languages of India continued to grow.
- At the time of this freedom struggle, the media expansion in India was not so much that its news could reach the corners of the country through newspapers.

- But some UK newspapers had published detailed reports on this first war of independence.
- However, the news was first delivered to Bombay via Telegraph and then transported to London and it used to take several weeks.
- Since then the media has been emerging in various forms.

Media and Ethics:

With the evolving time, the ways through which media shares its views, opinions, facts and information is also increasing. Now information is shared in many ways – through websites, WhatsApp groups, YouTube channels, television channels, newspapers, magazines, mobile & computer applications etc. India has evolved to be one of the biggest media markets in the world. However, major issues remain to be solved:

- Low standards of coverage:** The particular elements of news composing are exactness, accuracy, absence of prejudice, objectivity and open responsibility. Yet these "standards of news coverage" has gone under genuine dangers lately.
- Ignored code of ethics:** The news associations and the journalists and telecasters neglect and infrequently ignore the "code of ethics" in the procurement of newsworthy data and its consequent spread to general society.
- Most journalistic code of ethics contains the rule of "limitation of harm".
 - This includes the withholding of specific points of interest from news reports like the names of minor kids, wrongdoing casualties or data not applicable to specific news reports, the arrival of which may damage somebody's notoriety or life or obstruct the capacity of the organization.

What are the Ethical Principles of Journalism?

- Obligated to deliver the truth:**
 - It depends on the citizens of a democratic nation to have correct facts on which they can rely. The so called journalistic truth starts off with gathering and testing the facts.

- ▶ Journalists should try their best convey the news without any bias and without subjecting it to their personal opinion.
- **Answerable to the public:**
 - ▶ In the field of journalism, the primary answerability is to the citizens, not to the sponsors, the shareholders etc, because this is what makes it the medium of public interest.
 - ▶ Following this commitment make the news channel more credible and certainly adds to its good will.
- **Verification is a necessity:**
 - ▶ What news is to be presented to a large extent is based on how verified it is.
 - ▶ Without verification, there will always be hint of personal opinion of the journalist in the news article.
- **Independence:**
 - ▶ Independence is the corner stone of the trust in Journalism. Independence is what provides a sense of impartiality.
- **Present significant and relevant news:**
 - ▶ Journalism is not just a piece of story; it is a story with a meaningful motive. It is beyond attracting audience.
 - ▶ It should constantly scrutinize itself and decide what is meaningful enough to be presented.

What are the Ethical Issues with Indian media?

- **Paid news:** It is one of the biggest threats to journalism. The origins of the unethical practice of paid news can be trace back to the liberalisation of the Indian economy in 1991. With market forces at play and public investment in private companies, journalists found it sometimes lucrative to write only partially true stories of companies waiting to list on the stock exchanges.
- **Media Trial:** Media trial can be defined as a trial parallel to the court of law in which the media house declares a person innocent or guilty before the final judgment of the court based on debates and discussions.
- **Sidelined real issues:** The media often portray non-issues as real issues, while the real issues are sidelined. The real issues in India are economic, that is, the terrible economic conditions in which 80 per cent of our people are living, the poverty, and unemployment, lack of housing and medical care and so on. Instead of addressing these real issues, the media often try to divert the attention of people to non-issues.

- **Lack of transparency:** India is one of the biggest media markets. Only a few people control the ownership. The transparency in the inner structure of media organizations is dwindling, putting the credibility of media at stake.
- **Opaque private treaties:** There has been growing nexus of politicians and corporate entities in the news media through such schemes. Indian media today are trapped by power centres, business tycoons and Indian state authorities converting their role of watchdog to lapdog.
- **Widening legal regulatory gap:** The Press Council of India has dragged its feet on addressing paid news and other unethical practices. There have been growing practices of advertisements being published as news for a fee. This has severely affected their credibility.
- **Flawed measurements of audience reach and readership:** The yardsticks to measure the reach and impact of the Indian media are dubious. Television ratings also fail to tell the real picture.

What measures should be adopted to reform Indian media?

- **Bringing responsibility in media:** The government should strive to establish a working environment in which journalists understand their responsibility as people who work in the industry and as citizens in democracy, applying judgment and ethical standards in their reporting, and self-scrutinize and self-control their activities.
- **Transparency in the functioning:** The Press Council should publicize itself, its powers, its work and its adjudication so as to make itself known to the public and to gain its trust.
- **Adopting code practices:** Freelance journalists should make themselves familiar with the respective code for practice of the newspaper for which they are writing.
- **Undertaking oath:** Journalists should adopt their own Journalist oath, in the same manner as the Hippocratic Oath in medicine.

◎ CONCLUSION:

Media is the most common mode of carrying forward the public opinion and also keeping the public informed. It is thus important that media acts with a sense of responsibility. The media should keep its opinion objective, free from and prejudice or bias. It should try and explore all the possibilities and point of views. Undoubtedly free media is a pillar of democracy. One of its roles is to watch what the Government does; the media will not be able to perform this duty if it is under the government's control. But it is essential for the media to take some concrete measures to improve their conduct.

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GEMINIDS METEOR SHOWER

◎ **CONTEXT:** The Geminids meteor shower, believed to be the strongest of the year, was active from December 4-December 20.

◎ **ABOUT:** What is Geminids Meteor Shower?

- The Geminids Meteor Shower is believed to radiate from the **Gemini constellation**, from where it gets the name.
- The parent of the Geminids is **3200 Phaethon**, which is arguably considered to be either an asteroid or an extinct comet.
 - Discovered on October 11, 1983, the asteroid is over 5 km in diameter and was named after the Greek myth of Phaethon, the son of Sun god Helios.
- When the Earth passes through trails of dust, or meteoroids, left by 3200 Phaethon, that dust burns up in Earth's atmosphere, creating the Geminid meteor shower.
 - All meteors associated with a shower have similar orbits, and they all appear to come from the same place in the sky, which is called the **radiant**.
- Geminids travel 35 km/s - which is over 1,000 times faster than a cheetah, about 250 times faster than the swiftest car in the world, and over 40 times faster than a speeding bullet.

Meteor shower

- Meteors are bits of rock and ice that are ejected from comets as they manoeuvre around their orbits around the sun.
- Meteor showers are witnessed when Earth passes through the trail of debris left behind by a comet or an asteroid.
- When a meteor reaches the Earth, it is called a meteorite and a series of meteorites, when encountered at once, is termed a meteor shower.
- As meteors fall towards the Earth, the resistance makes the space rocks extremely hot and, as meteorites pass through the atmosphere, they leave behind streaks of glowing gas that are visible to the observers and not the rock itself.

How it started?

- The Geminids first began appearing in the mid-1800s. However, the first showers were not noteworthy with only 10 - 20 meteors seen per hour.
- Since that time, the Geminids have grown to become one of the most major showers of the year.
- During its peak, 120 Geminid meteors can be seen per hour under perfect conditions.

50th ANNIVERSARY OF 1971 INDIA-PAKISTAN WAR

◎ **CONTEXT:** India is observing the 50th anniversary of the 1971 War with Pakistan, also known as the Bangladesh Liberation War.

◎ **ABOUT:**

- The War was fought under the leadership of then-Prime Minister Indira Gandhi and chief of army staff (COAS), General Sam Manekshaw.
- On 25 March 1971, the Pakistan Army, led by Lieutenant General Tikka Khan, launched **Operation Searchlight** to quell the rebellion in East Pakistan.

- Massive human rights violations were reportedly perpetrated by the Pakistan Army during this operation.
- The hostilities between India and Pakistan formally began on **December 3, 1971**, when the Pakistan Air Force (PAF), launched pre-emptive air strikes on 11 Indian airfields.
- Addressing the nation the same evening, PM Indira Gandhi called the air strikes **"declaration of war against India."**
- While the Indian Air Force (IAF) responded with initial retaliatory strikes the same night, PM Gandhi ordered a "full-scale" invasion of Pakistan.
- Thus officially commenced the Indo-Pakistani war of 1971.

What led to the war?

- The conflict took place in the backdrop of tensions between Pakistan (also known then as West Pakistan) and the Bengali majority East Pakistan, which was closer to India then it was to Pakistan.
- The Bangladesh Liberation War was going on for months as the Bengali nationalists and Mukti Bahini guerrillas in East Pakistan fought to break away from the dominance of West Pakistan.
- India entered the war only after Pakistan Air Force (PAF) conducted aerial strikes on 11 Indian air stations.
- The war spread out across the eastern and western fronts.
- All three divisions of the Indian Armed Forces – Army, Navy and Air Force – engaged in clashes with their Pakistani counterparts.

Outcome of the war

- The war came to an end in less than two weeks on December 16, 1971, with the Eastern Command chief of the Indian Army, Lt Gen JS Aurora, making the Eastern Command chief of the Pakistan Army, Lt Gen AAK Niazi, sign the **instrument of surrender**.
 - As a result of the surrender, around 93,000 Pakistani troops were taken as prisoners of war (PoW) by India.
- The 13-day duration of the war also makes it one of the shortest wars in history.
- The war ended with a decisive victory for India, and resulted in the creation of Bangladesh, which was then known as East Pakistan.
 - East Pakistan became **Bangladesh**, with Awami League leader, Sheikh Mujibur Rahman, becoming its first President in January 1972, as well as its second prime minister in 1974. Mujib, who was assassinated in 1975, is the father of current Bangladesh PM Sheikh Hasina.

Where do Delhi-Dhaka ties stand now?

- With Bangladesh, India's relations are robust and progressing well. However, there remains some issues.

Some unresolved issues are:

- **Border issue:** The border remains sensitive.
- **Water issue:** Water remains another difficult issue. Bangladeshis have observed the tug-of-war on the Teesta water-sharing issue between the Centre and state.
- **Citizenship issue:** India's controversial Citizenship (Amendment) Act (CAA) and National Register of Citizens (NRC) have created a negative impression in Bangladesh of India's intent.
- **China factor:** The China factor also adds another dimension to the ties.

Despite some domestic scepticism, both countries understand the importance of cultivating strong bilateral relations.

Where does India's Pakistan policy stand?

- Pakistan has always been an important part of national politics – a position that flows not only from history but also Islamabad's continued support for terror activities.
- India-Pakistan relations in the Modi years hit a nadir as militants attacked an Indian Army brigade headquarters in Uri, Kashmir on September 18, 2016 killing 17 soldiers.
 - In response, India troops crossed the Line of Control on September 29.
- In February, 2019, over 40 Central Reserve Police Force jawans were killed in Pulwama, Kashmir by a car bomber – one of the deadliest attacks on security forces in India.
 - 12 days later, on February 26, Indian Air Force crossed into Pakistan for what the government called a "non-military preemptive strike" on a terrorist camp of the Jaish-E-Mohammed, which had taken responsibility for the Pulwama attack.

GENDER VIOLENCE DROPS, BUT PREVALENCE REMAINS HIGH IN BIGGER STATES: NFHS-5

◎ CONTEXT:

Gender-based violence across most Indian states declined in the past half-a-decade, according to the latest National Family Health Survey (NFHS). However, the prevalence remains high in bigger states.

◎ ABOUT:

- Factsheets for the 22 states surveyed in the first round of NFHS-5 were recently released by the Union Ministry of Health and Family Welfare.
- The factsheets analyzed domestic violence under three categories: Married women between 18 and 49 years who have ever experienced:
 - Spousal violence (both physical and sexual violence)
 - Physical violence during pregnancy
 - Young women aged between 18 and 29 years who experienced sexual violence by age 18

Key-finding of the Survey

• Spousal violence

- Most states experienced a downward trend in the cases of spousal violence.
 - **Prevalent:** The trend, however, was still prevalent (at 35 percent) in Telangana, Manipur, Bihar and Karnataka.
 - **Maximum rise:** Karnataka, Sikkim and Assam saw the maximum rise in spousal violence in the last five years.
 - **Significant hike:** Himachal Pradesh and Maharashtra also reported significant hike in prevalence of spousal violence
 - **Unchanged:** the figures for Jammu and Kashmir remained unchanged
 - **Reduction:** Manipur, Andhra Pradesh, Sikkim and Meghalaya witnessed a steep reduction in spousal violence
 - **Equal prevalence in urban and rural area:** Bihar, Kerala and Mizoram reported almost equal prevalence among rural as well as urban areas.

• Physical violence during pregnancy

- 17 of the 22 surveyed states / UTs showed a positive decline in cases of physical violence against women during their pregnancy.

- ▶ **Highest fall:** Telangana reported the highest fall in such cases followed by Bihar, while Andaman saw the maximum overall decline of three per cent since 2015-16.
 - ▶ **Maximum rise:** The maximum rise in cases was led by three north-eastern states of Meghalaya, Sikkim and Assam followed by Maharashtra.
 - ▶ **Least violence:** Nagaland and Kerala continued to witness the least violence, i.e. the prevalence there was less than 0.5 per cent.
 - ▶ **Highest percentage:** However, despite a huge fall, Karnataka and Telangana had the highest percentage of cases at 5.8 and 4 percent respectively.
 - ▶ **Unchanged:** Goa was the only state that saw no change in its figures in the last five years.
- **Sexual violence against young women**
 - The data on young women aged between 18 and 29 years who experienced sexual violence by age 18 indicated a mixed trend: As many as nine states and union territories showed a rise in numbers amongst 22 surveyed states.
 - ▶ **Highest rise:** Goa and Maharashtra witnessed the highest rise in cases of 3.3 per cent each.
 - ▶ **Maximum reduction:** Manipur that saw the maximum reduction of 8.6 per cent in the last five years.
 - ▶ **Unsafe:** Karnataka, West Bengal and Bihar were the most unsafe places for girls.
 - **High prevalence:** Bihar showed a high prevalence of violence despite the alcohol ban imposed in 2015.
 - ▶ **Least cases:** Sexual violence against young women was the least reported in Nagaland, Kerala and Mizoram.
 - ▶ **Safe rural states:** Rural girls were more exposed to violence across a majority of states except Andhra Pradesh, Meghalaya, Sikkim and Nagaland.

What led to increase in violence (sexual, physical, mental)?

The trend can be attributed to

- Poverty
- Unemployment
- Low female literacy rate
- Lower status of women in the state

Unemployment and illiteracy leads to reduced autonomy and say in family decisions by the female members.

INDIA SLIPS 17 SPOTS DOWN TO 111TH RANK

◎ CONTEXT:

A worldwide ranking of civil, economic and personal freedom, the Human Freedom Index 2020 has been released. India was placed at the 111th spot out of 162 countries. In 2019, India ranked 94 on the index.

◎ ABOUT:

What is Human Freedom Index?

- Human Freedom Index was published by **American think tank Cato Institute and Fraser Institute in Canada.**

- The index takes into account 76 indicators of personal, civil, and economic freedoms to rank 162 countries from 2008 to 2018.
- The institutes noted that the world has seen a notable decline in personal freedom since 2008.

Key-findings of the index

- The first three spots have been bagged by New Zealand, Switzerland and Hong Kong.
- The United States and United Kingdom are tied at the 17th spot on the index.
- War-torn Syria ranked the last on the list.
- The report finds a strong, positive relationship between freedom and prosperity, but also finds that there is an unequal distribution of freedom in the world.
- Fifteen percent of the world's population lives in the freest quartile of countries in the index, while 34 percent lives in the bottom quartile of countries.
- The gap in freedom between the most free and the least free countries has also been increasing since 2008.

India's position

- Though India slipped down, it has been ranked ahead of China and Bangladesh, which ranked 129 and 139 on the 2020 index respectively.
- India's scored
 - **Personal freedom:** 6.30 out of 10
 - **Economic freedom:** 6.56 out of 10
- The country's overall human freedom score was 6.43.

- The **Global Economic Freedom Index 2020** released in September showed India drop 26 spots from 79 to 105.
- The **World Press Freedom Index**, which was released in April, saw India slip two places. India ranked 142 on the index comprising of 180 countries and territories.

INDIA SLIPS TO 131 IN HUMAN DEVELOPMENT INDEX RANKING

◎ **CONTEXT:** India slipped one place further in the 2020 human development index released by the United Nations Development Programme (UNDP), ending up at 131st position out of 189 nations. India was ranked 130 in the index back in 2018.

◎ **ABOUT:** What is Human Development Index (HDI)?

- The Human Development Index is a combination of people's life expectancy at birth, expected years of schooling, mean years of schooling and a country's gross national income per capita.
- The index is compiled by the United Nations to measure and various countries' levels of social and economic development.
- It is composed of four principal areas of interest:
 - mean years of schooling expected years of schooling
 - life expectancy at birth

- gross national income per capita.

Key-findings of the Index

- India has been positioned at 131 out of 189 countries and territories.
- Nepal and Bangladesh ranked below India, at 142 and 133 spots, respectively, while Pakistan was placed at 154.
- Norway topped the index, followed by Ireland, Switzerland, Hong Kong and Iceland.
- India's neighbours Sri Lanka and China ranked higher, at 72 and 85, respectively.
- Whereas, Bangladesh (133), Myanmar (147), Nepal (142), Pakistan (154) and Afghanistan (169) were ranked lower on the list.
- **Life expectancy:** Life expectancy of Indians at birth in 2019 was 69.7 years while Bangladesh has a life expectancy of 72.6 years and Pakistan 67.3 years.
- **Gross National Income:** India's gross national income per capita fell to USD 6,681 in 2019 from USD 6,829 in 2018 on purchasing power parity (PPP) basis.
 - Purchasing power parity or PPP is a measurement of prices in different countries using the prices of specific goods to compare the absolute purchasing power of the countries' currencies.
- **Gender inequality index:** India was placed at 123 position in the gender inequality index.
 - Labour force participation rate of women in the country was 20.5 per cent, while it was 76.1 per cent for men.
 - And only 13.5 per cent women held seats in Parliament.

Human development category

- **Medium human development:** With a total HDI value of 0.645, India was placed in the 'medium human development' group alongside nations like Iraq, Bhutan, Ghana, Nepal and Cambodia.
- **High human development:** Countries such as Sri Lanka, Maldives, Vietnam and China were part of the 'high human development' group.
- **Very high human development:** Malaysia and Japan made it to the 'very high human development' list.

US PUTS INDIA BACK ON CURRENCY MANIPULATION WATCHLIST

◎ **CONTEXT:** The US has put India on its "monitoring list" of currency manipulating countries for the third time.

- ◎ **ABOUT:**
- The US Treasury Department's semi-annual report on the macroeconomic and foreign exchange policies list countries that may be intervening excessively in their foreign exchange (forex) markets to gain an unfair trade advantage.
 - The list also includes China, Korea, Japan, Italy, Singapore, Germany, Thailand, Malaysia, and Taiwan.

What is currency manipulation?

- Currency manipulation refers to a process defined by the USDT for countries that engage in unfair currency practices to gain a trade advantage.

- It is an attempt made by a country's central bank to decrease the value of their currency with respect to foreign currency exchange rates, the dollar, in this case.
- To weaken its currency, a country sells its currency and buys foreign currency—usually USD.
- This results in weak demand for the local currency and increased demand for US dollars.
- The US Treasury Department uses three benchmarks to judge whether a country has manipulated its currency:
 - a **bilateral trade surplus** with the US of more than \$20 billion
 - a **current account surplus** of at least 3 percent of GDP
 - **net purchases of foreign currency** of 2 percent of GDP over 12 months

Is India really a 'currency manipulator'?

- **Bilateral trade surplus:** As per the recent USDT report, India had a trade surplus with the US worth **\$22 billion** in the four quarters through June 2020.
- **Current account surplus:** India's first four-quarter current account surplus was 0.4 percent of GDP, unchanged since 2004.
- **Net purchases of foreign currency:** Further, India's net purchases of foreign currency stood at 2.4 percent of GDP. India increased its purchases of foreign currency as portfolio flows surged in the second half of 2020.

India was added to the list because it meets two of the three criteria laid down by the US Treasury.

AIR POLLUTION FACTOR IN GIRL'S DEATH

◎ CONTEXT:

- A United Kingdom's court recent judgment concluding air pollution exposure as one of the major causes of death of a nine-year-old girl may serve as a wake-up call for India to deal with its own high levels of pollution.

What is the case?

- Ella, born on January 24, 2004 in Lewisham in south eastern, London, suffered from **hypersecretory asthma**, wherein a large quantity of mucus is secreted leading to blockage of intrapulmonary airways.
 - The quantity and quality of the mucus is also different than routine chest infections.
 - This led to frequent episodes of respiratory and cardiac distress, which required frequent visits to the emergency room.
- During the course of her illness between 2010 and 2013, she was exposed to excessive high levels of nitrogen dioxide and particulate matter (PM), primarily from traffic emissions.

How this ruling can set precedent for India?

- In India, long-term exposure to outdoor and household air pollution contributed to over 1.67 million annual deaths, across all age groups, from stroke, heart attack, diabetes, lung cancer, chronic lung diseases and neonatal diseases.
- In India, 24 percent of infant deaths can be attributed to air pollution.
- Out of a global tally of 6.67 million particulate matter (PM) 2.5-attributable deaths, 980,000 were recorded in India.

- Air Pollution was the fourth leading risk factor for early death worldwide in 2019, surpassed only by high blood pressure, tobacco use and poor diet.

Where does Indian court stand?

- The courts in India have been very proactive in taking cognisance of the severe health risks of air pollution and have often pushed for "immediate solutions" towards this public health crisis.
- They have frequently cited **Article 21** of Indian Constitution; Right to Life, which extends to the right to a pollution-free environment.
- With the UK judgement as a precedent, India can perhaps follow suit.

How listing air pollution as a cause of death will help?

- Despite air pollution being declared a public health emergency and its links with increased risks of the novel coronavirus disease (COVID-19), very rarely is it listed as a specific cause of death.
- Hypertension, cardiac arrests, asthma and chronic obstructive pulmonary disease (COPD) are the usual listed causes.
- Listing air pollution as a cause of death would perhaps be a non-cognisable offense, it will certainly help spread awareness among the public regarding the ills of air pollution and galvanize towards faster and decisive steps in curbing it.

CHAR DHAM PROJECT RESPONSIBLE FOR LANDSLIDE IN UTTARAKHAND?

◎ CONTEXT:

The Char Dham project, inaugurated in 2016, aims to widen roads in India's Himalayan state of Uttarakhand. However, the study of rocks in a key area where blasting is underway shows that the project is responsible for many of the landslides have been occurring recently.

◎ ABOUT:

- The project is one of the largest road-widening projects in the Himalayan region of India.
- The project aims to widen the roads to four of Hinduism's holiest shrines in the Himalayas:
 - Kedarnath
 - Badrinath
 - Gangotri
 - Yamunotri

Which area is in question?

- The area in question is **Tota Ghati** ('Parakeet Valley'), a less-than-10 kilometre stretch.
- It lies between Kodyala and Sakhni Dhar on National Highway 58 in Tehri district, Uttarakhand.
- In this stretch, the highway passes through a **complex geological terrain**, with multiple rock types and slopes susceptible to 'failures.'
 - A **slope failure** is a phenomenon in which a slope collapses abruptly due to weakened self-retainability of the earth under the influence of a rainfall or an earthquake.
- Tota Ghati, where there are seemingly stable rock slopes, has been in the news of late for having had a number of slope failures recently.

- The narrow stretch of Tota Ghati is dominated by limestone and interbedded shale rocks, shattered light grey dolomite, with occasional pockets (as fracture filling) of gypsum and purple grey shale and limestone.
 - This is called a '**Karol formation**' in geological terms.
- The **calcareous (calcium containing) rocks** are highly jointed (two to three sets of intersecting joints), fractured and sheared due to three 'thrusts' passing proximally to Bayasi, Shakhnidhar, and Teen Dhara.
- Field investigations reveal that Tota Ghati's rocks are widely sheared, faulted and fractured.
- Often, the competent (strong) rock types such as quartzite also occur as shear bands and completely crushed rocks in the stretch.

COAL HERE TO STAY, BUT MEASURES CAN CUT DOWN EMISSIONS BY 22%

◎ CONTEXT:

Coal will continue to be the mainstay of India's power generation till at least 2030, but efforts must be made to ensure it is used efficiently to reduce greenhouse gas (GHG) emissions, according to CSE.

◎ ABOUT:

How big is India's coal sector?

- India produces over 85 minerals including coal, lignite, bauxite, chromite, copper ore and concentrates, iron ore, lead and zinc concentrates, manganese ore, silver, diamond, limestone, phosphorite etc.
- **Production and import:** India is the second-largest producer and importer of coal in the world.
- **CO₂ emission:** India's coal-based thermal power sector is one of the country's biggest emitters of carbon dioxide (CO₂).
- **GHG emission:** It spews out 1.1 gigatonne of CO₂ every year; this is 2.5 per cent of global GHG emissions, one-third of India's GHG emissions, and around 50 percent of India's fuel-related CO₂ emissions.
- **Ash content:** Indian coal is known to contain 30-50% ash, meaning that for every two units of coal burned, one unit of ash could be produced.
- Besides the creation of poisonous landfills in the ground, the burning of poor quality coal increases carbon emissions and air pollution, a danger to public health.

What are the feasible measures to cut GHG emissions?

The webinar, titled *Reducing CO₂ footprints of India's coal-based power sector*, brought together some key experts from the field to discuss the issue. The following measures were put forth by experts during the webinar:

- **Improve fleet technology and efficiency, renovate and modernise:** India has one of the youngest coal fleets in the world, with around 64 per cent of the capacity (132 GW) less than a decade old. Maintaining efficiency of this large fleet will be crucial as it is going to be operational for at least the next 15-20 years. The government's renovation and modernisation policies need to play a key role in maintaining the efficiency of this fleet.
- **Plan for the old capacity:** In 2015, over 34 GW capacity in India was more than 25 years old, and 60 per cent of it was highly inefficient. Increasing India's renewable electricity generation can help further the cause to accelerate the retirement of old and inefficient plants.
- **Propagate biomass co-firing:** Biomass co-firing is a globally accepted cost-effective method for decarbonising a coal fleet. Only one plant currently co-fires biomass in India. India is a country where biomass is usually burnt on the field — this reflects apathy towards resolving the problem of clean coal using a very simple solution that is readily available.

- **Invest in carbon capture and storage (CCS):** Globally, carbon capture and storage has struggled to pick up. India's prospects appear to be dim at least until 2030. Businesses should invest in indigenous research and development to bring down the costs of CCS.
- **Bring back coal beneficiation:** This is another missed opportunity on which we need a course correction.
 - A 1997 environment ministry notification had mandated the use of beneficiated coal from 2001 with ash content not more than 34 per cent.
 - However, in 2020, overturning the good work, the government allowed use of coal irrespective of the ash content.

The measures, among others, could help cut GHG emissions by 22 per cent, according to CSE.

KERALA: FORKED FANWORT BLOOMS IN KOZHIKODE

◎ **CONTEXT:** Recently, a river in Kerala's Kozhikode district has turned pink because of millions of forked fanwort flowers that have blossomed in its waters.

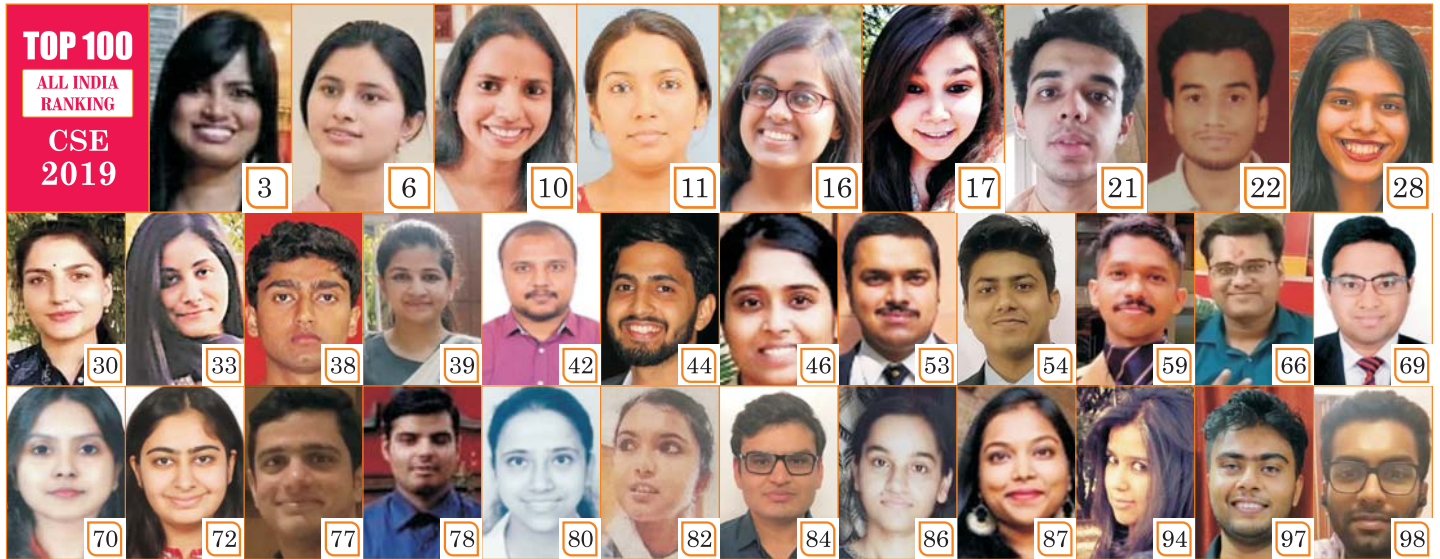
- ◎ **ABOUT:**
- The aquatic plant behind the 'pink phenomenon' is forked fanwort.
 - **Local name:** It is known locally as 'mullan payal'.
 - **Family:** It comes from the family of Red Cabomba (Cabomba Furcata).
 - Cabomba is a submerged perennial aquatic plant that grows in stagnant to slow-flowing freshwater. It dominantly belongs to Central and South America.
 - **Native species:** It is not a native species found in the waters of Kerala. It is native to South America and is mostly used as an aquarium plant.

Kerala, the spot of alien invasions

- Kerala has records of biological invasions dating back to the 19th century. It continues to experience several waves of alien invasions till today.
- Terrestrial invasive alien plants such as Chromolaena odorata, Lantana camara, Mikania micrantha, Mimosa diplotricha, and Sphagneticol trilobata, and invasive fauna such as the giant African snail Achatina fulica, papaya mealybug Paracoccus marginatus, etc have affected the biodiversity of rural and urban spaces in Kerala, said Sajeev.
- These species impact the ecology and economy by damaging the crops, recreational spaces and small home gardens.
- They pose significant health risks in some cases as well.

Impact of invasion of Cabombas

- **Decrease in diversity of native plants:** The invasion of Cabombas has led to a decrease in the diversity of native aquatic plants.
- **Species conflict:** The aquatic ecosystems are under threat of Cabombafurcata and Salvinia molesta where the competition between these two species is clearly visible in the canal.
- **Taking toll on species:** It can drain the river of its natural resources including minerals and oxygen, which in turn, could lead to the death or migration of the rest of the aquatic species in the water body.
- **Economic loss:** It has also caused economic losses by affecting the yield of freshwater fishes.



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