

## ABOUT CURRENT CONNECT

It gives us immense pleasure to present an innovative approach to master current affairs. Current is a passing wind and diverse issues happen at the same time. It is to an extent chaotic. Newspapers, magazines and various other sources report the chaos per se. With our experience of current affairs we have tried to give “the current” a medium to travel. It is the syllabus of the UPSC with their components that are the medium through which the “Current is Passed” to the readers. Ever since the new syllabus of the UPSC came into existence, current has been gaining significance both at prelims as well as mains examination. This book is meant to cover current affairs and related questions arising from those events. We have not only covered the current events for their factual contents but also presented it in such a way that any question asked from that topic gets covered. Moreover, topics are also “peppered” with the relevant facts/key concepts that are related to the theme. We have also given questions for practice both, subjective and objective, so that candidates are oriented to the examination mode. It is a collection covering myriad source yet in a manageable size. To use this book we recommend you to master the components of general studies (GS) syllabus as broken into rows and columns (provided in the beginning after preface). Each cell comprising of the portion of GS becomes the connect for the current and every news subsequently covered guides the reader to the address of the syllabus. It is logical to expect that same issue may be connected to more than one topic of the syllabus. Further, the news also has some additional vistas opened for the readers by adding a box with a title “PEPPER IT WITH” where we expect the students to build further around the theme.

We are also trying to reach the remotest part of the country with our spirit and zeal of “Mains Answer Writing”, which has been admired by students, CSE rankholders and other scholars. Continuing in line with the effort, we have started with programs like 7 Question (7Q) Challenge, Shell Points, Stock Points, Content Enrichment Booklet etc.

When it comes to evaluation, we are altogether at a different level. We are also reaching every nook and corner with this expertise for the aspirants of CSE. Now you can write a Mains Answer and get it evaluated from our Expert Team and can get Feedback. [Drop a mail at evaluation@ksgindia.com for registering yourself in our race to perfection.](mailto:evaluation@ksgindia.com) Don't wait, it's your golden chance to crack this exam and fulfill your passionate dream.

Team KSG

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**ART & CULTURE**

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<b>GS - I</b>	Culture-Art Forms, Literature and Architecture from ancient to modern times.	Indian history significant events, person	Post independence issues, National boundary and disputes	Indian society, issues, globalization and diversity	Women - issues and developments	Urbanization – problems and remedies	Distribution of industries and resources – India and world	Geophysical phenomena such as earthquakes, Tsunami, Volcanic			
<b>GS - II</b>	Indian constitution- Amendments, acts and bills.	Legislative, executive and judicial processes.	Constitutional, non-constitutional, judicial, quasi-judicial, administrative and other types of bodies.	Federal structure and local bodies. Their powers and functions.	Government policies and various governance issues like transparency, accountability and – governance	Committees and schemes.	Non-government issues, self-help groups and role of civil society	Vulnerability sections of our society and social sector issues and initiatives	International Relation -India and other countries, various Indian and international agreements, effects of other countries on		
<b>GS - III</b>	Various measures to boost Indian economy- planning, policies, management.	Government budgeting and issues related to budget.	Agriculture, animal husbandry and transport	Food security- measures to boost food security and food processing. Issues related to land- land reforms	Industries and infrastructure- their growth and investment model	Space and technology, IT space, robotics and computer	Disease, biotechnology and human welfare	Innovations, intellectual property, Awards, POI and other important aspects of S&T	Environment: government initiatives, various judgments, pollution, degradation and conservation efforts	Disaster & Management	Challenges to internal security, Various Security forces and agencies and their mandate. Cybersecurity: moneylaundering and its prevention.
<b>GS - IV</b>	Ethical issues related to family society, education, Corruption etc.	Ethics in public and private administrative	Issues	Related laws and rules	Governance/ Governance	Ethics in international issues	Personalities and their	Other important topics			
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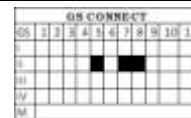
POLITY

Rights of Disabled

News Excerpt

The government is not conferring "largesse" on disabled people by facilitating a scribe during the course of the Civil Services Examination, the Supreme Court held in a judgment.

The court said it is high time the government shed its "fundamental fallacy" that only persons with "benchmark disability" or specified disability of 40% or more should be accommodated with a scribe while taking competitive tests like the Civil Services Examination. This is a clear violation of the intent to provide "reasonable accommodation" for disabled persons under the Right to Persons with Disabilities (RPwD) Act of 2016.



Pre-Connect

- Disability is an impairment that may be cognitive, development, intellectual, activity, limitations, sensory or some combination of these. It substantially affects a person's life activities and may be present from birth or occur during a person's lifetime.
The Declaration of the Rights of Disabled persons was a declaration of the General Assembly of the United Nations made on 9 Dec 1975. It is the 3447th resolution made by the Assembly.

Highlights

- The apex court held that the provision for the facility of a scribe is in pursuance of the statutory mandate to ensure that persons with disabilities are able to live a life of equality and dignity based on respect in society for their bodily and mental integrity.

Person with Disabilities Act, 2016, which replaces the 1995 law on disability, was brought into effect on 19 April 2017. The Rights of Persons with Disability Rules, 2017 (Rules) were notified on 15 June 2017 to supplement the provisions of the Act. The Act is in line with the principles of the United Nations Convention on the Rights of Persons with Disabilities and aims at encouraging establishments to have a disabled friendly workplace. The Act prohibits discrimination against persons with disabilities, unless it can be shown that such act is a proportionate means of achieving a legitimate aim.

While the applicability of the 1995 statute was restricted to government controlled/aided establishments, the Act has now brought private establishments within its ambit. Though the Act or the Rules do not require private establishments to mandatorily appoint Persons with Disabilities (PwD), there are certain obligations imposed on private establishments under the Act, that are briefly described in this update. The definition of private establishment under the Act is also quite broad and includes companies, firms, co-operative or other societies, associations, trusts, agencies, institutions, organizations, unions and factories.

In Jared Abiding vs. Union of India, the Supreme Court bearing in mind the discomfort and harassment suffering by a person of locomotor so disability would face while travelling by train particularly too far off places issued directions to the Indian Airlines to grant persons suffering from locomotor so disability to the extent of 80%.

In National Federation of blind vs. UPSC, The Supreme Court held that, UPSC may be directed to allow blind persons for appearing the examinations for Indian administrative and allied Services.

In Government of NCT of Delhi vs. Bharath Lalmeena, The Delhi High court held that people with disabilities can be appointed as physical education teachers provided they have passed the qualifying examination undergone the requisite training.



- There is a fundamental fallacy on the part of the UPSE/DoPT in proceeding on the basis that the facility of a scribe shall be made available only to persons with benchmark disabilities. This is occasioned by the failure of the Ministry of Social Justice and Empowerment to clarify their guidelines.
- The judgment was based on an appeal filed on behalf of Vikash Kumar, a candidate with Writer's cramp, a chronic neurological condition which causes extreme difficulty in writing. He was denied a scribe for the Civil Services Exam by the UPSC in 2018, on the ground that he did not come within the definition of person with benchmark disability.
- Court said that the prolonged legal battle fought by Mr. Kumar, is a constant reminder of the chasm between law and reality.
- The court observed that the principle of reasonable accommodation captures the positive obligation of the State and private parties to provide additional support to persons with disabilities to facilitate their full and effective participation in society.
- The 2016 Act has a more inclusive definition of "persons with disability" evidencing a shift from a stigmatising medical model of disability to a social model of disability which recognises that it is the societal and physical constraint that are at the heart of exclusion of persons with disabilities from full and effective participation in society.
- The Act gives a powerful voice to the disabled people who, by dint of the way their impairment interacts with society, hitherto felt muted and silenced.
- The judgment said that cases like that of Mr. Kumar present the court with "an opportunity to make a meaningful contribution in the project of creating the RPwD generation in India".

Article 15(2) says, no citizen shall on the grounds only of religion, race, caste, sex, place of birth or any of them, be subjected to any disabilities liability restriction or condition with regard to:

- a) Access to shops, public restaurants, hotels and places of public entertainment; or
- b) The use of wells, tanks, bathing ghats, roads and places of public resort maintained wholly or partly out of the state funds dedicated to the use of the general public.

### **Constitutional Rights of Disabled Persons: Prohibition of**

**Discrimination:** Article 15 is a manifestation of Right to Equality under Article 14, as it enshrines a specific dimension of the principles of equality relating to discrimination by state or various grounds. Under Article 15 the protection extends only to citizens, unlike Article 14 which protects any person. Thus in application Article 15 protects from the discriminatory state activities but the ambit of Article 15 is narrower than that of Article 14. Article 15 of the Indian Constitution deals with prohibition of discrimination on the grounds of religion, race, caste, sex or place of birth.

**Rights of Disabled Persons in India:** Persons with disabilities are one of the most neglected sections of our nation. This is due to the sheer indifference of the society which subjects such people to disapproval and antipathy. Such people have several rights under various Indian laws as well as UN conventions that are followed in India. Under section 2(i) of Persons with

**National policy for persons with disabilities, 2006:** The Government of India formulated the national Policy for persons with disabilities in Feb 2006 which deals with the physical, educational and economic rehabilitation of persons with disabilities. The National Policy recognises the Persons with Disabilities are valuable human resources for the country and seeks to create an environment that provides them equal opportunities, protection of their rights and full participation in society. Some of the aspects which the policy focuses on are:

- Prevention of Disabilities
- Rehabilitation Measures
- Women with disabilities
- Children with disabilities

Disabilities Act, 1995,"disability" includes blindness, low vision, leprosy cured, hearing impairment, locomotor disability, mental retardation and mental illness.

- ✓ **Disability Certificate:** It is the most basic document that a disabled person should possess in order to avail certain benefits and concessions. The State Medical Boards established under the State governments can issue a disability certificate to any person with more than 40% disability.
- ✓ **Disability Pension:** People who are above 18 years of age, suffering with more than 80% disability and are living below the poverty line are entitled to the disability pension under the Indira Gandhi National Disability Pension Scheme. Various NGOs are dedicated to this because i.e. they help such persons with disabilities to get their disability pension.
- ✓ **Employment:** In government jobs, 3% of the seats are reserved for persons with disabilities.
- ✓ **Income Tax Concession:** Under sections 80DD and 80U of Income Tax Act, 1961, persons with disabilities are also entitled to certain income tax concessions.

**PEPPER IT WITH**  
Article 14, 21, 25, 27 of the  
Convention on the Rights of  
Persons with Disabilities

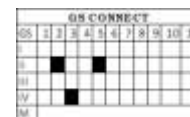
### Conclusion

Disability refers to the disadvantage or restrictions of activity caused by the way society is organised which takes little or no account if people who have physical, sensory or mental impairments. Disability is an unfortunate part of human life which can affect not only the natural way of a living but also despair component strength and power. The Government needs to launch more social security schemes for disabled sections and generate more employment opportunities for them. Several schemes and benefits conference on the disabled persons has come up as relief and has successfully served to provide equal opportunities to the disabled section.

### Sedition Law

#### News Excerpt

Recently, Delhi court granted bail to activist in a sedition case. Additionally, the Supreme Court dismissed a Public Interest Litigation (PIL) against former Jammu and Kashmir Chief Minister Farooq Abdullah demanding he be charged with sedition.



#### Pre-Connect

- NCRB data suggests that the number of sedition cases has increased in recent years as police in certain states clamp down on protesters.
- Sedition, which falls under Section 124A of the Indian Penal Code, is defined as any action that brings or attempts to bring hatred or contempt towards the government of India and has been illegal in India since 1870.
- The National Crime Records Bureau (NCRB), though, has only been collecting separate data on sedition cases since 2014.
- In 2014, there were 47 cases of sedition but that number increased to 70 in 2018 (the latest year with available data).

#### Highlights

- The Delhi High Court said recent coverage of the farmers' protest 'toolkit' case "definitely shows there is sensationalism and prejudicial journalism which is being undertaken by the media houses".
- Ruling on a petition filed by climate activist Disha Ravi, the Delhi High Court said the Delhi Police would be entitled to conduct press briefings so long as no rights of the petitioner were violated.



- Ravi had moved the court seeking direction to restrain the police from leaking to the media any probe material in relation to the FIR lodged against her in the 'toolkit' case.
- The High Court said the editors of news channels must exercise proper editorial control so the investigation by the police is not hampered.
- The court said the media houses shall ensure that the broadcasts/telecasts by them are from verifiable and authentic sources. The editorial teams shall ensure that only verified content is broadcasted. While a journalist cannot be asked to reveal the source, it needs to be ensured that the source ought to be authentic and verifiable," it added.
- In court, the Delhi Police argued that neither information nor documents forming part of case file had been leaked. "The petition is an attempt to malign the police force and hamper the investigation."
- ASG SV Raju said that he is not precluded from making the WhatsApp chats a part of the chargesheet. The only restriction is now since it could hamper investigation.
- The 'toolkit' on the farmers' protests had come under the police scanner after Swedish environmental activist Greta Thunberg tweeted it on February 3, with police claiming the sequence of events in the farmers' protests, including the violent incidents at Red Fort on Republic Day, was a "copycat" of the alleged action plan in the document.

**WHAT IS IT?**

- **Sedition law:** Section 124A of the Indian Penal Code, 1860
- **Definition:** Whoever by words, either spoken or written, or by signs, or by visible representation, or otherwise brings or attempts to bring into hatred or contempt, or excites or attempts to excite disaffection towards, the government established by law in India, shall be punished
- **Punishment:** Imprisonment for life, to which fine may be added, or imprisonment which may extend to three years, to which fine may be added, or just a fine

**PEPPER IT WITH**  
 Transit Bail, Judicial Custody, Police Custody, Yellow and Tabloid Journalism, Sec. 124A

**Conclusion**

Over time and across different parties, the Indian government's stance has been consistent on sedition. When asked in Parliament if sedition is likely to be revoked soon, the government is succinct but clear in his response that there is no proposal to scrap sedition. There is a need to retain the provision to effectively combat anti-national, secessionist and terrorist elements.

**No Confidence Motion**

**News Excerpt**

Political instability in Puducherry has ended with the resignation of Chief Minister V. Narayanasamy after he failed to prove his majority on the floor of the House.

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**Pre-Connect**

- It need not state the reasons for the adoption of No Confidence Motion.
- No Confidence Motion can be moved against the entire council of ministers only.
- No Confidence Motion is moved for ascertaining the confidence of the House in the council of ministers.
- If, "No Confidence Motion" is passed in the Lower House of the parliament or in the state legislature, the council of ministers must resign from the office.

**Highlights**

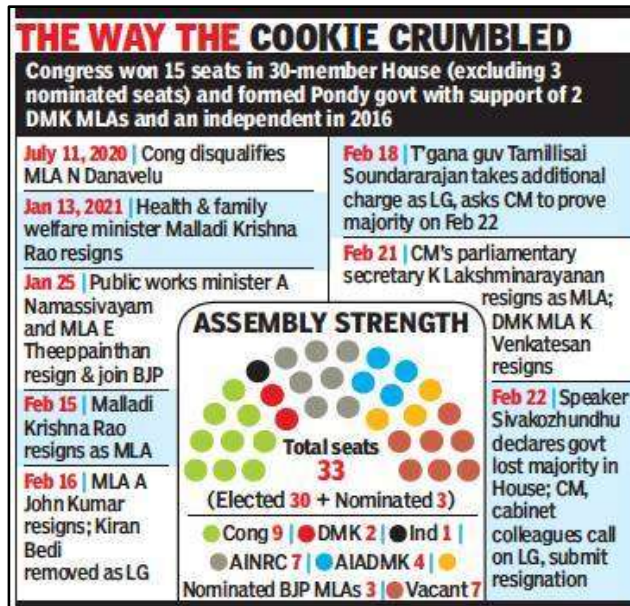
- Puducherry Lt Governor has asked the Chief Minister V Narayanasamy to prove his government's majority in the Vidhan Sabha. According to her direction, the House will meet and the only agenda before it was the confidence motion.
- The L-G has also directed that votes be counted by a show of hands, and the entire proceedings of the Assembly be recorded.

- The Congress-DMK government had lost majority in the House. Eight MLAs of the ruling alliance have resigned from the Vidhan Sabha.

### Historical Background: Nominated MLAs of Puducherry

- ✓ When the Constitution was made, the states were categorised into those in Parts A, B, C, and D. Parts C and D states were merged into Union Territories with the reorganisation of the states in 1956. The UTs were administered directly by the central government. Subsequently, a committee was appointed under the then Law Minister Asoke Kumar Sen to give recommendations on granting more powers to the UTs.

- ✓ In 1962, after the signing of a treaty with France, the territories of Pondicherry, Karaikal, Mahe, and Yanam became part of the Indian Union. In the same year, then Home Minister Lal Bahadur Shastri introduced a Constitution Amendment Bill in Parliament, which grouped these territories into the Union Territory of Pondicherry, and also inserted a new Article 239A into the Constitution.



- ✓ The new article gave Parliament power to create a legislature for Union Territories. The government's proposal was similar to Article 240 of the Constitution, which had governed the administration of Part C states. This article also gave the central government the option to create a legislature that was fully nominated.
- ✓ The proposal faced resistance in Lok Sabha. Hari Vishnu Kamath, a Janata Party member from Hoshangabad, who had been a member of the Constituent Assembly, the provisional and first Parliament, moved an amendment to the Home Minister's proposal, opposing the idea of a wholly nominated legislature.
- ✓ Shastri accepted his suggestion — and Article 239A provided that the legislature created for Union Territories could be either fully elected, or part nominated and part elected.
- ✓ Exercising the power given by the Constitution, the central government made The Government of Union Territories Act, 1963. This law specifies that the Puducherry legislature will have 30 elected MLAs, and a maximum of three MLAs nominated by the central government. The law also specifies that the nominated persons should not be government employees.

**PEPPER IT WITH**  
 Public Bill, Private Bill, Ordinary Bill, Money Bill, Half-an-Hour Discussion

### Conclusion

In Parliament, the President can appoint 12 members to the Rajya Sabha. These members enjoy the same voting rights as elected members, except that they can't vote in the election of the President. Until last year, the President could also appoint two members to Lok Sabha from the Anglo-Indian community. These members too, had the right to vote on all matters, except the election of the President. In the past, courts have intervened in cases of fresh nomination of Anglo-Indian MLAs. In 2005 and 2018, the Supreme Court stayed the nomination of Anglo-Indian MLAs before trust votes in Jharkhand and Karnataka respectively.

**DNA Bill: Standing Committee Recommendation****News Excerpt**

The Parliamentary Standing Committee on Science and Technology, Environment, Forests and Climate Change has recommended that the government assuage concerns raised over the DNA Technology (Use and Application) Regulation Bill, 2019, including over creation of a national databank of crime scene DNA profiles and fears of communities being targeted.

KS CONNECT										
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**Pre-Connect**

- In July 2019, the Centre introduced a bill — The DNA Technology (Use and Application) Regulation Bill, 2019 — to enable the agencies to use DNA technology while probing crime cases and set up a data bank of DNA.
- In 2019, Union Minister of Science and Technology had introduced the Bill in the Lok Sabha. The Bill, he said, was for the regulation of use and application of DNA technology for the purpose of establishing identity of missing persons, victims, offenders, under trials and unknown deceased persons.
- Establishment of the National and Regional DNA Data Banks, as envisaged in the Bill, will assist in forensic investigations.
- The proposed legislation will empower the criminal justice delivery system by enabling the application of DNA evidence.

**Highlights**

- As per the Bill, a DNA Regulatory Board would be set up that would advise the central and state governments on setting up of laboratories, databanks and laying down of guidelines, standards and procedures.
- A number of legislators who deposed before the committee were apprehensive that the Bill could be misused to target segments of society based on religion, caste or political views.
- The Bill proposes to have regional databanks besides a central one. However, the panel recommends only one national data Bank to minimise the chances of misuse of data. Legislators raised concerns that provisions of the Bill would lead to violations of the right to privacy.
- The Committee recommends that this board should be independent and not comprise only serving government officials. It also says that DNA samples be taken only with the consent of an individual and no one should be forced to provide evidence that may incriminate him/her in any crime.

**Analytica**

- ✓ The Parliamentary Standing Committee has recognised the importance of DNA technology in cracking crime cases but wants the Centre to allay the fears over its misuse. The Committee has also flagged risks in having a national data bank of DNA.
- ✓ Standing Committee said that the “risk with a national databank of crime scene DNA profiles is that it will likely include virtually everyone since DNA is left at the ‘crime scene’ before and after the crime by several persons who may have nothing to do with the crime being investigated.”
- ✓ The committee opined that an enabling ecosystem must be created soon to ensure DNA profiling is done in a manner that is fully consistent with the letter and spirit of various Supreme Court judgments and with the Constitution.
- ✓ On the data bank, the Committee states that a crime scene can also have the DNA of someone who was not even there at the time. It says bodily material like hair may have been transported to the crime scene inadvertently by a variety of ways. These DNA profiles, the committee fears, could find their way into the ‘crime scene index. Considering this,

**PEPPER IT WITH**  
Article 20 of the Constitution of India, Legal debates around the Narco Analysis Test, Polygraph Test

these DNA profiles, the committee suggests, be used only for investigation but not put in a national data bank and they are destroyed once a trial is over, preserving those of convicted.

- ✓ The Department of Biotechnology has argued that nearly 60 countries have enacted similar law, and that all important matters related to privacy, confidentiality and data protection have been taken into consideration.

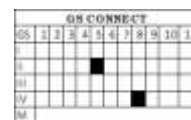
### Conclusion

The committee consulted legal and forensic science experts, including members of the Internet Freedom Foundation, National Law University, the Centre for Internet and Society and Gujarat Forensic Sciences University, among others. In its report, the panel states that the Committee is conscious of the fact that this Bill is very technical, complex and sensitive.

## **Issues related with Privacy and the Right to Freedom**

### News Excerpt

With the government and Twitter at loggerheads over issues related to content removal and freedom of expression, the Centre expressed “deep disappointment” over Twitter’s partial compliance to its orders “grudgingly” and with substantial delay.



### Pre-Connect

- Freedom of expression is not absolute and it is subject to reasonable restrictions as mentioned in Article 19 (2) of the Constitution of India.
- Lawfully passed orders are binding on any business entity. They must be obeyed immediately. If they are executed days later, it becomes meaningless.
- The Ministry of Electronics and Information Technology said the Twitter leadership had affirmed its commitment towards following Indian laws and rules. Twitter had also expressed its continuing commitment towards building its services in India, and had requested better engagement between the Government of India and Twitter’s global team.

### Highlights

- The U.S.-headquartered firm has been under fire from the government over non-compliance to block 250 accounts using hashtags related to “farmer genocide”, and about 1,178 accounts that security agencies suspect are backed by Khalistani sympathisers and Pakistan.
- On the issue of the use of the hashtag related to “farmer genocide” on Twitter, the government “expressed strong displeasure on the way Twitter acted after an emergency order was issued to remove this hashtag and content related to that. Spreading misinformation using an incendiary and baseless hashtag at a time when such irresponsible content can provoke and inflame the situation is neither journalistic freedom nor freedom of expression as envisaged under Article 19 of the Constitution of India”.
- In this adversarial contest, a recent government direction was issued to the social media platform, ordering it to shut down user accounts connected with these protests.
- In this on-going tussle, various reports claim that the government has, over the last week, sought to exercise powers under Section 69A of the Information Technology Act to block user accounts critical of the farm bills.
- While the specific legal order issued is secret, as per reports and observable behaviour on the platform, these account suspensions are in a high number and include a diverse category of users from farm unions, activists and even a press publication.

### Analytica

- ✓ The growing digitisation of Indian society is reflective in the ongoing protests by farmers. Battles are being waged every day in gram sabhas and protest sites as well on social media.



- ✓ Each day on Twitter, a new hashtag trends for and against the farm laws, or farm leaders, or the promoters of leading Indian conglomerates, leaders of Opposition and even the Prime Minister. This conversation is public, chaotic but also democratic.
- ✓ The government direction on hashtag presents a clear breach of fundamental rights but also reveals a complex relationship between the government and large platforms on the understanding of the Constitution of India.
- ✓ This brings into focus the condition of secrecy that is threshold objection to multiple strands of our fundamental rights. It conflicts against the rights of the users who are denied reasons for the censorship.
- ✓ Secrecy also undermines the public's right to receive information, which is a core component of the fundamental freedom to speech and expression.
- ✓ Though the right to privacy has been held to be a "sacred fundamental right" and is being "respected" by the government, the "veil of privacy" can be lifted for certain "legitimate state interest".

**Privacy concerns over Haryana's ID scheme**

- ❖ In Haryana, schools have been directed by the district education officer to collect required information for unique identity card scheme — ParivarPehchan Patra (PPP).
- ❖ It is mandatory for all families to register themselves to avail the benefits of the social security schemes of the State government.
- ❖ Haryana government clarified that enrolment under the PPP was voluntary, but in case a citizen or a family wished to apply for a service delivered by the government or any benefit and subsidy under any citizen welfare scheme, which has already been integrated with the PPP, the PPP ID would be required.
- ❖ A lot of data is being sought, well above and beyond what is required to deliver education and related services. The demand for Aadhaar numbers — evidently, virtually mandatory — is in violation of the Supreme Court guidelines — especially if no State benefits or subsidies are being sought by the residents.
- ❖ Experts expressed concern over reports of plans to cross-link this database with other databases, saying that if the PPP becomes a precondition to getting birth or death certificates, etc. then there is no choice in the matter and it was an offer people can't refuse.
- ❖ Additionally, in the absence of strong privacy laws in India, or any indication of data protection Standard Operating Procedures being followed for this exercise, experts worry about potential abuse of this data — including, but not limited to, its immediate leakage and availability to spammers at the very least, and perhaps more insidious uses.
- ❖ Experts added that though on various official portals, including the State government website, it is stated that the "data is to be taken with consent", but the State government is virtually mandating that consent via schools. It is virtually telling schools and RWAs, please

**Conclusion**

A large number of accounts which were sought to be censored are back online. A lot of this emerges from Twitter's evident refusal to comply with the directions after a constitutional appraisal. It has, as per press statements, cited the doctrine of proportionality in its defence. This is less than an ideal situation in which an unconstitutional law is being applied to its maximum threshold, with high arbitrariness, and its compliance is being resisted by a large, foreign, social media entity. To sum, it leaves a sense of confusion and wonder about why our own government formed

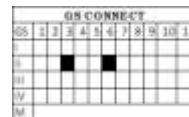
**PEPPER IT WITH**  
Article 19(1)(a), Article 21 of the Constitution of India, Salient features of the IT Act. 2000

under the Constitution may be failing to fulfil its obligations when strangers who trade in our data for profit are seemingly more eager.

## Guidelines for Digital Media and Social Media

### News Excerpt

Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021 has been framed in exercise of powers under section 87 (2) of the Information Technology Act, 2000 and in supersession of the earlier Information Technology (Intermediary Guidelines) Rules 2011.



### Pre-Connect

- The Digital India programme has now become a movement which is empowering common Indians with the power of technology.
- The extensive spread of mobile phones, Internet etc. has also enabled many social media platforms to expand their footprints in India.
- Common people are also using these platforms in a very significant way.

Some portals, which publish analysis about social media platforms and which have not been disputed, have reported the following numbers as user base of major social media platforms in India:

- WhatsApp users: 53 Crore
- YouTube users: 44.8 Crore
- Facebook users: 41 Crore
- Instagram users: 21 Crore
- Twitter users: 1.75 Crore

### Highlights

- Amidst growing concerns around lack of transparency, accountability and rights of users related to digital media and after elaborate consultation with the public and stakeholders these rules have been framed.
- While finalizing these Rules, both the Ministries of Electronics and Information Technology and Ministry of Information and Broadcasting undertook elaborate consultations among themselves in order to have a harmonious, soft-touch oversight mechanism in relation to social media platform as well as digital media and OTT platforms etc.
- Part- II of these Rules shall be administered by Ministry of Electronics and IT, while Part-III relating to Code of Ethics and procedure and safeguards in relation to digital media shall be administered by the Ministry of Information and Broadcasting.

**Rationale and Justification for New Guidelines:** These Rules substantially empower the ordinary users of digital platforms to seek redressal for their grievances and command accountability in case of infringement of their rights. In this direction, the following developments are noteworthy:

- ❖ The Supreme Court in suo-moto writ petition in Prajjawala case observed that the Government of India may frame necessary guidelines to eliminate child pornography, rape and gangrape imageries, videos and sites in content hosting platforms and other applications.
- ❖ There was a Calling Attention Motion on the misuse of social media and spread of fake news in the Rajya Sabha and the Minister had conveyed to the house, the resolve of the Government to strengthen the legal framework and make the social media platforms accountable under the law.
- ❖ The Ad-hoc committee of the Rajya Sabha laid its report after studying the alarming issue of pornography on social media and its effect on children and society as a whole and recommended for enabling identification of the first originator of such contents.

### Analytica

- ✓ These social platforms have enabled common Indians to show their creativity, ask



questions, be informed and freely share their views, including criticism of the Government and its functionaries. The Government acknowledges and respects the right of every Indian to criticize and disagree as an essential element of democracy.

- ✓ India is the world's largest open Internet society and the Government welcomes social media companies to operate in India, do business and also earn profits. However, they will have to be accountable to the Constitution and laws of India.
- ✓ Proliferation of social media, on one hand empowers the citizens then on the other hand gives rise to some serious concerns and consequences which have grown manifold in recent years. These concerns have been raised from time to time in various forums including in the Parliament and its committees, judicial orders and in civil society deliberations in different parts of country. Such concerns are also raised all over the world and it is becoming an international issue.
- ✓ Of late, some very disturbing developments are observed on the social media platforms. Persistent spread of fake news has compelled many media platforms to create fact-check mechanisms.
- ✓ Rampant abuse of social media to share morphed images of women and contents related to revenge porn have often threatened the dignity of women.
- ✓ Misuse of social media for settling corporate rivalries in blatantly unethical manner has become a major concern for businesses. Instances of use of abusive language, defamatory and obscene contents and blatant disrespect to religious sentiments through platforms are growing.
- ✓ Over the years, the increasing instances of misuse of social media by criminals, anti-national elements have brought new challenges for law enforcement agencies. These include inducement for recruitment of terrorists, circulation of obscene content, spread of disharmony, financial frauds, incitement of violence, public order etc.
- ✓ It was found that currently there is no robust complaint mechanism wherein the ordinary users of social media and OTT platforms can register their complaint and get it redressed within defined timeline.
- ✓ Lack of transparency and absence of robust grievance redressal mechanism have left the users totally dependent on the whims and fancies of social media platforms. Often it has been seen that a user who has spent his time, energy and money in developing a social media profile is left with no remedies in case that profile is restricted or removed by the platform without giving any opportunity to be heard.

### Cyber Crime Volunteer Programme

The volunteer programme is supposed to act as a facilitative tool between ordinary citizens and the government for the prevention of cybercrime. Any citizen can register himself/herself under one of three categories: 'Cyber Volunteer Unlawful Content Flagger', 'Cyber Awareness Promoter', and 'Cyber Expert'. Post-registration, the individual can directly report "unlawful content" being circulated over the Internet, which presumably includes social media platforms like Facebook, Instagram and Twitter, among others.

**Press Council of India** is a mechanism for the Press to regulate itself. The raison d'être of this unique institution is rooted in the concept that in a democratic society the press needs at once to be free and responsible. If the Press is to function effectively as the watchdog of public interest, it must have a secure freedom of expression, unfettered and unhindered by any authority, organised bodies or individuals. But, this claim to press freedom has legitimacy only if it is exercised with a due sense of responsibility. The Press must, therefore, scrupulously adhere to accepted norms of journalistic ethics and maintain high standards of professional conduct.

### Salient Features: Guidelines Related to Social Media to be administered by Ministry of Electronics and IT:

- **Due diligence to be followed by Intermediaries:** The Rules prescribe due diligence that must be followed by intermediaries, including social media intermediaries. In case, due diligence is not followed by the intermediary, safe harbour provisions will not apply to them.
- **Grievance Redressal Mechanism:** The Rules seek to empower the users by mandating the intermediaries, including social media intermediaries, to establish a grievance redressal mechanism for receiving & resolving complaints from the users or victims. Intermediaries shall appoint a Grievance Officer to deal with such complaints and share the name and contact details of such officer. Grievance Officer shall acknowledge the complaint within twenty four hours and resolve it within fifteen days from its receipt.
- **Ensuring Online Safety and Dignity of Users, Specially Women Users:** Intermediaries shall remove or disable access within 24 hours of receipt of complaints of contents that exposes the private areas of individuals, show such individuals in full or partial nudity or in sexual act or is in the nature of impersonation including morphed images etc. Such a complaint can be filed either by the individual or by any other person on his/her behalf.
- **Two Categories of Social Media Intermediaries:** To encourage innovations and enable growth of new social media intermediaries without subjecting smaller platforms to significant compliance requirement, the Rules make a distinction between social media intermediaries and significant social media intermediaries. This distinction is based on the number of users on the social media platform. Government is empowered to notify the threshold of user base that will distinguish between social media intermediaries and significant social media intermediaries. The Rules require the significant social media intermediaries to follow certain additional due diligence.

**PEPPER IT WITH**  
Article 19(1)(a), Salient  
Features of the Information  
and Technology Act, 2000

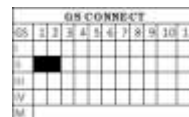
### Conclusion

These Rules are a fine blend of liberal touch with gentle self-regulatory framework. It works on the existing laws and statues of the country which are applicable to content whether online or offline. In respect of news and current affairs publishers are expected to follow the journalistic conduct of Press Council of India and the Programme Code under the Cable Television Network Act, which are already applicable to print and TV. Hence, a level playing field has been proposed.

### Right to Free Speech vs. Right to Reputation

#### News Excerpt

A Delhi court recently acquitted a journalist in a criminal defamation complaint filed by a former Union Minister over her allegations of sexual harassment against him.



#### Pre-Connect

Defamation has been defined under Section 499 of the Indian Penal Code (IPC) as whoever, by words either spoken or intended to be read, or by signs or by visible representations, makes or publishes any imputation concerning any person intending to harm, or knowing or having reason to believe that such imputation will harm, the reputation of such person is said to defame that person.

However, a mere defamatory statement does not amount to defamation. The publication of such statement is a pre-requisite to establish defamation.

#### Highlights

- Acquitting the journalist in a criminal defamation case filed against her by a former Union minister, a Delhi court asserted that “the right of reputation cannot be protected at the cost of the right of life and dignity of woman”.

- In doing so, the court has now laid down a precedent for women to speak up against sexual harassment — irrespective of the time elapsed since the alleged incident or the platform on which the woman chooses to speak up.
- Court asserted that a “woman cannot be punished for raising voice against the sex- abuse on the pretext of criminal complaint of defamation as the right of reputation cannot be protected at the cost of the right of life and dignity of woman as guaranteed in Indian Constitution under Article 21 and right of equality before law and equal protection of law as guaranteed under Article 14 of the Constitution”.
- The court also said a woman has “a right to put her grievance at any platform of her choice and even after decades”.
- The court applied ‘preponderance of probabilities’ as the standard of proof for the journalist’s defence. Preponderance of probabilities is a legal principle on the standard of proof that the parties to a case need to fulfil, and required the judge to persuade himself to just lean on one side as opposed to the other.
- The degree of proof needed is lower in case of preponderance of probabilities, as compared to beyond reasonable doubt, which is the standard of proof for the prosecution in criminal cases.

**Defamatory Statement**

- A defamatory statement is one which tends to lower the plaintiff in the estimation of right thinking members of society generally.(case **Sim V Stretch**)
- Defamatory Statement may be either Libel or Slander
- Libel – a defamatory statement in a permanent form e.g. written words in newspaper
- Slander – a defamatory statement in a transient form e.g. spoken words, gesture.

**Can former Union Minister face criminal case now?**

- India has a limitation period for the time within which complaints about certain criminal offences can be taken cognisance of. This is what may pose a challenge for any fresh criminal action to be brought against the former minister, specifically over allegations made by the journalist.
- It is open for a victim to file a criminal complaint alleging sexual harassment and outraging/insulting the modesty of a woman (Sections 354, 509 of the IPC). In old cases, the only challenge is overcoming what we call the ‘bar of limitation.’”
- The general position of law is: For an offence punishable with a maximum punishment of 3 years or less (which these offences are), the complaint has to be filed within 3 years of the crime/incident. This sometimes poses a challenge.
- Although, this is not an insurmountable barrier, the court does have the power to “to condone delay in filing of a criminal complaint. This can be done if the court is satisfied that, in a given case, the delay has been ‘properly explained’ or if it is necessary to do so in the ends of justice.
- In cases of sexual harassment/sexual assaults, courts are generally liberal in granting of condonation of delay. Courts do understand that it is not easy for a woman to gather courage and file a criminal complaint, especially in cases of serious power imbalances or where the accused is an influential person.

**PEPPER IT WITH**  
 Sec.376, 376A, 376B, 376C, 376D,  
 Sec. 359, 360 366, Sec.354, 354B  
 of the Indian Penal Code

**Conclusion**

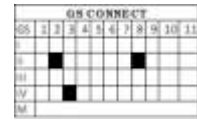
By giving primacy to dignity over the right to reputation, the ruling will encourage women to speak up and caution powerful men.



## Civil Rights: Legal Recognition of Same Sex marriage

### News Excerpt

The Centre opposed any changes to the existing laws on marriage to recognise same sex marriages, saying such interference would cause “a complete havoc with the delicate balance of personal laws in the country”.



### Pre-Connect

- The Central Government expressed its refusal to the decriminalisation of the same sex marriage in India. It opposed the legalisation of same-sex marriage stating that living together as same-sex partners is not comparable with the Indian concept of a family unit. In India, marriage is a bond between a biological man and a biological woman.
- It told the Delhi High Court that in spite of decriminalisation of homosexuality, one cannot claim a fundamental right with respect to same-sex marriage. Stressing on Indian marriage values under Hindu Marriage Act, it further said issue of legal recognition of same sex Marriage can't be decided by court.
- In an affidavit filed, the central government has told the Delhi High Court that statutory recognition of same-sex marriage in India is not a fundamental right. In its affidavit, it further told while consensual sexual relations between persons of same-sex are no longer illegal, the same would not imply legal sanctity to marriages between persons of same-sex.

### Analytica

- The government’s position is curious given the Act itself wiped out several recorded Hindu traditions that existed prior to codification. Whoever drafted the response also seems clueless about the 60-odd genders recognised in Hindu historical texts not to mention it has failed to provide any textual basis prohibiting the marriage of these 60-odd genders.
- The progeny argument is particularly ridiculous because it implies any marriage shorn of biological offspring is not a marriage. In short this is a shoddy and poorly drafted response.
- Celebration of a marriage gives rise to not just legal but moral and social obligations, particularly the reciprocal duty of support placed upon spouses and their joint responsibility for supporting and raising children born of the marriage and to ensure their proper mental and psychological growth in the most natural way possible.
- Relationship in marriage has more than personal significance at least in part because human beings are social beings whose humanity is expressed through their relationships with other. Entering into marriage therefore is to enter into a relationship that has public significance as well.

HCT

## Arguments from both sides

**WHAT CENTRE SAID**

- Family issues are far beyond mere recognition and registration of marriage between persons belonging to the same gender
- Living together as partners and having sexual relationship by same-sex individuals is not comparable with the Indian family unit concept of a husband, a wife and children which necessarily presuppose a biological man as a 'husband', a biological woman as a 'wife' and the children born out of the union between the two

**PETITIONERS' RESPONSE**

- The government’s position is curious given the (Hindu Marriage) Act itself wiped out several recorded Hindu traditions that existed prior to codification. Whoever drafted the response also seems clueless about the 60-odd genders recognised in Hindu historical texts not to mention it has failed to provide any textual basis prohibiting the marriage of these 60-odd genders.
- The progeny argument is particularly ridiculous because it implies any marriage shorn of biological offspring is not a marriage

- The institution of marriage and family are important social institutions that provide for the security, support and companionship of members of our society and bear an important role in the rearing of child and their mental and psychological upbringing.
- The concept of marriage cannot be relegated to merely a concept within the domain of privacy of an individual. The government said that considering the larger statutory framework, it is clear that “there exists a legitimate state interest in limiting the legal recognition of marriage to persons of opposite sexes only.
- In same sex marriage, it is neither possible nor feasible to term one a husband and the other one a wife. Resultantly the statutory scheme of many statutory enactments will become otiose.

**PEPPER IT WITH**

Rights of the Vulnerable peoples, Sexual Minorities, Sec. 377 of the IPC

**Conclusion**

The institution of marriage has a sanctity attached to it and in major parts of the country it is regarded as a “sacrament”. In India, despite statutory recognition of the relationship of marriage between a biological man and a biological woman, marriage depends on age-old customs, rituals, practices, cultural ethos and societal values. Family issues are far beyond mere recognition and registration of marriage between persons belonging to the same gender. Living together as partners and having sexual relationship by same-sex individuals (which is decriminalised now) is not comparable with the Indian family unit concept of a husband, a wife and children which necessarily presuppose a biological man as a ‘husband’, a biological woman as a ‘wife’ and the children born out of the union between the two.

**Unlawful Activities Act**

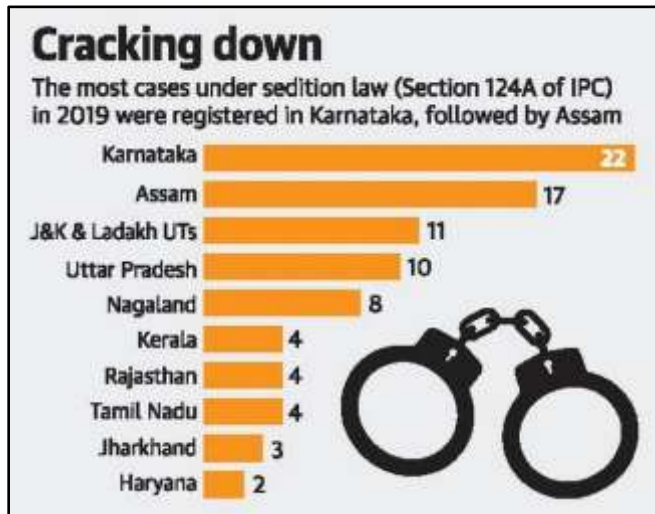
**News Excerpt**

Only 2.2 % of cases registered under the Unlawful Activities (Prevention) Act (UAPA) between the years 2016-2019 ended in convictions by court, according to data presented by the Union Home Ministry in the Rajya Sabha.

GS CONNECT											
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**Pre-Connect**

- Terrorism is the most heinous activities in the world. The term "Terrorism" comes from the French word Terrorisme, which is based on the Latin verb “terrere” (to cause to tremble).
- The Jacobins cited this precedent when imposing a Reign of Terror during the French Revolution. After the Jacobins lost power, the word "terrorist" became a term of abuse.
- In modern times "Terrorism" usually refers to the killing of innocent people by a private group in such a way as to create a media spectacle. **In November 2004, a United Nations Security Council report described terrorism** as any act "intended to cause death or serious bodily harm to civilians or non-combatants with the purpose of intimidating a population or compelling a government or an international organization to do or abstain from doing any act".
- In many countries, acts of terrorism are legally distinguished from criminal acts done for other purposes, and "terrorism" is defined by statute.



## Highlights

- Union Minister of State for Home informed the Upper House that as per the 2019 Crime in India Report compiled by the National Crime Records Bureau (NCRB), the total number of persons arrested under the UAP Act in 2019 is 1,948.
- The total number of the persons arrested and the persons convicted in the years from 2016 to 2019 under the UAPA in the country are 5,922 and 132 respectively. The NCRB does not maintain this data on the basis of religion, race, caste or gender.
- In the year 2019, as many as 96 persons were arrested for sedition (Section 124A IPC) but only two were convicted and 29 persons were acquitted. Of the 93 cases of sedition, the charge sheet was filed in 40 cases the same year.

## Laws related to terrorism in India

- ✓ Terrorism has immensely affected India. The reasons for terrorism in India may vary vastly from religious cause and other things like poverty, unemployment and under development etc.
- ✓ The Indian Supreme Court took a note of it in *Kartar Singh v. State of Punjab* 1994, where it observed that the country has been in the firm grip of spiralling terrorist violence and is caught between deadly pangs of disruptive activities.
- ✓ Anti-terrorism laws in India have always been a subject of much controversy. One of the arguments is that these laws stand in the way of fundamental rights of citizens guaranteed by Part III of the Constitution. The anti-terrorist laws have been enacted before by the legislature and upheld by the judiciary though not without reluctance. The intention was to enact these statutes and bring them in force till the situation improves. The intention was not to make these drastic measures a permanent feature of law of the land. But because of continuing terrorist activities, the statutes have been reintroduced with requisite modifications.
- ✓ At present, the legislations in force to check terrorism in India are the National Security Act, 1980 and the Unlawful Activities (Prevention) Act, 1967. There have been other anti-terrorism laws in force in this country a different point in time.

**Unlawful Activities (Prevention) Act, 1967:** The UAPA was designed to deal with associations and activities that questioned the territorial integrity of India. The ambit of the Act was strictly limited to meeting the challenge to the territorial integrity of India. The Act was a self-contained code of provisions for declaring secessionist associations as unlawful, adjudication by a tribunal, control of funds and places of work of unlawful associations, penalties for their members etc. The Act has all along been worked holistically as such and is completely within the purview of the central list in the 7th Schedule of the Constitution.

**Terrorist and Disruptive Activities (Prevention) Act, 1987 (TADA):** The Terrorist & Disruptive Activities (Prevention) Act 1987 had much more stringent provisions than the UAPA and it was specifically designed to deal with terrorist activities in India. When TADA was enacted it came to be challenged before the Apex Court of the country as being unconstitutional. The Supreme Court of India upheld its constitutional validity on the assumption that those entrusted with such draconic statutory powers would act in good faith and for the public good in the case of *Kartar Singh vs State of Punjab (1994)*. However, there were many instances of misuse of power for collateral purposes. The rigorous provisions contained in the statute came to be abused in the hands of law enforcement officials. TADA lapsed in 1995.

**The Maharashtra Control of Organised Crime Act, 1999 (MCOCA):** Other major Anti-terrorist law in India is The Maharashtra Control of Organised Crime Act, 1999 which was enforced on 24th April 1999. This law was specifically made to deal with rising organized crime in Maharashtra and especially in Mumbai due to the underworld.



**Prevention of Terrorism Act, 2002:** With the intensification of cross-border terrorism and the continued offensive agenda of Pak ISI targeted at destabilizing India and the post 9/11 developments, it became necessary to put in place a special law to deal with terrorist acts. The POTA, 2002 clearly defines the terrorist act and the terrorist in Section 3 and grants special powers to the investigating authorities under the Act. In the case of *People's Union for Civil Liberties Vs. Union of India (UOI) (2004)*, the constitutional validity of the Prevention of Terrorism Act, 2002 was discussed. The court said that the Parliament possesses power under Article 248 and entry 97 of list I of the Seventh Schedule of the Constitution of India to legislate the Act. Need for the Act is a matter of policy and the court cannot go into the same. However, in order to ensure that these powers are not misused and the violation of human rights does not take place, specific safeguards have been built into the Act. Some of these are:

- No court can take cognizance of any offence under the Act without the previous sanction of the Central Government or, as the case may be, of the State Government.
- No officer lower in rank than the Deputy Superintendent of Police can investigate offences under the Act.
- Confession made by a person before a police officer not below the rank of Superintendent of Police is admissible as evidence under the Act provided such person is produced with 48 hours before a magistrate along with his confessional statement.
- The Act provides for punishment for any officer who exercises powers maliciously or with malafide intentions. It also provides for award of compensation to a person who has been corruptly or maliciously proceeded against under the Act.

**The POTA, 2002** is a special law for the prevention of and for dealing with terrorist activities and clearly defines the terrorist act and the terrorist in Section 3, Sub-Section (1) of the Act. The Act provides the legal framework to strengthen the hands of the administration in our fight against the menace of terrorism and can and should be applied against such persons and acts as are covered by the provisions of this law and it is not meant as a substitute for action under ordinary criminal laws.

**PEPPER IT WITH**  
Sanjay Dutt Vs. State through  
C.B.I 1994, Salient features of  
the National Security Act

### Conclusion

Various suspicion and voices have been raised by people NGOs under the pretext of constitution, constitutional provisions, and equality before law and civil rights. All these organizations must keep in mind that provisions are there in the constitution where reasonable restrictions can be enforced even upon the liberty of people and there is need to stringent law to tackle the terrorism. We also need to bear in mind that much as terrorist keep pace with emerging technology- the current phenomena being termed as fourth generation warfare and certainly India also need to fine tune and adopt their anti-terror legislation to fought to the changing time.

Lord Denning said: "The freedom of individual must take second place to the security of the state". Recently, no less a person than the Chief Justice of India said that the international community could not fault India if it chose to enact tough measures to deal with the menace of terror. So, there is needed to make stringent law to tackle terrorism.

## Political Funding in India

### News Excerpt

The Association for Democratic Reforms in its latest analysis has said that the contribution reports of just 3.39%, or 78 of the overall 2,301 registered unrecognised parties are available in the public domain for the financial year of 2018-'19.

OS CONNECT											
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### Pre-Connect

- Unrecognised political parties are either newly registered or they have not secured a sufficient percentage of votes in the Assembly or General Elections to become a state party. The parties that fall under this category also may have never contested the elections after being registered with the Election Commission of India. The ADR report said 2,301 or 97.50% of registered groups are unrecognised parties.
- Political parties are voluntary associations or organised groups of individuals who share the same political views and who try to gain political power through constitutional means and who desire to work for promoting the national interest.
- There are four types of political parties in the modern democratic states, viz., (i) reactionary parties which cling to the old socio-economic and political institutions; (ii) conservative parties which believe in the status-quo; (iii) liberal parties which aim at reforming the existing institutions; and (iv) radical parties which aim at establishing a new order by overthrowing the existing institutions.

**Conditions for Recognition as a National Party:** A party is recognised as a national party if any of the following conditions is fulfilled:

- ❖ If it secures six per cent of valid votes polled in any four or more states at a general election to the Lok Sabha or to the legislative assembly; and, in addition, it wins four seats in the Lok Sabha from any state or states; or
- ❖ If it wins two per cent of seats in the Lok Sabha at a general election; and these candidates are elected from three states; or
- ❖ If it is recognised as a state party in four states.

**Conditions for Recognition as a State Party:** At present (2019), a party is recognised as a state party in a state if any of the following conditions is fulfilled:

- ❖ If it secures six per cent of the valid votes polled in the state at a general election to the legislative assembly of the state concerned; and, in addition, it wins 2 seats in the assembly of the state concerned; or
- ❖ If it secures six per cent of the valid votes polled in the state at a general election to the Lok Sabha from the state concerned; and, in addition, it wins 1 seat in the Lok Sabha from the state concerned; or
- ❖ If it wins three per cent of seats in the legislative assembly at a general election to the legislative assembly of the state concerned or 3 seats in the assembly, whichever is more; or
- ❖ If it wins 1 seat in the Lok Sabha for every 25 seats or any fraction thereof allotted to the state at a general election to the Lok Sabha from the state concerned; or
- ❖ If it secures eight per cent of the total valid votes polled in the state at a General Election to the Lok Sabha from the state or to the legislative assembly of the state. This condition was added in 2011.

The number of recognised parties keeps on changing on the basis of their performance in the general elections. On the eve of the seventeenth Lok Sabha general elections (2019), there were 7 national parties, 52 state parties and 2354 registered unrecognised parties in the country.

- In their classification of political parties on the basis of ideologies, the political scientists have placed the radical parties on the left and the liberal parties in the centre and reactionary and conservative parties on the right. In other words, they are described as the leftist parties, centrist parties and the rightist parties. There are three kinds of party systems in the world, viz.
  - one party system in which only one ruling party exists and no opposition is permitted, as for example, in the former communist countries like the USSR and other East European countries;
  - two-party system in which two major parties exists, as for example, in USA and Britain; and
  - multi-party system in which there are a number of political parties leading to the formation of coalition governments, as for example, in France, Switzerland, India and Italy.

### Highlights of the Report

- The number of registered unrecognised political parties has increased two-fold in the last 10 years. From 1112 parties in 2010, the number has spiked to 2,301 in 2019. It is important to note that the number of such parties increases disproportionately during the year of Parliamentary elections especially. Between 2018 and 2019, it increased by over 9.8% while between 2013 and 2014, it increased by 18%.
- Only 0.96% of registered unrecognised parties filed their contribution reports to the ECI for both FY 2017-18 and FY 2018-19. Among the parties considered, only 22 submitted their reports for all two years.
- Out of a total of 2,301 registered unrecognised parties, approx. 30 parties won seats in the current state assemblies and Lok Sabha. Of these 30 parties, only 3 parties' contribution reports are available for FY 2017-18 or/and FY 2018-19.

### Recommendations of ADR

- In 1999, the ECI had issued notices to more than 200 political parties which were registered till 1995 but failed to contest in any elections. Notices to those parties which were returned undelivered or parties which failed to respond to these notices were deleted only from the list of registered parties, which added up to 150.

### Recognition of National and State Parties

- The Election Commission registers political parties for the purpose of elections and grants them recognition as national or state parties on the basis of their poll performance. The other parties are simply declared as registered-unrecognised parties.
- The recognition granted by the Commission to the parties determines their right to certain privileges like allocation of the party symbols, provision of time for political broadcasts on the state-owned television and radio stations and access to electoral rolls.
- Further, the recognized parties need only one proposer for filing the nomination. Also, these parties are allowed to have forty “star campaigners” during the time of elections and the registered unrecognised parties are allowed to have twenty “star campaigners”. The travel expenses of these star campaigners are not included in the election expenditure of the candidates of their parties.
- Every national party is allotted a symbol exclusively reserved for its use throughout the country. Similarly, every state party is allotted a symbol exclusively reserved for its use in the state or states in which it is so recognised. A registered-unrecognised party, on the other hand, can select a symbol from a list of free symbols. In other words, the Commission specifies certain symbols as ‘reserved symbols’ which are meant for the candidates set up by the recognised parties and others as ‘free symbols’ which are meant for other candidates.

Similarly, 255 parties were de-listed in 2016 from the list of registered unrecognised parties as they were no longer in existence or functioning.

- This exercise should continue so as to weed out all political parties which do not contest in any election for more than 5 years and also as a means to strengthen the registration process.
- The website of the state CEOs should be regularly updated to provide details of status of submission of audit reports and contribution reports by unrecognised parties. As mentioned in the transparency guidelines, the list of reports/statements filed by these parties shall be compiled and uploaded on the CEO's website within 24 hours of the due date. This list shall be periodically updated by the CEO office, within 3 days of receipt of statement/report from any political party.
- Regulation of registration of political parties is crucial to avoid money laundering, corrupt electoral practices and abuse of money power. Thus, the ECI should impose strict norms for the registration of an association of persons as a political party apart from taking the stringent step of de-listing those parties which fail to adhere to the rules.
- IT scrutiny of unrecognised parties should be taken up, especially of those which do not contest in elections but declare receipt of voluntary contributions.

**PEPPER IT WITH**

Political Parties in USA, Democratic and Republican, Political Parties of Britain, Conservative and Labour

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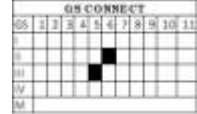


### SOCIAL ISSUES, SCHEMES, REPORTS & INDICES

#### City Innovation Exchange

##### News Excerpt

Recently, the City Innovation Exchange (CiX) platform was launched by Ministry of Housing and Urban Affairs.



##### Pre-Connect

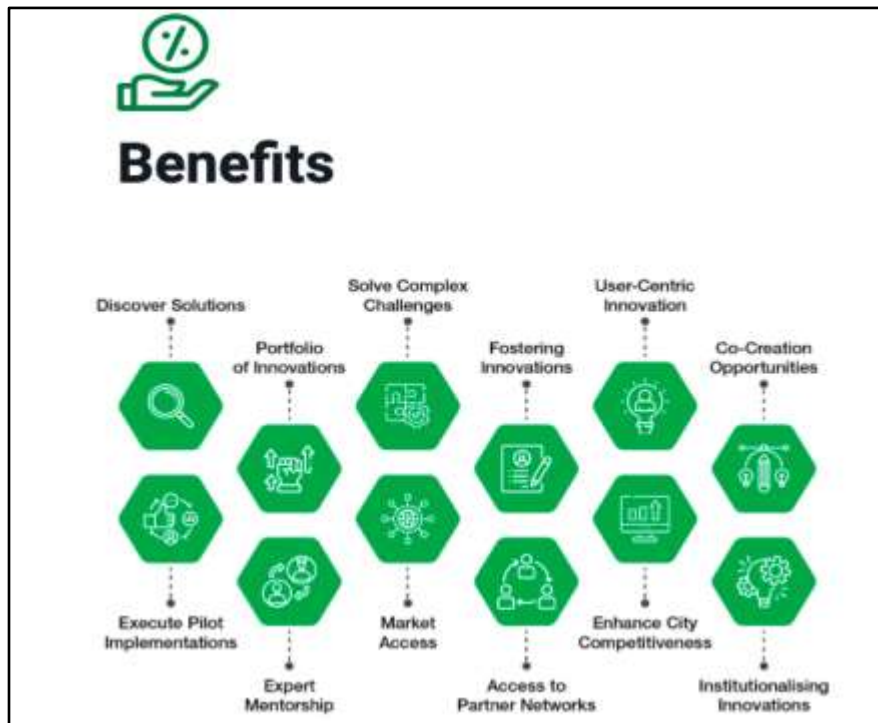
- Urban India is in dire need of the capability to discover and scale innovation at speed to keep up with the escalating scope and complexities of its challenges.
- Identifying and removing systemic bottlenecks, blind spots and inefficiencies are imperatives that requires urgent attention. The vast geography and diversity of our 4000+ cities further complicate the challenge of discovering the right solutions for local needs and aspirations.
- Smart Cities Mission, under Ministry of Housing and Urban Affairs, envisions bringing administrators and urban stakeholders in direct connection with India’s innovation ecosystem to significantly augment the problem-solving capacity of our cities. In due time, the CiX platform will immensely contribute to the Ease of Doing Business and Ease of Living in Cities.

##### Smart City Mission

The purpose of the Smart Cities Mission is to drive economic growth and improve the quality of life of people by enabling local area development and harnessing technology, especially technology

##### About City Innovation Exchange (CiX)

- The CiX will connect cities to innovators across the national ecosystem to design innovative solutions for their pressing challenges.
- The platform will ease the discovery, design & validation of solutions through a robust, transparent and user centric process that will reduce barriers for innovators and cities to discover fitting solutions.
- Built on the concept of ‘open innovation’, the platform will help in the flow of ideas ‘outside in and inside out’, enhancing the skills and capacity required to deliver smart urban governance.



- Through interaction with the Academia and Businesses/ Start-ups, the platform will benefit cities in the transfer of ideas from ‘labs’ to real environment. Similarly, by helping

urban governments interact with citizens, the platform will ensure adoption of tested solutions that will be impactful and sustainable.

### Importance of City Innovation Exchange

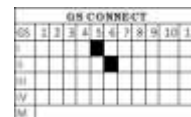
- ✓ The platform will be a significant addition to the growing innovation ecosystem of India and focuses on fostering innovative practices in cities. CiX, through an ‘open innovation’ process, engages with innovators to design-test-deliver on solutions to pressing urban challenges.
- ✓ The platform in due time will help our cities in adopting solutions that will enhance the quality of life for its residents and significantly improve the Ease of Doing Business.
- ✓ The Platform has more than 400 start-ups, 100 smart cities, more than 150 challenges statements and over 215 solutions at the time of launch.

**PEPPER IT WITH**  
Smart Cities Mission, Urban Transformation Initiative

### Vigyan Jyoti Programme

#### News Excerpt

Recently, the second phase of Vigyan Jyoti programme was commenced on the International Day of Women and Girl in Science, which will spread the programme for encouraging girls to take interest in science and build a career in STEM to 50 more districts adding to the existing 50 districts across the country.



#### Pre-Connect

Vigyan Jyoti programme, an initiative to encourage girls to take interest in science and build career, was launched by the Department of Science & Technology (DST) to create a level-playing field for the meritorious girls to pursue STEM. It had been running successfully in 50 Jawahar Navodaya Vidyalayas (JNVs) since December 2019 and has now been expanded to 50 more JNVs for the year 2021-22.

#### About the Programme

- Vigyan Jyoti is a programme to promote STEM learning among girl students and to inspire them towards STEM careers by creating a level-playing field for meritorious girls from grades 9 to 12 to pursue STEM in their higher education, especially from the top colleges in the areas where girls are hugely underrepresented.
- Engage with Science of Vigyan Prasar is another initiative to build interest and create a community of practice with students, teachers, and scientists connecting the high school students to the higher education institutions.
- The engage with Science platform will make students interact, participate and get involved with the sampling and active consumption of S&T content, including Cloud, Big Data, etc. through the usage of digital tools.

DST is working proactively to bring gender parity in Science & Technology (S&T) domain through various women-centric programmes. Apart from Vigyan Jyoti, it runs other women-oriented programmes like Women Scientists Scheme to help women with career-break, Indo-US Fellowship for Women in STEMM (WISTEMM) program where women scientists can work in research labs of USA, Consolidation of University Research for Innovation and Excellence in Women Universities (CURIE) programme for improving R&D infrastructure and establishing state-of-the-art research facilities in order to create excellence in S&T in women universities and Gender Advancement for Transforming Institutions (GATI) program in pilot mode. Further, DST has also additionally established Artificial Intelligence (AI) labs in women universities with the goal to foster AI innovations and to prepare skilled manpower for AI-based jobs in future.



- Vigyan Jyoti initiative by DST focuses on solving the multidimensional problems associated with meagre representation of women in Engineering and Technology streams in higher education by building confidence and excitement towards these streams.
- Vigyan Jyoti activities include student-parent counselling, visit to labs and knowledge centres, partners role model interactions, science camps, academic support classes, resource material distribution and tinkering activities. Online academic support to students includes streaming of video classes, study materials, daily practice problems and doubt clearing sessions.
- In India, it will be called GATI (Gender Advancement through Transforming Institution).

### Analytica

#### Why India need such a programme?

- India is ranked 108 out of 149 countries in the 2018 Global Gender Gap report. According to DST figures, in 2015-16, the share of women involved in scientific research and development was 14.71% — after it had actually increased from 13% in 2000-2001 to 29% in 2014-15.
- The DST has also found that women are either not promoted, or very often drop out mid-career to attend to their families.

#### What are the challenges ahead?

- To get as many institutions as possible to sign up, the DST will need to manoeuvre around government red tape as most universities, barring the IITs and NITs, are run and funded by the government as well.
- This means that these institutions don't have direct control over institutional policies, recruitment and promotions. The DST has tied up with National Assessment and Accreditation Council, under the UGC, aiming to push gender equity through them.
- The DST plans to run intensive gender sensitisation programmes, especially for the top leadership of institutions, and work within existing rules such as pushing for women members on selection committees during recruitment processes. In the future, the DST is likely to consider policy changes such as those brought about in the UK providing financial incentives through grants to institutes.

#### **First ASEAN-India Hackathon 2021**

Recently, the first-ever ASEAN-India Hackathon concluded with more than 400 students, mentors, and officials from 10 ASEAN countries and India participating.

It aims at enhancing the cooperation between India and ASEAN countries in science, technology, and education. The teams for the ASEAN countries suggested innovative solutions to overcome the challenges under two broad themes: Blue Economy and Education.

The participating teams consisted of 330 students and 90 mentors. The students were divided in 54 cross-country teams, where each team consists of six students and two mentors. These diverse teams competed on developing the best solution for 11 problem statements provided by various different international organisations and government bodies.

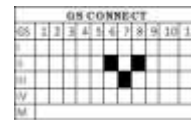
ASEAN India Hackathon offers a unique platform for our youngsters to put their minds and energies together. It is an excellent means to inculcate cooperative spirit among the participants and also exposes them to diverse viewpoints, cultures and work ethics. cutting across national boundaries.

**PEPPER IT WITH**  
Global STEM Initiative

## Intensified Mission Indradhanush (IMI) 3.0

### News Excerpt

Recently, States/Union Territories (UTs) have rolled out Intensified Mission Indradhanush (IMI) 3.0 to cover children and pregnant women who missed the routine immunisation during the COVID-19 pandemic.



### Pre-Connect

Immunization Programme in India was introduced in 1978 as 'Expanded Programme of Immunization' (EPI) by the Ministry of Health and Family Welfare, Government of India. In 1985, the programme was modified as 'Universal Immunization Programme' (UIP) to be implemented in phased manner to cover all districts in the country by 1989-90 with the one of largest health programme in the world. Despite being operational for many years, UIP has been able to fully immunize only 65% children in the first year of their life.

### Mission Indradhanush

To strengthen and re-energize the programme and achieve full immunization coverage for all children and pregnant women at a rapid pace, the Government of India launched "Mission Indradhanush" in December 2014.

### Goal of Mission Indradhanush:

- The ultimate goal of Mission Indradhanush is to ensure full immunization with all available vaccines for children up to two years of age and pregnant women. The Government has identified 201 high focus districts across 28 states in the country that have the highest number of partially immunized and unimmunized children.
- Earlier the increase in full immunization coverage was 1% per year which has increased to 6.7% per year through the first two phases of Mission Indradhanush.
- Four phases of Mission Indradhanush have been conducted till August 2017 and more than 2.53 crore children and 68 lakh pregnant women have been vaccinated.
- To further intensify the immunization programme, the Prime Minister launched the Intensified Mission Indradhanush (IMI) in 2017. Through this programme, Government of India (GoI) aims to reach each and every child up to two years of age and all those pregnant women who have been left uncovered under the routine immunisation programme/UIP.
- The focus of special drive was to improve immunisation coverage in select districts and cities to ensure full immunisation to more than 90% by December 2018.

### Intensified Mission Indradhanush (IMI) 2.0

To boost the routine immunization coverage in the country, the GoI has introduced Intensified Mission Indradhanush 2.0 to ensure reaching the unreached with all available vaccines and accelerate the coverage of children and pregnant women in the identified districts and blocks from December 2019-March 2020.

### About Intensified Mission Indradhanush 3.0

It will have two rounds and will be conducted in pre-identified 250 districts/urban areas across 29 States/UTs in the country. Focus of the IMI 3.0 will be the children and pregnant women who have missed their vaccine doses during the COVID-19 pandemic. They will be identified and vaccinated during the two rounds of IMI 3.0.

### Why India need this programme?

Every year the Universal Immunization Programme caters to the vaccination needs of 2.65 crore children and 2.9 crore pregnant women against 12 Vaccine Preventable Diseases. Despite these efforts by all the States and UTs, some children and pregnant women get missed out from this network. Mission Indradhanush is indeed a successful strategy to reach out to every dropped out and left out child and pregnant woman. There has been remarkable improvement in the immunization coverage which is also evident in the NFHS5 data as available for 22 States.

### Benefits of programme

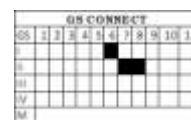
- Implementing large campaigns like IMI 3.0 even during the roll out of COVID-19 vaccine is a clear indication of India's health system getting stronger day by day.
- IMI 3.0 aimed to reach the unreached population with all the available vaccines under Universal Immunisation Programme (UIP) and thereby accelerate the full immunization and complete immunization coverage of children and pregnant women.
- The Mission Indradhanush campaigns have proven to be tailor made for the Indian context, and have given far reaching results during the earlier phases.
- Mission Indradhanush & IMI has enabled the immunization system in reaching hard to reach and high-risk areas including brick kilns, construction sites and nomadic population.
- The previous campaigns also helped in improving the micro-planning, generating demand for immunization services and strengthening the supporting systems.

**PEPPER IT WITH**  
Rainbow Vaccine, SarvaSwasthya  
Abhiyan, Rotavirus vaccine

## 'Population versus Planet' Conference

### News Excerpt

Recently, Union Minister for Health and Family Welfare participated and expressed his views in WION and Zee Media's 'Population versus Planet' Conference which is a part of its year-long campaign called 'Mission Sustainability: Population Vs Planet'.



### Pre-Connect

- Mission Sustainability - Population vs Planet is a social cause initiative on WION in partnership with the Mobius Foundation. In this segment, WION brings you a discussion on education and general awareness.
- Taking the vision of the Government of India forward and launching a one-year-long social initiative called 'Mission Sustainability - Population v/s Planet'. The campaign commenced with a two-hour-long Thought Leadership Conclave.
- Technology has advanced in the last 100 years to give us television, satellites, space exploration, and instant communication through apps. But today, there is an urgency to take action, in the short and long term, for the survival of civilisation as we know it.
- Although the general population is aware that the future looks bleak, the causes are not immediately apparent to the common person. But if we had to attribute the difficulty to a single cause, it is the explosion of population. The solution (mitigation), however, does not seem feasible.

### Highlights of the Conference

- This e-conclave marking the campaign's launch will host deliberations between numerous policy experts, demographic researchers & academicians on socially important themes like population stabilisation, empowering women & youth through education among various others as the world population witnesses an increase from 1 billion in the year 1800 to 7.8 billion today.
- More people require more resources, and as the population increases, the earth's resources deplete. The population boom has been affecting the planet and the human race in many adverse ways. People in developing countries like India, feel the impact of environmental problems more acutely.
- India was one of the first countries in the world to formulate a National Family Planning Program way back in 1952 which was later expanded to cover maternal and child health as well as adolescent health and nutrition and has taken giant strides in spreading awareness & enhancing adoption of family planning techniques while also ensuring healthier lives for its citizens.

- Even though India's population has increased from 36 crore in 1951 to 121.02 crore in 2011, the country has witnessed significant decline in both fertility and mortality; the crude birth Rate which was recorded at 40.8 per 1000 in 1951 has declined to 20.0 in 2018.
- Total Fertility Rate (TFR) has declined from 6.0 in 1951 to 2.2 in 2015-16.
- Death rate in India has declined from 7 in 2012 to 6.2 in 2018.

### **Step taken by India**

- ✓ India has been an important and active member of Family Planning 2020 partnership, advancing collaborative efforts to address the policy, financing, delivery and socio-cultural barriers to women accessing contraceptive information, services and supplies.
- ✓ The alliance, which is now entering its next phase, provided an impetus to our national agenda of protecting mothers and children through improving access to family planning choices from the time of the partnership's initiation in 2012.
- ✓ India added more than 1.5 crore additional users for modern contraceptives thereby increasing the modern contraceptive use to 55%.
- ✓ The Partnership helped India add two new contraceptives, namely the Injectable Medroxy Progesterone Acetate (MPA) and Centchroman in the National contraceptive basket while the total allocation for Family Planning during this period was to the tune of 3 billion USD.
- ✓ Family Planning Logistics Management and Information system was developed under the Digital India initiative for ensuring last mile availability of the contraceptives. A holistic media campaign covered all aspects of Information Education & Communication as well as Behaviour Change Communication and this is how demand generation was achieved.
- ✓ Strengthening post pregnancy contraception with more than 10 million pregnant women benefiting through Post-Partum Intra-Uterine Contraceptive Device (PPIUCD) and improving quality remained the central tenets of the program.
- ✓ As a result of our persistent efforts on three key fronts of Supplies, Services and Information, India was able to provide modern contraceptive access to 14.2 Crore beneficiaries and thus averting 5.6 Crore unintended pregnancies, 18.6 lakh unsafe abortion and 30 thousand maternal deaths in 2019.

### **National Family Health Survey 5 (NFHS5)**

NFHS5 that bolsters India's remarkable achievements in Family Planning- 20 out of 22 States surveyed so far have shown an increase in modern contraceptive use and 21 showing a decline in unmet needs for contraception while 19 of them have shown a decline in fertility. India is on the verge of achieving the replacement Total Fertility Rate (TFR) with 28 out of 36 states & UTs having already achieved the replacement Total fertility rate of 2.1.

### **Population Projection for India and States 2011-2036**

- Population projection for India and States 2011-2036, released in July 2020, indicates that the TFR is expected to decline from 2.37 during 2011-2015 to 1.73 during 2031-35.
- India is now in a phase of demographic transition with a substantial percentage of youth population. The youth population in the age group of 15-24 years is projected to decline from 233 million in 2011 to 227 million in 2036.
- However, the proportion of the working age population is expected to increase from 61% in 2011 to 65% in 2036. India is adding 12 million people to the working age population each year.

### **Conclusion**

It is evident that the impact of the interventions is now beginning to yield dividends. Today, India is knocking at the door of achieving replacement level fertility, and has made remarkable improvement in reducing maternal and child mortality. With commitment and perseverance, India can achieve the goal of population stabilization and advancing the development goals of the country.



## Jal Jeevan Mission-Urban

### News Excerpt

Recently, ministry of Housing and Urban Affairs has selected 10 pilot cities to survey for Jal Jeevan Mission to launched a new project to install water connections to every urban household.

GIS CONNECT											
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### Pre-Connect

- Jal Jeevan Mission (Urban) (JJM (U)) has been designed to provide universal coverage of water supply to all households through functional taps in all 4,378 statutory towns in accordance with SDG Goal- 6.
- Providing coverage of sewerage/septage management in 500 AMRUT cities is the other focus area. The Finance Minister also announced that Swachh Bharat Mission (Urban) 2.0 will be launched under the “Health and Wellbeing” vertical.
- The Finance Minister further said that a Scheme to induct over 20,000 city buses in 5 lakhs plus cities including Hilly/ UT/ North East State capital cities (total: 111) will be launched to strengthen organized city bus services, improve urban mobility and ease in living.

### About the Mission

- 2.68 crore is the estimated gap in urban household tap connections that is proposed to be covered under JJM(U). Likewise, estimated gap in sewer connections/septage in 500 AMRUT cities proposed to be covered in JJM(U) is 2.64 crore.
- Rejuvenation of water bodies to augment sustainable fresh water supply and creating green spaces and sponge cities to reduce floods and enhance amenity value through an Urban Aquifer Management plan are other key areas of the Mission.
- JJM(U) will promote circular economy of water through development of city water balance plan for each city focusing on recycle/reuse of treated sewage, rejuvenation of water bodies and water conservation. 20% of water demand to be met by reused water with development of institutional mechanism.
- A Technology Sub-Mission for water is proposed to leverage latest global technologies in the field of water.
- Information, Education and Communication (IEC) campaign is proposed to spread awareness among masses about conservation of water.
- Pey Jal Survekshan will be conducted in cities to ascertain equitable distribution of water, reuse of wastewater and mapping of water bodies with respect to quantity and quality of water through a challenge process.
- Mission has a reform agenda with focus on strengthening of urban local bodies and water security of the cities. Major reforms are reducing non-revenue water to below 20%; recycle of treated used water to meet at least 20% of total city water demand and 40% for industrial water demand at State level; dual piping system, electric vehicle charging points; Wi-fi infrastructure in new buildings; unlocking value and improving land use efficiency through adequate urban planning; GIS based master plans of the cities; raising funds through issuance of municipal bonds and rejuvenation of water bodies.

The Centre will fund 90 per cent of the project for the Northeast and hill states, while union territories will receive 100 per cent funding from the Centre. Cities will less than a lakh population will have 50 per cent Centre funding, cities between a lakh and 10 lakh population will receive a third Centre funding, and cities with over a million population will receive a quarter Centre funding.

### Salient features of Mission

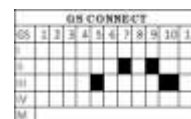
- ✓ A Pey Jal Survekshan will determine the distribution of water, wastewater, and water bodies in 10 cities: Patiala, Rohtak, Churu, Agra, Surat, Badlapur, Bhubaneswar, Tumkur, Kochi and Madurai. Five of these cities are water-scarce and five are water abundant.

- ✓ The scheme will be implemented first through signing of MoUs between the Centre, states, and the urban local bodies. The cities will then prepare city water balance plans, recycle/reuse plans and aquifer management plans. The state will vet and approve the development of the project with a baseline assessment.
- ✓ In order to promote Public private partnership, it has been mandated for cities having million plus population to take up PPP projects worth minimum of 10 percent of their total project fund allocation.
- ✓ There is an estimated 2.68 crore urban households without tap connection and 2.64 crore households in AMRUT cities without sewer connection or septage option.

## Road Safety Report by World Bank

### News Excerpt

Bringing the focus on the social and financial impact of road accidents in India, the World Bank recently released a report titled 'Traffic Crash and Disabilities'.



### Pre-Connect

- The report released by Transport Minister states that 75 percent of low-income households in India reported a decrease in their income if there was a road crash in the family.
- Such families tend to lose over seven months of salary over a road accident while the loss for a higher income family is less than one month salary.
- World Bank commissioned a survey-based assessment study in association with the Save LIFE Foundation (SLF) to determine such differential impacts more objectively in India.
- The Burden on Indian Society today has 1 percent of the total vehicles around the world but accounts for 11 percent of the global road accidents. Considering these alarming statistics on road accidents in the country, the World Bank conducted surveys to gauge the impact that goes beyond injuries, death, and how the families cope with the trauma and additional responsibilities.

### What report says?

- In India, pedestrians, bicyclists and motorcyclists, who mostly represent the poor income strata of the society, also happen to have the least safety protection in the event of a traffic crash. They account for more than half the total road crash deaths.
- And most of those unfortunate ones, who are involved in a crash, do not have adequate access to medical and social safety net. The burden of the crash is borne not only by the victim but by their entire household.
- This study assesses the social, financial, gender, and psychological impacts of road crashes on poor and disadvantaged households. It is based on the survey data collected from four Indian states – Uttar Pradesh, Bihar, Tamil Nadu and Maharashtra.
- The decline in total household income was sharper among low-income households (LIH) (75%) than high-income households (HIH) (54%).
- The severe impact of decline in income was highest among low-income households in rural areas (56%) compared to low-income households in urban areas (29.5%) and high-income households in rural areas (39.5%).
- Within households, women bear the brunt of caregiving activities post-crash, leading to a double burden of physical and mental stress and exacerbated inequality of opportunities in returning to livelihoods and income generating tasks.

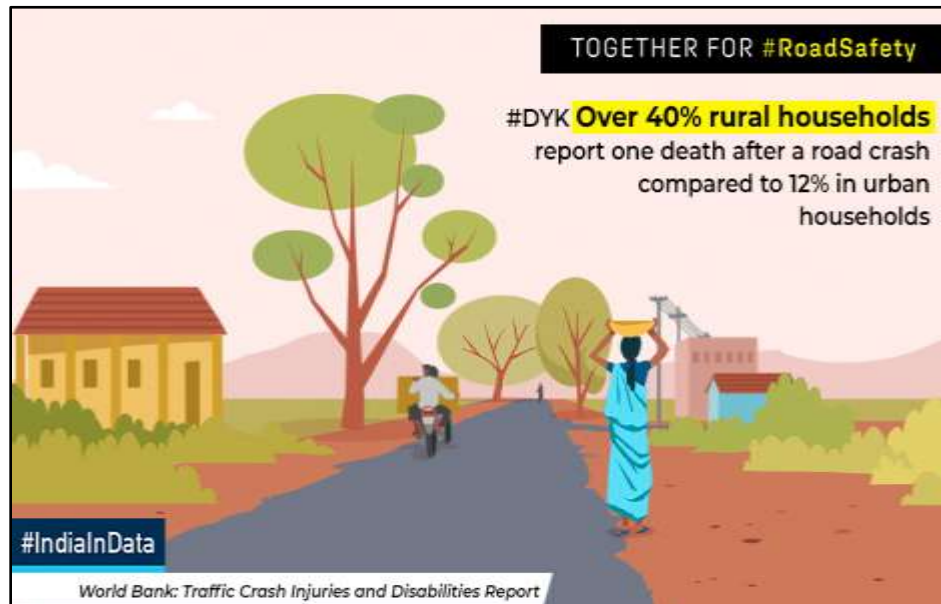
### Financial burden of road accidents

In India, over 1.5 lakh people lose their lives and more than 4.5 lakh are injured in road accidents every year, which not only causes trauma to the families but accidental deaths also result in an economic loss equivalent to a massive 3.14 percent of GDP each year. Some 70 percent of the fatalities are in the age group of 18 to 45 years, impacting the economically

productive lives. The World Bank estimates the total cost of Road Traffic Injuries (RTIs) at Rs 12.9 lakhs crore for the year 2016.

### Social burden of road accidents

- In addition to financial distress, poor households experience a deterioration in their quality of life accompanied by psychological suffering and emotional distress.
- Within households, it is women who bear the brunt of caregiving activities, leading to a double burden of labour and mental load, exacerbated inequalities of opportunities in returning to livelihoods and income-generating tasks.
- Inequality in insurance coverage and delay in accessing compensation further mars the quick recovery process among LIH. Insurance coverage was significantly higher among HIH and households in urban areas vis-à-vis LIH urban areas.



- Low rates of insurance coverage and poor awareness related to legal compensation processes among truck drivers: Overall, 2/3rd of the respondent truck drivers did not file an FIR after the crash. Only 40% of the truck drivers were covered under life insurance and 18% under medical insurance at the time of the crash.
- Overall, 2/3rd of the truck drivers were not aware of third-party liability insurance. None of the drivers said that they had applied/benefited from cashless treatment at the hospital, solatium fund for hit and run case, or ex-gratia schemes.
- Information asymmetry and poor awareness on legal compensation among LIH: Only less than a quarter of the LIH victims were aware of the compensation process and insurance clauses. Only a handful of the victims availed government compensation/ex gratia.

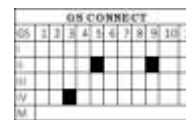
### Way forward

- ✦ The Ministry of Road, Transport, and Highways will engage with the Save Life Foundation and World Bank and work towards framing relevant laws and policies to address the challenges.
- ✦ The importance of quality standards on crash helmets for two-wheeler users and how mandatory front airbags help improve safety. The government is also working to get regular eye check-ups for truck drivers.
- ✦ The report points to a serious matter that healthcare services are not adequate in rural areas in India and there is a lack of education and awareness that makes low-income households more prone to road accidents.
- ✦ India needs social schemes for low-income households. There has been a 54 percent drop in road fatalities in Tamil Nadu. India need to urge other states to follow the model to improve conditions.

## Corruption Perception Index 2020

### News Excerpt

India's rank has slipped six places to 86th among 180 countries in a corruption perception index (CPI) in 2020.



### Pre-Connect

India was ranked at 80th position out of 180 countries in 2019. The CPI score for India, published by TI, is constant this year as well as the previous year's score.

### Key finding of the report

- In democracies like India and Australia, unfair and opaque political financing, undue influence in decision-making and lobbying by powerful corporate interest groups, has resulted in stagnation or decline in the control of corruption.
- The index, which ranks 180 countries and territories by their perceived levels of public sector corruption according to experts and business people, uses a scale of 0 to 100, where 0 is highly corrupt and 100 is very clean.
- The latest CPI report has revealed that a majority of countries are showing little to no improvement in tackling corruption.
- India is still very low on corruption Index, the report said, noting that experts feel the CPI does not reflect the actual corruption level in any country. The integrity score determines the corruption situation of a country.
- This year, New Zealand and Denmark were ranked at first position with scores of 88. Somalia and South Sudan were ranked lowest at 179th position with scores of 12.

### Status check

The Corruption Perceptions Index uses a scale of zero (highly corrupt) to 100 (very clean). The global average for 2019 is 43

Country	Score in 2019	Rank in 2019	Change in rank from '18
Denmark	87	1	0
New Zealand	87	1	1
U.K.	77	12	-1
U.S.	69	23	-1
India	41	80	-2
China	41	80	7
Brazil	35	106	-1
Pakistan	32	120	-3
Russia	28	137	1
Bangladesh	26	146	3
Somalia	9	180	0

### Analytica

- Analysis shows corruption is more pervasive in countries where big money can flow freely into electoral campaigns and where governments listen only to the voices of wealthy or well-connected individuals.
- In the Asia Pacific region, the average score is 45, after many consecutive years of an average score of 44, which “illustrates general stagnation” across the region. China has improved its position from 87 to 80 with a score
- Despite the presence of high performers like New Zealand (87), Singapore (85), Australia (77), Hong Kong (76) and Japan (73), the Asia Pacific region hasn't witnessed substantial progress in anti-corruption efforts or results. In addition, low performers like Afghanistan (16), North Korea (17) and Cambodia (20) continue to highlight serious challenges in the region of 41 out of 100, a two-point jump.



- According to TI, while often seen as an engine of the global economy, in terms of political integrity and governance, the region performs only marginally better than the global average.
- Many countries see economic openness as a way forward, however, governments across the region, from China to Cambodia to Vietnam, continue to restrict participation in public affairs, silence dissenting voices and keep decision-making out of public scrutiny.

**Transparency International (TI)**

TI is nonpartisan, non-profit, nongovernmental organization (NGO) founded in Berlin in 1993 to expose corruption and reduce its harmful effects around the world, especially on the poor and underprivileged. TI consists of a global network of approximately 100 national chapters devoted to fighting corruption in their home countries. Its headquarters are in Berlin.

TI does not conduct investigations into corruption itself but instead brings together officials in the areas of government, business, civil society, and the media to promote transparency in private and public affairs and to lobby for anticorruption measures.

TI targets corruption at every level, from local governments to multinational corporations, in keeping with its belief that corruption creates and perpetuates poverty, weakens democracy, distorts national and international trade, endangers national security, and threatens natural resources around the world.

It focuses on five areas of concern: corruption in politics, corruption in the private sector, corruption in public contracting, poverty and development, and international anticorruption conventions.

TI is governed by a board of directors, which is elected at an annual meeting of national chapters and individual members. It publishes several annual reports, including the Global Corruption Report, the Global Corruption Barometer, and the Corruption Perceptions Index, which ranks countries by perceived level of corruption based on surveys of experts.

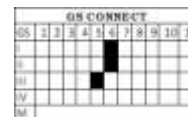
**Conclusion**

In the last eight years, only 22 countries significantly improved their CPI scores, including Greece, Guyana and Estonia. In the same period, among the 21 countries that saw a significantly fall in their scores are Canada, Australia and Nicaragua. In the remaining 137 countries, the levels of corruption show little to no change.

**Nurturing Neighbourhoods Challenge**

**News Excerpt**

Recently, Ministry of Housing and Urban Affairs announced twenty-five shortlisted cities for the 'Nurturing Neighbourhoods Challenge' cohort, in collaboration with the Bernard van Leer Foundation (BvLF) and technical partner WRI India.



**Pre-Connect**

- In 2020, Union Housing and Urban Affairs (HUA) Ministry launched a challenge for cities to develop and implement initiatives to improve the quality of life of young children, caregivers and families.
- Nurturing Neighbourhoods Challenge' which will be open for the 100 Smart Cities, cities with population of more than 5 lakh and State/Union Territory capitals.
- The three-year challenge will help cities to re-imagine parks and open spaces; improve access to early childhood facilities; adapt public spaces with early childhood-oriented amenities; and create accessible, safe, walkable streets for young children and families.

### **Shortlisted Cities are?**

- The shortlisted cities would carry out projects for making early childhood-friendly neighbourhoods.
- The selected cities were Agartala, Bengaluru, Coimbatore, Dharamshala, Erode, Hubballi-Dharwad, Hyderabad, Indore, Jabalpur, Kakinada, Kochi, Kohima, Kota, Nagpur, Rajkot, Ranchi, Rohtak, Rourkela, Salem, Surat, Thiruvananthapuram, Tiruppur, Ujjain, Vadodara, and Warangal.

### **Significance of challenge**

- Under its prime objective of inclusive development, the Government of India is committed to enhancing opportunities in urban areas for all vulnerable citizens, especially young children.
- Over the 3-year initiative, selected cities based on their proposal, readiness, and commitment – will receive technical support and capacity-building to develop, pilot and scale solutions that enhance the quality of life of young children.
- Over time, the programme will enable city leaders, managers, staff, engineers, urban planners, and architects to incorporate a focus on early childhood development into the planning and management of Indian cities.

### **Participation from cities**

During the three-month application period, over 100 cities were engaged through remote or in-person discussions and online capacity-building workshops under the Nurturing Neighbourhoods Challenge. There was an enthusiastic response from cities to focus on the needs of young children aged 0 – 5 years and their caregivers in the public realm.

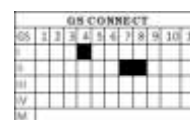
### **Conclusion**

By engaging cities to shape healthier urban environments for early childhood, the Challenge has refocused attention on the importance of neighbourhood-level interventions. This approach is well-aligned with the strategy of the Smart Cities Mission to promote inclusive, people-oriented development in compact, local areas towards scaling city-wide solutions that enhance our citizens' quality of life. Cities across India stepping up to the challenge and demonstrating their commitment to adopt more sensitive urban planning and design that addresses the needs and aspirations of millions of young children and their families.

## **International Mother Language Day**

### **News Excerpt**

Vice President of India, on 21 Feb 2021, inaugurated the Webinar on the occasion of 'International Mother Language Day'.



### **About the Webinar**

- The Webinar on 'Fostering Multilingualism for Inclusion in Education and Society' is being organised jointly by the Ministry of Education, Ministry of Culture and IGNC.
- The Vice President also inaugurated the International Virtual Calligraphy Exhibition.
- The Vice President called for making mother tongue the primary medium of instruction, at least until Grade 5.
- He suggested that educating a child in a language that is not spoken at home can be a big impediment to learning especially at the primary stage.
- Teaching through the mother tongue in the initial stages of education can boost a child's self-esteem and enhance his or her creativity. Calling the New Education Policy, a visionary and progressive document, he urged for implementing the Policy in letter and spirit.
- The Vice President focused on five key sectors to promote the use of mother tongue. Apart from emphasizing the use of mother tongue in primary education, the other highlighted

areas are the use of local languages in administration, court proceedings and to deliver judgments in them.

- He also wanted gradual increase in the use of indigenous languages in higher and technical education. The final emphasis was on everyone to proudly and preferably use their mother tongue in their homes.
- With hundreds of languages coexisting, linguistic diversity is one of the cornerstones of our ancient civilization. Observing how our mother tongues can evoke an emotional response in the people, called them an ‘important link to our socio-cultural identity’, ‘a repository of our collective knowledge and wisdom’ and thus needs to be protected, preserved and promoted.
- The Vice President appreciated various government initiatives for a multilingual society such as the National Translation Mission, the Bharatavani project and the proposed setting up of a Bharatiya Bhasha Vishwavidyalaya (BBV) and Indian Institute of Translation and Interpretation (IIT).
- In Conclusion, the Vice President reiterated that languages are nourished only by constant use and that every day must be a Matribhasha Diwas. He called for all-round commitment and efforts to reclaim mother tongues and to ‘feel proud to speak freely and confidently in one’s mother tongue’ in homes, community, meetings and administration.

International Mother Language Day recognizes that languages and multilingualism can advance inclusion, and the Sustainable Development Goals’ focus on leaving no one behind. UNESCO believes education, based on the first language or mother tongue, must begin from the early years as early childhood care and education is the foundation of learning.

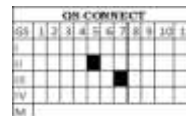
This year’s observance is a call on policymakers, educators and teachers, parents and families to scale up their commitment to multilingual education, and inclusion in education to advance education recovery in the context of COVID-19. This effort also contributes to the United Nations International Decade of Indigenous Languages (2022-2032), for which UNESCO is the lead agency, and which places multilingualism at the heart of indigenous peoples’ development.

**PEPPER IT WITH**  
Article 350 A and 350 B

## Non-Alcoholic Fatty Liver Disease

### News Excerpt

Under scoring the importance of tackling NAFLD (Non-Alcoholic Fatty Liver Disease) as a step to deal with the country's burden of non-communicable diseases, Health Minister recently launched the operational guidelines for Integration of NAFLD with NPCDCS (National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke).



### Analytica

- The NAFLD, the abnormal accumulation of fat in the liver in the absence of secondary causes of fatty liver, such as harmful alcohol use, viral hepatitis, or medications, is a serious health concern as it encompasses a spectrum of liver abnormalities, from a simple non-alcoholic fatty liver (NAFL, simple fatty liver disease) to more advanced ones like non-alcoholic steatohepatitis (NASH), cirrhosis and even liver cancer.
- Over the last two decades global burden of NASH has more than doubled. Globally, NASH caused 40 lakh prevalent cases of compensated cirrhosis in 1990, which increased to 94 lakh cases in 2017. NAFLD is emerging as an important cause of liver disease in India.

- Epidemiological studies suggest the prevalence of NAFLD is around 9 per cent to 32 per cent of the general population in India with a higher prevalence in those with overweight or obesity and those with diabetes or prediabetes.
- Researchers have found NAFLD in 40 to 80 per cent of people who have type 2 diabetes and in 30 to 90 per cent of people who are obese.
- Studies also suggest that people with NAFLD have a greater chance of developing cardiovascular disease. Cardiovascular disease is the most common cause of death in NAFLD. Once the disease develops, there is no specific cure available, and health promotion and prevention aspects targeting weight reduction, healthy lifestyle, and control of aforementioned risk factors are the mainstays to disease progression and prevent the mortality and morbidity due to NAFLD.
- NAFLD is an independent predictor of future risk of cardiovascular diseases, type 2 diabetes and other metabolic syndromes like hypertension, abdominal obesity, dyslipidaemia, glucose intolerance.
- Government of India is of the view that existing NPCDCS programme strategies can easily be aligned to prevent NAFLD through lifestyle changes, early diagnosis, and management of associated non-communicable diseases as well as NAFLD.
- Accordingly, doable actions have been identified with main focus on health promotion and prevention of common NCDs which would also specifically cater to the identified needs of NAFLD.
- With this initiative, India is becoming the first country in the world to identify the need for action for NAFLD.

### **Steps Taken by the Government for the prevention of NCDs**

- **The Ayushman Bharat programme:** Under this, the government has so far screened 838.39 lakh people for hypertension, 683.34 lakh for diabetes and 806.4 lakh for the three common forms of cancer through the HWCs. They have so far organised 6.91 lakh yoga and

### **National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS)**

In India, Non-Communicable Diseases (NCDs) like Cardiovascular Diseases (CVD), Cancer, Chronic Respiratory Diseases, Diabetes are estimated to account for around 60% of all deaths. The Government of India has been implementing National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) since 2010 up to District level under the National Health Mission.

#### **Objectives**

- ❖ Health promotion through behaviour change with involvement of community, civil society, community-based organizations, media etc.
- ❖ Screening at all levels in the health care delivery system from sub-centre and above for early detection of diseases covered under the program including management and follow up.
- ❖ To build capacity at various levels of health care for prevention, early diagnosis, treatment, rehabilitation, IEC/BCC, operational research and rehabilitation.
- ❖ To provide logistic support for diagnosis and cost effective treatment at primary, secondary and tertiary levels of health care.
- ❖ To support for development of database of NCDs through Surveillance System and to monitor NCD morbidity and mortality and risk factors.

#### **Strategy**

- ❖ Health promotion awareness generation and promotion of healthy lifestyle
- ❖ Screening and early detection
- ❖ Timely affordable and accurate diagnosis
  - Access to affordable treatment
  - Rehabilitation



wellness sessions at the community level. Apart from treating the poorest of the poor, they are also mandated to inculcate healthy living at the grassroots among the community.

- **'Eat Right India':** FSSAI has embarked on a large-scale effort to transform the country's food system in order to ensure safe, healthy and sustainable food for all Indians through the **'Eat Right India'** movement (The tagline 'SahiBhojan. Behtar Jeevan'). Eat Right India adopts a judicious mix of regulatory, capacity building, collaborative and empowerment approaches to ensure that our food is good both for the people and the planet. Further, it builds on the collective action of all stakeholders - the government, food businesses, civil society organizations, experts and professionals, development agencies and citizens at large.
- Eat Right India adopts an integrative or 'whole of the government' approach and 'whole of a society approach' to achieve its stated objectives. Eat Right India is aligned to the National Health Policy 2017 with its focus on preventive and promotive healthcare and flagship programmes like Ayushman Bharat, POSHAN Abhiyaan, Anaemia Mukh Bharat and Swachh Bharat Mission.
- **'Fit India Movement':** The Fit India Movement is a movement to take the nation on a path of fitness and wellness. It provides a unique and exciting opportunity to work towards a healthier India. As part of the movement, individuals and organisations can undertake various efforts for their own health and well-being as well as for the health and well-being of fellow Indians.
- **POSHAN Abhiyan:** It is India's flagship programme to improve nutritional outcomes for children, adolescents, pregnant women and lactating mothers by leveraging technology, a targeted approach and convergence.

## India Justice Report

### News Excerpt

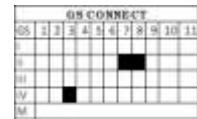
Recently, Tata Trusts in collaboration with Centre for Social Justice, Common Cause, Commonwealth Human Rights Initiative, DAKSH, Tata Institute of Social Sciences - Prayas and Vidhi Centre for Legal Policy released second edition of the India Justice Report.

### Pre-Connect

- The second edition of the India Justice Report (IJR) is all about comparisons and tracking the rise and falls in each state's structural and financial capacity to deliver justice, using the latest available government figures.
- The first ever ranking was published in November 2019. The ranking is based on quantitative measurements of budgets, human resources, infrastructure, workload, diversity across police, judiciary, prisons and legal aid in 18 large and medium sized states with a population of over 1 crore and 7 small states. Data for 7 Union Territories (UTs) and 4 other unranked states is also provided.
- IJR 2020 not only provides pillar and theme wise comparisons between similarly situated states one against another, but also allows for an understanding of what improvements and shortfalls have been made within each state's own pillars and themes since IJR 2019 and over 5 years.

### What report says?

- The 2020 report shows that human resource deficits continue to stubbornly ail the justice system. High vacancy is arguably one of the biggest factors impeding its functioning and even when vacancies are filled they are often done so in junior ranks.
- As of January 2020, while only three states have constable vacancy above 30% as many as 9 states including Rajasthan, MP, UP and Bihar among others have officer vacancy above 30%. In IJR 2019, this figure stood at 6 states for both constable and officer vacancies above 30%.



KSG CONNECT										
05	06	07	08	09	10	11	12	13	14	15

- In the judiciary, we find that vacancies are higher in high courts as compared to subordinate courts; something that has persisted since 2016-17.

**Improve utilisation of funds**

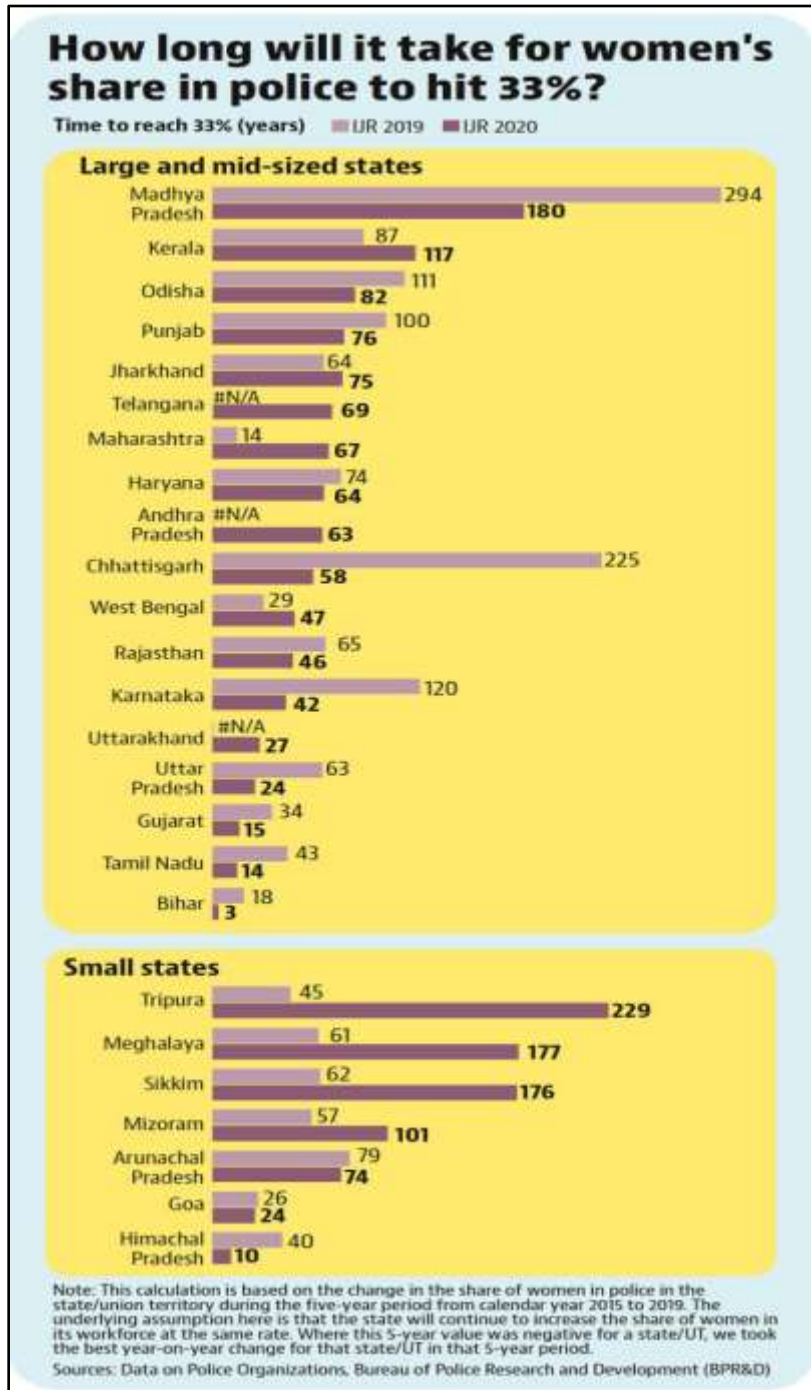
- Across judiciary, police and prisons, the lion's share of all expenditure goes towards salaries leaving little margin for recruiting more personnel. In nearly all the states, the problem of budget inadequacy is juxtaposed with that of underutilisation of available funds.

- Uttar Pradesh, for instance, utilised less than 15% of its police modernisation fund and had among the lowest expenditure on training per personnel (about ₹3,300), but it recorded vacancies of 24% at the constable level and 40% at the officer level.

- To be sure, there have been improvements in the justice system across states, in specific parameters. For instance, in Chhattisgarh, the number of officers in prisons rose from what we recorded in the previous report; at least 9 large and mid-sized states and two small states saw vacancies in the District Legal Services Authority secretary post come down to zero; and Jharkhand managed to improve the status of vacancies in 6 out of 8 key personnel positions across all pillars.

- IJR 2020 also finds that 21 states and Union Territories contributed 50% and above to the state's legal aid spend as compared to only 16 states/UTs in IJR 2019. This indicates a realization of the need to support legal aid functions within the state.

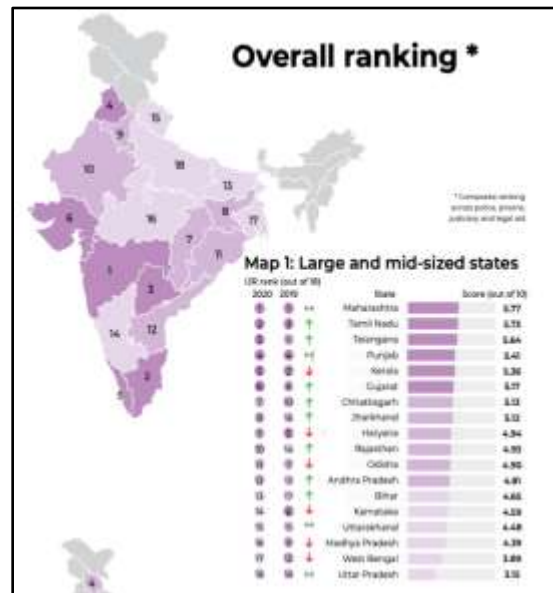
- A well-trained workforce forms the backbone of the justice system.



- According to Common Cause, one of the civil society groups involved in the making of IJR 2020, between 2012 and 2016 only 6.4% of India’s total police force had undergone training. This means that over 90% deal with the public without any up-to-date training.
- Nationally, the spend on training is a meagre 1.13% of the total police budget. Without commenting on quality, the IJR finds that in states like Uttar Pradesh, which has hired more than 47,000 constables, there is a severe dearth of training institutes.
- Taken together, the picture that emerges is a police that remains understaffed and inadequately trained. In 28 states/UTs, a maximum of 1 out of 4 police personnel was trained. Similarly, in legal aid, only 6 states/UTs could train all their panel lawyers.

**Conclusion**

A serious analysis of the gains we can make by investing in justice delivery compared against the losses accrued by judicial delays, prison overcrowding, poor access to free legal aid and lawlessness might help us quantify the problem. But if it’s reform we’re looking for, a good place to start would be to fill the vacancies focusing on increased diversity.



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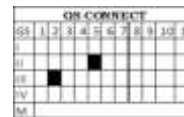
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## ECONOMY

### Budget 2021-22

#### News Excerpt

The Finance Minister recently presented the Union Budget 2021-22 in the Lok Sabha.

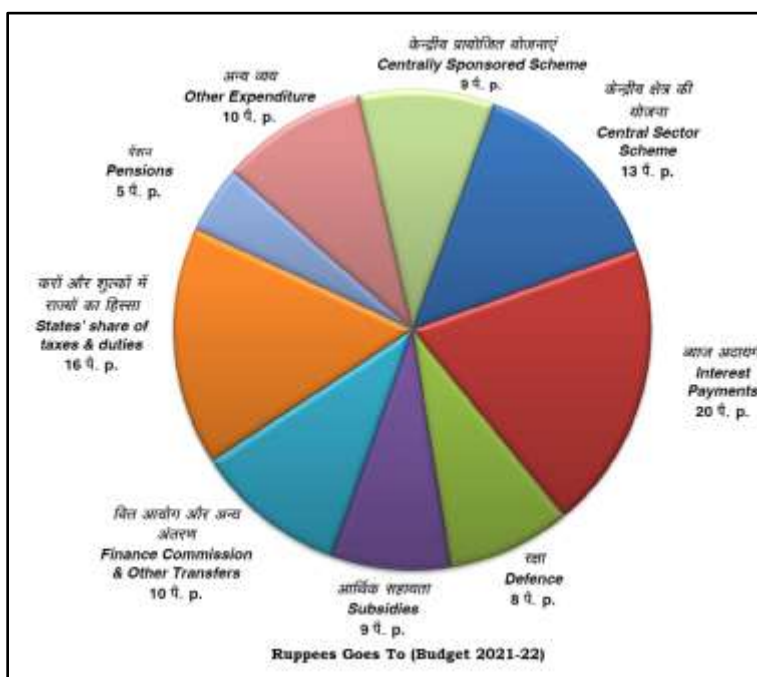


#### Pre-Connect

- Budget is a constitutionally-mandated annual exercise by the government.
- The Constitution refers to the budget as the “annual financial statement” that has been dealt with in Article 112 of the Constitution.
- The budget contains-
  - Estimates of revenue and capital receipts;
  - Ways and means to raise the revenue;
  - Estimates of expenditure;
  - Details of the actual receipts and expenditure of the closing financial year and the reasons for any deficit or surplus in that year; and
  - Economic and financial policy of the coming year, that is, taxation proposals, prospects of revenue, spending programme and introduction of new schemes/projects.
- Union Budget keeps the account of the government's finances for the fiscal year that runs from 1st April to 31st March. Union Budget is classified into Revenue Budget and Capital Budget.
- Since 2017, the Union Budget has usually been presented on the first of February, every year. Before that, it used to be presented on the last day of February.
- Revenue budget includes the government's revenue receipts and expenditure. There are two kinds of revenue receipts - tax and non-tax revenue.
- Capital Budget includes capital receipts and payments of the government. Capital expenditure is the expenditure on development of machinery, equipment, building, health facilities, education etc.
- Fiscal deficit is incurred when the government's total expenditure exceeds its total revenue.

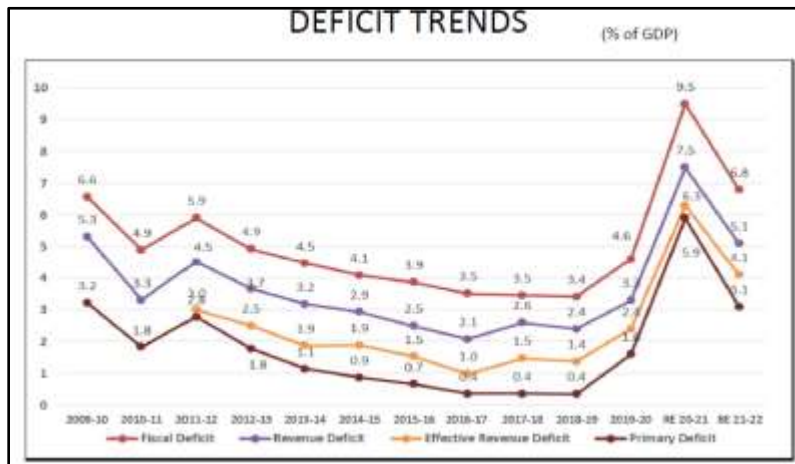
#### Highlights

- The Budget proposals for this financial year rest on six pillars —
  - health and well-being
  - physical and financial capital and infrastructure
  - inclusive development for aspirational India
  - reinvigorating human capital,
  - innovation and R&D





- Minimum Government, Maximum Governance
- **Health and Sanitation:**
  - A new scheme, titled **PM AtmaNirbharSwasthya Bharat Yojana**, to be launched to develop primary, secondary and tertiary healthcare.
  - **Mission POSHAN 2.0** to improve nutritional outcomes across 112 aspirational districts.
  - Operationalisation of 17 new public health units at points of entry.
  - Modernising of existing health units at 32 airports, 15 seaports and land ports.
  - **Jal Jeevan Mission Urban** aimed at better water supply nationwide.
  - Strengthening of Urban Swachh Bharat Mission.
- **Education:**
  - 100 new **Sainik Schools** to be set up.
  - 750 **Eklavya schools** to be set up in tribal areas.
  - A Central University to come up in Ladakh.
- **Infrastructure:**
  - **Vehicle scrapping policy** to phase out old and unfit vehicles – all vehicles to undergo fitness test in automated fitness centres every 20 years (personal vehicles), every 15 years (commercial vehicles).
  - Highway and road works announced in Kerala, Tamil Nadu, West Bengal and Assam.
  - **National Asset Monetising Pipeline** launched to monitor asset monetisation process.
  - **National Rail Plan** created to bring a future ready Railway system by 2030.
  - 100% electrification of Railways to be completed by 2023.
  - Metro services announced in 27 cities, plus additional allocations for Kochi Metro, Chennai Metro Phase 2, Bengaluru Metro Phase 2A and B, Nashik and Nagpur Metros.
  - **National Hydrogen Mission** to be launched to generate hydrogen from green power sources.
  - Recycling capacity of ports to be doubled by 2024.
  - Gas pipeline project to be set up in Jammu and Kashmir.
  - **Pradhan Mantri Ujjwala Yojana (LPG scheme)** to be extended to cover 1 crore more beneficiaries.
- **Tax:**
  - No IT filing for people above 75 years who get pension and earn interest from deposits.
  - Reopening window for IT assessment cases reduced from 6 to 3 years. However, in case of serious tax evasion cases (Rs. 50 lakh or more), it can go up to 10 years.
  - Affordable housing projects to get a tax holiday for one year.



- Compliance burden of small trusts whose annual receipts does not exceed Rs. 5 crores to be eased.
- Duty on various products like copper scrap, naphtha, cotton etc., has been reduced.
- Custom duty on gold and silver to be rationalised.
- Agriculture infrastructure and development cess proposed on certain items including urea, apples, crude soyabean and sunflower oil, crude palm oil, kabuli chana and peas.

➤ **Economy and Finance:**

- Fiscal deficit stands at 9.5% of the GDP; estimated to be 6.8% in 2021-22.
- The nominal GDP is estimated to grow at a rate of 14.4% in 2021-22. In Budget 2020-21, GDP was estimated to grow at 10%, which was revised to -13%.
- Proposal to allow States to raise borrowings up to 4% of GSDP this year.
- A Unified Securities Market Code to be created, consolidating provisions of the SEBI Act, Depositories Act, and two other laws.
- Proposal to increase FDI limit from 49% to 74%.
- An asset reconstruction company will be set up to take over stressed loans.
- Deposit insurance increased from Rs 1 lakh to Rs 5 lakh for bank depositors.
- Proposal to decriminalise Limited Liability Partnership Act of 2008.
- Two PSU bank and one general insurance firm to be disinvested this year.
- An IPO of LIC to debut this fiscal.
- Strategic sale of BPCL, IDBI Bank, Air India to be completed.

**Increase in Insurance Cover for Bank Deposits**

- ❖ Deposit insurance is offered by Deposit Insurance and Credit Guarantee Corporation (DICGC), a wholly owned subsidiary of the RBI.
- ❖ Deposit insurance is a protection cover against losses accruing to bank deposits if a bank fails financially and has no money to pay its depositors.
- ❖ The move will help boost the confidence of people in the banking system after a scam last year in Punjab and Maharashtra Cooperative Bank (PMC Bank) which left lakhs of customers stranded.

➤ **Agriculture:**

- Agriculture infrastructure fund to be made available for APMCs for augmenting their infrastructure.
- 1,000 more Mandis to be integrated into the E-NAM market place.
- Five major fishing hubs, including Chennai, Kochi and Paradip, to be developed.
- A multipurpose seaweed park to be established in Tamil Nadu.

➤ **Employment:**

- A portal to be launched to maintain information on gig workers and construction workers.
- Social security to be extended to gig and platform workers.
- Margin capital required for loans via Stand-up India scheme reduced from 25% to 15% for SCs, STs and women.

**Analytica**

- ✓ There were speculations that some new tax like COVID cess will be introduced or surcharge on income tax will be increased. But the government did not propose any new tax or any

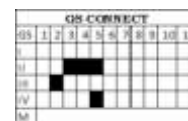
increase in existing tax rates. The government maintained a status quo, which signals a stability in tax regime in these turbulent times – and, is a welcome move.

- ✓ The government announced several measures for the benefit of individual and small / medium taxpayers and to ease their compliance burden. For instance, senior citizens (75 years or above) earning pension and interest income have been exempted from filing tax return.
- ✓ Taxpayers will now be provided with pre-filled tax returns which will even include details of capital gains from listed securities, dividend income, and interest from banks, post office, etc.
- ✓ All this has been made possible due to extensive investment made by the government in technology and process automation in the last few years, such as e-filing of tax and other returns, annual information reports, specified transaction reports, faceless assessment, appeal, etc.
- ✓ Thus, to bring certainty in income tax proceedings at the earliest – the government has proposed to curtail the time period spent in processing of tax returns, completing assessment, etc. by 3 months.
- ✓ Also, with the recent success of faceless assessment / appeal, the government even proposes to make tax tribunals faceless, jurisdiction-less and more efficient - though, there could be some hiccups.
- ✓ This technological advancement is bearing fruits for taxpayers as well. It has been proposed to reduce the time limit for re-opening of assessment from 6 years to 3 years, subject to certain conditions. This is a welcome move and means that taxpayers won't have the sword of re-assessment hanging over their neck for a prolonged period.
- ✓ The government announced a significant step to form a Dispute Resolution Committee for small and medium taxpayers having income up to INR 50 lacs and tax adjustment up to INR 10 lacs.
- ✓ This shall go a long way and help prevent new tax disputes and settle issues at the initial stage itself. In times to come, the government may think to expand the ambit of the Committee to cover large taxpayers as well.
- ✓ As regards large corporates, the government proposes to do away with the Authority for Advance Rulings and replace it with Board for Advance Rulings (BFAR) as an alternative method of providing advance rulings to taxpayers in a timely manner. Since, BFAR will be headed by Revenue officials, in times to come, it may be used by taxpayers as a faster route to reach High Court.
- ✓ The government also stood firm on its commitment to BEPS project and continued with Equalization Levy (EQL), in spite of investigations by its largest trading partner i.e., USA.
- ✓ The government went on to clarify range of aspects related to EQL applicable on non-residents at the rate of 2%.
  - In order to provide certainty, it is being expressly clarified that transactions in the nature of royalty or fees for technical services taxable under the income-tax law (read with applicable double taxation treaty), would not be liable for EQL.
  - It is also proposed to clarify on what would construe an 'online sale of goods or services'. It has now been explicitly expanded to almost all transactions having some element of digital nature. Thus, non-resident taxpayers should carefully analyse intra-group / third-party transactions.
- ✓ The tax and non-tax measures announced by the government and with technology at their side - will go a long way and prove to be a stepping stone to make India an Atmanirbhar Bharat and realise the dream of building a US\$ 5 trillion economy.

## Fifteenth Finance Commission

### News Excerpt

The 15th Finance Commission submitted its report for FY 2020-21.



### Pre-Connect

- The Finance Commission is a **constitutional body** under Article 280 of the constitution.
- It is formed by **the President of India** at the expiration of every fifth year or at such earlier time as the President considers necessary to give suggestions on centre-state financial relations.
- The Parliament may by law determine the qualifications which shall be requisite for appointment as members of the Commission and the manner in which they shall be selected.
- The duty of the Commission to make recommendations to the President as to —
  - the distribution between the Union and the States of the net proceeds of taxes which are to be, or may be, divided between them under this Chapter and the allocation between the States of the respective shares of such proceeds;
  - the principles which should govern the grants in-aid of the revenues of the States out of the Consolidated Fund of India;
  - the measures needed to augment the Consolidated Fund of a State to supplement the resources of the Panchayats in the State on the basis of the recommendations made by the Finance Commission of the State;
  - the measures needed to augment the Consolidated Fund of a State to supplement the resources of the Municipalities in the State on the basis of the recommendations made by the Finance Commission of the State;
  - any other matter referred to the Commission by the President in the interests of sound finance.
- The 15<sup>th</sup> Finance Commission (Chair: **Mr. N.K. Singh**) was required to submit two reports.
- The first report, consisting of recommendations for the financial year 2020-21, was tabled in Parliament in February 2020.
- The final report with recommendations for the 2021-26 period was tabled in Parliament on February 1, 2021.

### Key Recommendations

- **Decrease in the devolution of taxes to states:** The share of states in the centre's taxes is recommended to be decreased from 42% during the 2015-20 period to 41% for 2020-21. The 1% decrease is to provide for the newly formed union territories of Jammu and Kashmir, and Ladakh from the resources of the central government.
- **Criteria for devolution:**

Criteria	14 <sup>th</sup> FC (2015-20)	15 <sup>th</sup> FC (2020-21)	15 <sup>th</sup> FC (2021- 26)
Income Distance	50.0	45.0	45.0
Area	15.0	15.0	15.0
Population (1971)	17.5	-	-
Population (2011) #	10.0	15.0	15.0
Demographic	-	12.5	12.5



Performance			
Forest Cover	7.5	-	-
Forest and Ecology	-	10.0	10.0
Tax and fiscal efforts*	-	2.5	2.5
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Note: #14th FC used the term “demographic change” which was defined as Population in 2011. \*The report for 2020-21 used the term “tax effort”, the definition of the criterion is same.

- **Income distance:** Income distance is the distance of a state’s income from the state with the highest income. Income of a state has been computed as average per capita GSDP during the three-year period between 2016-17 and 2018-19. A state with lower per capita income will have a higher share to maintain equity among states.
- **Demographic performance:** The Commission used only 2011 population data for its recommendations (as per ToR).
- The Demographic Performance criterion has been introduced to reward efforts made by states in controlling their population. It will be computed by using the reciprocal of the total fertility ratio of each state, scaled by 1971 population data. States with a lower fertility ratio will be scored higher on this criterion.
- **Forest and ecology:** This criterion have been arrived at by calculating the share of the dense forest of each state in the aggregate dense forest of all the states.
- **Tax and fiscal efforts:** This criterion has been used to reward states with higher tax collection efficiency. It is measured as the ratio of the average per capita own tax revenue and the average per capita state GDP during the three years between 2016-17 and 2018-19.
- **Grants-in-aid:** Over the 2021-26 period, the following grants will be provided from the centre’s resources:
- **Revenue deficit grants:** 17 states will receive grants worth Rs 2.9 lakh crore to eliminate revenue deficit.
- **Sector-specific grants:** Sector-specific grants of Rs 1.3 lakh crore will be given to states for eight sectors: (i) health, (ii) school education, (iii) higher education, (iv) implementation of agricultural reforms, (v) maintenance of PMGSY roads, (vi) judiciary, (vii) statistics, and (viii) aspirational districts and blocks. A portion of these grants will be performance-linked.
- **State-specific grants:** The Commission recommended state-specific grants of Rs 49,599 crore. These will be given in the areas of: (i) social needs, (ii) administrative governance and infrastructure, (iii) water and sanitation, (iv) preservation of culture and historical monuments, (v) high-cost physical infrastructure, and (vi) tourism. The Commission recommended a high-level committee at state-level to review and monitor utilisation of state-specific and sector-specific grants.
- **Grants to local bodies:** The total grants to local bodies will be Rs 4.36 lakh crore (a portion of grants to be performance-linked) including: (i) Rs 2.4 lakh crore for rural local bodies, (ii) Rs 1.2 lakh crore for urban local bodies, and (iii) Rs 70,051 crore for health grants through local governments. The grants to local bodies will be made available to all three tiers of Panchayat- village, block, and district.
- The health grants will be provided for: (i) conversion of rural sub-centres and primary healthcare centres (PHCs) to health and wellness centres (HWCs), (ii) support for diagnostic infrastructure for primary healthcare activities, and (iii) support for urban HWCs, sub-centres, PHCs, and public health units at the block level.

- Grants to local bodies (other than health grants) will be distributed among states based on population and area, with 90% and 10% weightage, respectively.
- The Commission has prescribed certain conditions for availing these grants (except health grants). The entry-level criteria include: (i) publishing provisional and audited accounts in the public domain and (ii) fixation of minimum floor rates for property taxes by states and improvement in the collection of property taxes (an additional requirement after 2021-22 for urban bodies).
- No grants will be released to local bodies of a state after March 2024 if the state does not constitute State Finance Commission and act upon its recommendations by then.
- **Disaster risk management:** The Commission recommended retaining the existing cost-sharing patterns between the centre and states for disaster management funds. The cost-sharing pattern between centre and states is: (i) 90:10 for north-eastern and Himalayan states, and (ii) 75:25 for all other states. State disaster management funds will have a corpus of Rs 1.6 lakh crore (centre's share is Rs 1.2 lakh crore).

### **Fiscal Roadmap**

- **Fiscal deficit and debt levels:**
  - The Commission suggested that the centre bring down fiscal deficit to 4% of GDP by 2025-26. For states, it recommended the fiscal deficit limit (as % of GSDP) of: (i) 4% in 2021-22, (ii) 3.5% in 2022-23, and (iii) 3% during 2023-26. If a state is unable to fully utilise the sanctioned borrowing limit as specified above during the first four years (2021-25), it can avail the unutilised borrowing amount (calculated in rupees) in subsequent years (within the 2021-26 period).
  - Extra annual borrowing worth 0.5% of GSDP will be allowed to states during first four years (2021-25) upon undertaking power sector reforms including: (i) reduction in operational losses, (ii) reduction in revenue gap, (iii) reduction in payment of cash subsidy by adopting direct benefit transfer, and (iv) reduction in tariff subsidy as a percentage of revenue.
  - The Commission observed that the recommended path for fiscal deficit for the centre and states will result in a reduction of total liabilities of: (i) the centre from 62.9% of GDP in 2020-21 to 56.6% in 2025-26, and (ii) the states on aggregate from 33.1% of GDP in 2020-21 to 32.5% by 2025-26.
  - It recommended forming a high-powered inter-governmental group to: (i) review the Fiscal Responsibility and Budget Management Act (FRBM), (ii) recommend a new FRBM framework for centre as well as states, and oversee its implementation.
- **Off-budget borrowings:** The Commission observed that financing capital expenditure through off-budget borrowings detracts from compliance with the FRBM Act. It recommended that both the central and state governments should make full disclosure of extrabudgetary borrowings. The outstanding extra-budgetary liabilities should be clearly identified and eliminated in a time-bound manner.
- **The statutory framework for public financial management:** It recommended forming an expert group to draft legislation to provide for a statutory framework for sound public financial management system. It observed that an overarching legal fiscal framework is required which will provide for budgeting, accounting, and audit standards to be followed at all levels of government.
- **Tax capacity:** The Commission noted that tax revenue is far below the estimated tax capacity of the country (around 17.5% of GDP in 2018-19 of centre & State). Further, India's tax capacity has largely remained unchanged since the early 1990s. The Commission recommended:
  - Broadening the tax base
  - Streamlining tax rates
  - Increasing capacity and expertise of tax administration in all tiers of the government.

- **GST:** The Commission highlighted some challenges with the implementation of the Goods and Services Tax (GST). These include-
  - Large shortfall in collections as compared to original forecast- It suggested that the structural implications of GST for low consumption states need to be considered.
  - High volatility in collections
  - Accumulation of large integrated GST credit
  - Glitches in invoice and input tax matching
  - Delay in refunds
- The continuing dependence of states on compensation from the central government (21 states out of 29 states in 2018-19) for making up for the shortfall in revenue is a concern. **It suggested that the structural implications of GST for low consumption states need to be considered.**

### Other Recommendations

- **Funding of defence and internal security:** A dedicated non-lapsable fund called the Modernisation Fund for Defence and Internal Security (MFDIS) will be constituted to primarily bridge the gap between budgetary requirements and allocation for capital outlay in defence and internal security. The fund will have an estimated corpus of Rs 2.4 lakh crore over the five years (2021-26). Of this, Rs 1.5 lakh crore will be transferred from the Consolidated Fund of India. Rest of the amount will be generated from measures such as disinvestment of defence public sector enterprises, and monetisation of defence lands.
- **Health:** States should increase spending on health to more than 8% of their budget by 2022. Primary healthcare expenditure should be two-thirds of the total health expenditure by 2022. Centrally sponsored schemes (CSS) in health should be flexible enough to allow states to adapt and innovate. Focus of CSS in health should be shifted from inputs to outcome. All India Medical and Health Service should be established.
- **Centrally-sponsored schemes (CSS):** A threshold should be fixed for annual allocation to CSS below which the funding for a CSS should be stopped (to phase out CSS which outlived its utility or has insignificant outlay). Third-party evaluation of all CSS should be completed within a stipulated timeframe. Funding pattern should be fixed upfront in a transparent manner and be kept stable.

### Analytica

- ✓ The commission has partly met criticism that sole reliance on the 2011 population figures would discriminate against states such as Kerala that have a better record of controlling population growth and reducing their share in the national population.
- ✓ It has continued with the practice of providing some states with revenue deficit grants to take make up for shortfalls in receipts relative to projected expenditures as a result of the horizontal devolution formula, with Rs. 2.95 lakh crore allocated to 17 states.
- ✓ Having peaked at Rs 7.6 lakh crore in 2018-19, the sum devolved to the states by the centre contracted significantly over the next two years. And though the 15th FC optimistically forecasts transfer to rise to Rs 6.7 lakh crore in 2021-22, that figure is below the level touched even in 2017-18.
- ✓ Reflecting its bias towards the centre, while the 15th FC does not take account of the revenue loss the centre's policies have resulted in, it has included in its formula for determining the sharing of devolved resources among the states a new tax-effort criterion, captured by the three-year average of per-capita own tax revenues and Per-Capita Gross State Domestic Product (GSDP).
- ✓ The 15th FC's failure to critically examine the tax record of the centre is reflected quite starkly in its position, or the absence of one, on the centre's growing reliance on cesses and surcharges to subvert the awards of past FCs and make up for the fiscal losses it (the centre) suffers on account of its neoliberal manoeuvres.

- ✓ Since revenues from cesses and surcharges are not required to be shared with the states, an increasing reliance on them reduces the share of the centre’s tax revenues that accrue to the states.
- ✓ Besides this implicit endorsement of central manoeuvres that reduce the volume of resources transferred to the states, the 15th FC’s report has changed the terms of transfer in ways that erode the policy independence of the state government, increases the room for central interference in the determination of state-level priorities and advances a neoliberal economic agenda.
- ✓ The two instruments used for this purpose are
  - to increase the share of resources transferred to the states and local bodies that are tied to areas, sectors or schemes;
  - linking transfers to performance criteria that are clearly aimed at imposing neoliberal policies on the states.
- ✓ Grants to local bodies is one of the measures adopted by FCs to ensure adequate devolution to lower levels. However, disbursement of an overwhelming proportion of this sum has been made conditional and tied. While some of these actions may be desirable, this amounts to depriving states and local bodies of their right to determine their priorities and using statutory devolution as a means of privileging and imposing the centre’s priorities and pet schemes on the states.
- ✓ The 15th FC has not acceded to the demand of the states that they be permitted to borrow larger sums to meet their immediate fiscal strain, and do so without being subjected to conditions.
- ✓ The 15th FC has also accepted the centre’s suggestion to set up a non-lapsable dedicated fund to support defence and internal security modernisation. Given the centre’s claim that the states should share the burden of defence and security, this could open the door to diverting a part of the states’ share of resources to financing this facility.

**Non-convertible Debentures (NCDs)**

- ❖ These are a financial instrument that is used by companies to raise long term capital. This is done through a public issue.
- ❖ NCDs are a debt instrument with a fixed tenure and people who invest in these receive regular interest at a certain rate.

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## Decriminalisation of Economic offences

### News Excerpt

The corporate affairs ministry said it plans to decriminalise 12 offences as well as omit a provision entailing criminal liability under the Limited Liability Partnership (LLP) Act, 2008, for greater ease of doing business for law-abiding LLPs.

### Limited liability Partnership (LLP)

- It allows for a partnership structure where each partner's liabilities is limited to the amount they put into the business.
- Having business partners means spreading the risk, leveraging individual skills and expertise, and establishing a division of labor.
- Limited liability means that if the partnership fails, creditors cannot go after a partner's personal assets or income.
- LLPs are common in professional business-like law firms, accounting firms, and wealth managers.
- It is governed by Limited Liability Partnership Act of 2008.



## Analytica

- A number of offences related to timely filings, including annual reports and filings on changes in partnership status of the LLP, which are unrelated to fraud have been recommended for decriminalisation.
- The move is in line with decriminalisation of the Companies Act through an amendment in 2020 in which offences which do not involve fraud or impact public interest were decriminalised.
- While none of these provisions recommended for decriminalisation in the Company Law Committee (CLC) report currently have prison terms as a possible punishment, the panel has recommended that companies be required to pay penalties for non-compliance, instead of fines which are imposed after a partner or the LLP is found guilty of misconduct by a court.
- The report notes that there is a risk of a convicted person being disqualified or becoming ineligible for various posts and designations in the case of fines imposed by courts, which would not be the case for penalties imposed by an appropriate authority.
- The Registrar of Companies would have the authority to levy penalties with prescribed minimum and maximum penalties for any contravention of provisions of the LLP Act.
- The move to impose penalties would reduce the time taken for LLPs to resolve non-compliance and moving to penalties would help unclog the judicial system from complaints not related to fraud or public interest.
- The firms would take care to not violate the amended provisions as despite decriminalisation the committee had recommended higher monetary penalties for violations in a number of provisions.

### Other types of Business entities in India

#### **Private Ltd Company:**

- ❖ Restricts the right of the shareholders to transfer their shares.
- ❖ Has a minimum of 2 and maximum of 50 members.
- ❖ does not invite public to subscribe to its share capital
- ❖ Must have a minimum paid up capital of Rs. 1 lakh or such a higher amount which may be prescribed from time to time.

#### **Public Ltd Company:**

- ❖ It allows the shareholders to transfer their shares.
- ❖ Has a minimum of 7 members, and for maximum there is no limit.
- ❖ it invites the general public to subscribe to its shares
- ❖ Must have a minimum paid up capital of Rs 5 lakh or such a higher amount as may be prescribed from time to time.

**Unlimited Company:** It is a form of business organization under which the liability of all its members is unlimited. The personal assets of the members can be used to settle the debts. It can at any time re-register as a limited company under section 32 of the Companies Act.

**Sole proprietorship:** It is a form of business entity where a single individual handles the entire business organization. He is the sole recipient of all profits and bearer of all losses. There is no separate law that governs sole proprietorship.

**Joint Hindu Family:** It is a form of business organization wherein the members of a family can only own and manage the business. It is governed by Hindu Law.

**Partnership:** It is “the relation between persons who have agreed to share the profits of the business carried on by all or any one of them acting for all”. It is governed by the Indian Partnership Act 1932.

**Co-operatives:** These are a form of voluntary organization, wherein the members work together for the promotion of the interests of its members. There is no restriction to the entry or exit of any member. It is governed by Cooperative Societies Act 1912.

- Decriminalisation is far-thinking and far-reaching in its capacity as both a standalone reform, and as part of the overall maximum governance impact. It will also reduce the burden on the already heavily burdened judiciary.
- The ministry plans to introduce certain new concepts in the LLP Act for greater ease of doing business. One proposal is to create small LLPs in line with the concept of small companies
- The CLC has also recommended that LLPs which are currently not allowed to issue debt securities be permitted to issue non-convertible debentures (NCDs) to facilitate raising of capital and financing operations. The move is likely to benefit start-ups and small firms in sectors which require heavy capital investment.
- The Reserve Bank of India and Securities and Exchange Board of India would also have to make changes to current regulations to allow LLPs to issue NCDs for the implementation of the committee's recommendation.

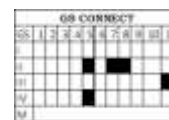
### **Conclusion**

- ✓ The Centre's move to separate good-faith errors or omissions from mala fide ones will bolster ease of doing business. Assurance as a part of justice for all is a critical component, and it led to an incremental addition on the foundation of the government of India's goals in 2019. From 'SabkaSaath, SabkaVikaas', the government began optimising towards 'SabkaVishwaas'. A significant aspect of building assurance, belief and trust is by supporting and scaling entrepreneurship in India. There has been relentless focus on facilitating entrepreneurial endeavours towards bringing prosperity for citizens and to create well-being in society.

## **Foreign Contribution Act and contention on NGO Funding**

### **News Excerpt**

The Ministry of Home Affairs (MHA) has laid down a charter for banks which says that "donations received in Indian rupees" by non-governmental organisations (NGOs) and associations from "any foreign source even if that source is located in India at the time of such donation" should be treated as "foreign contribution".



### **What is the Foreign Contribution (Regulation) Act (FCRA)?**

- The FCRA regulates foreign donations and ensures that such contributions do not adversely affect internal security.
- First enacted in 1976, it was amended in 2010 when a slew of new measures were adopted to regulate foreign donations.
- The FCRA is applicable to all associations, groups and NGOs which intend to receive foreign donations.
- It is mandatory for all such NGOs to register themselves under the FCRA. The registration is initially valid for five years and it can be renewed subsequently if they comply with all norms.
- Registered associations can receive foreign contribution for social, educational, religious, economic and cultural purposes. Filing of annual returns, on the lines of Income Tax, is compulsory.
- In 2015, the MHA notified new rules, which required NGOs to give an undertaking that the acceptance of foreign funds is not likely to prejudicially affect the sovereignty and integrity of India or impact friendly relations with any foreign state and does not disrupt communal harmony.

- It also said all such NGOs would have to operate accounts in either nationalised or private banks which have core banking facilities to allow security agencies access on a real time basis.
- In 2019, MHA had amended FCRA rules where it said that even persons prohibited to receive foreign funds such as journalists, politicians, members of the judiciary “are allowed to accept foreign contribution from their relatives” if the amount does not exceed ₹1 lakh. Any such transaction above ₹1 lakh will have to be informed to MHA.
- Until a decision is taken, the association cannot receive any fresh donation and cannot utilise more than 25% of the amount available in the designated bank account without permission of the MHA.
- The MHA can cancel the registration of an organisation which will not be eligible for registration or grant of ‘prior permission’ for three years from the date of cancellation.

### **Highlights**

- As per the existing rules, all banks have to report to the Central government within 48 hours, the “receipt or utilisation of any foreign contribution” by any NGO, association or person whether or not they are registered or granted prior permission under the FCRA.
- Last September, the FCRA was amended by Parliament and a new provision that makes it mandatory for all NGOs to receive foreign funds in a designated bank account at the State Bank of India’s New Delhi branch was inserted.
- The Ministry has laid out a series of guidelines and charter to make the NGOs and the banks comply with the new provisions.
- The charter for the banks said, “It may be noted that foreign contribution has to be received only through banking channels and it has to be accounted for in the manner prescribed. Any violation by the NGO or by the bank may invite penal provisions of the FCRA, 2010.”
- It added that “donations given in Indian rupees (INR) by any foreigner/foreign source including foreigners of Indian origin like OCI or PIO cardholders” should also be treated as foreign contribution.
- Recently the National Investigation Agency (NIA) registered a case against Sikhs for Justice (SFJ), a foreign based group that advocates secessionist and pro-Khalistani activities in India.
- NIA summoned 40 people, all associated with the ongoing farmers agitation, to join the probe in the case where it alleged that large amounts of funds being collected by Khalistani terrorist outfits are being sent through NGOs to pro-Khalistani elements based in India.
- MHA also said down “good practices” to be followed by NGOs in accordance with standards of global financial watchdog- Financial Action Task Force (FATF).
- It asked NGOs to inform the Ministry about “suspicious activities” of any donor or recipient and “take due diligence of its employees at the time of recruitment.”
- The Ministry of Home Affairs (MHA) has asked chartered accountants (CAs) to ensure that foreign funds are received and utilised by NGOs (non-governmental organisations) “within the four corners of law.”

#### **Amnesty International India**

- ❖ It is an international NGO working for the protection of human rights.
- ❖ It is being probed by the central agency over alleged violation of the Foreign Contribution Regulation Act (FCRA).
- ❖ It has been under investigation since October 2018 and had shut its operations in the country in 2020 alleging ‘continuous harassment’ by government agencies.
- ❖ In October 2018, ED had raided the NGO’s head office in Bengaluru and frozen its accounts due to which it had to let go of some staff at the time.

- The FCRA, 2010, states that a CA should certify if an association or an NGO has utilised foreign contribution received for the purposes it was registered for and the annual statements are to be uploaded on the FCRA portal.

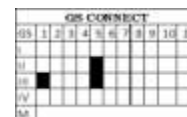
### Conclusion

- ✓ The need of FCRA is felt for the regulation of foreign contribution and foreign hospitality and for the (i) the sovereignty and integrity of India; or (ii) public interest; or (iii) freedom or fairness of election to any Legislature; or (iv) friendly relations with any foreign State; or (v) harmony between religious, racial, social, linguistic or regional groups, castes or communities.
- ✓ If we look into the cases like Greenpeace; the Delhi High Court had accepted the Writ Petition of Greenpeace by directing the MHA to state a full-proved reason. On the same footing, the Hon'ble High Court in the case of Association for Democratic Reforms & Anr vs. Union of India & Ors (W.P.(C) 131/2013), found that leading political parties had received funds in violation of the Foreign Contribution (Regulation) Act (FCRA)".
- ✓ The Supreme Court has held if a provision is capable of both use and abuse, and then, it is violative of Article 14 of the Constitution. Right from 1958 the Supreme Court in Ramkrishan Dalmia's case has said that any provision made by the legislation cannot be such that it is both capable of use as well as abuse. The FCRA has both pros and cons, but we need to analyse as to how to interpret the provision so that the 'National Agenda' should be maintained.

## NPA and Asset Reconstruction Company

### News Excerpt

Recently, it was proposed in the budget that the Asset Reconstruction Company (ARC), which will have an Asset Management Company (AMC) to manage and sell bad assets, will look to resolve stressed assets of Rs 2-2.5 lakh crore that remain unresolved in around 70 large accounts.



### Non-Performing Assets (NPAs)

- It is a loan or advance for which the principal or interest payment remained overdue for a period of 90 days.
- The coronavirus pandemic has had a devastating impact on banks and financial institutions around the world as the global economic crisis has led to a rise in defaults and bad loans. The situation is particularly serious for Indian banks that are already struggling to cope with rising bad loans.
- A lot of the loans currently classified as NPAs originated in the mid-2000s, at a time when the economy was booming and business outlook was very positive.
- But as economic growth stagnated following the global financial crisis of 2008, the repayment capability of these corporations decreased.
- This contributed to what is now known as India's Twin Balance Sheet problem, where both the banking sector (that gives loans) and the corporate sector (that takes and has to repay these loans) have come under

#### Further Classification of NPAs

**Substandard assets:** Assets which has remained NPA for a period less than or equal to 12 months.

**Doubtful assets:** An asset would be classified as doubtful if it has remained in the substandard category for a period of 12 months.

**Loss assets:** As per RBI, "Loss asset is considered uncollectible and of such little value that its continuance as a bankable asset is not warranted, although there may be some salvage or recovery value."



financial stress.

- Further, recently there have also been frauds of high magnitude that have contributed to rising NPAs. Although the size of frauds relative to the total volume of NPAs is relatively small, these frauds have been increasing, and there have been no instances of high-profile fraudsters being penalised.
- Some of the factors leading to the increased occurrence of NPAs are external, such as decreases in global commodity prices leading to slower exports.
- The measures taken to resolve and prevent NPAs can broadly be classified into two kinds –
  - regulatory means of resolving NPAs per various laws (like the Insolvency and Bankruptcy Code (IBC))
  - remedial measures for banks prescribed and regulated by the RBI for internal restructuring of stressed assets.
- The IBC was enacted in May 2016 to provide a time-bound 180-day recovery process for insolvent accounts (where the borrowers are unable to pay their dues).
- Proceedings under the IBC are adjudicated by the Debt Recovery Tribunal for personal insolvencies, and the National Company Law Tribunal (NCLT) for corporate insolvencies.

### **Asset reconstruction company (ARC)**

- It is a specialized financial institution that buys the NPAs or bad assets from banks and financial institutions so that the latter can clean up their balance sheets. Or in other words, ARCs are in the business of buying bad loans from banks.
- ARCs clean up the balance sheets of banks when the latter sells these to the ARCs. This helps banks to concentrate in normal banking activities.
- Banks rather than going after the defaulters by wasting their time and effort, can sell the bad assets to the ARCs at a mutually agreed value.
- The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002; enacted in December 2002 provides the legal basis for the setting up ARCs in India.
- An ARC may issue bonds and debentures for meeting its funding requirements. But the chief and perhaps the unique source of funds for the ARCs is the issue of Security Receipts.
- As per the SARFAESI Act, Security Receipts is a receipt or other security, issued by a reconstruction company to any Qualified Institutional Buyers (QIBs) for a particular scheme. The Security Receipt gives the holder (QIB) a right, title or interest in the financial asset that is bought by the ARC. These SRs issued by ARCs are backed by impaired assets.
- Asset Reconstruction Company Limited (ARCIL) was the first ARC in India.
- According to an ASSOCHAM report, the average recovery rate for ARCs in India is around 30% of the principal and the average time taken is between four to five years.
- But after 2014, the performance of ARCs in settling the NPAs became below par. Especially in the recent periods, ARCs became underperformers in the context of the present rising tide of bad assets.

### **Analytica**

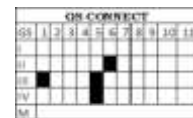
- The ARC proposed in the Budget will be set up by state-owned and private sector banks, and there will be no equity contribution from the government.
- Of the existing ARCs, only 3-4 are adequately capitalised, while the more-than-dozen remaining are thinly capitalised — necessitating the need to set up a new structure to resolve stressed assets urgently.
- While the government will not provide any direct equity support to the ARC, it may provide sovereign guarantee that could be needed to meet regulatory requirements.
- The transfer of stressed assets to the ARC will happen at net book value, which is value of assets minus provisioning done by banks against these assets. The bank will get 15 per cent cash and 85 per cent security receipts against bad debt that will be sold to the ARC.

- This structure will reduce the load of stressed assets on the bank balance sheet and look to resolve these bad debts in a market-led way.
- With most banks expected to be on board this company, the resolution is expected to be faster. Since most commercial loans are granted by a group of 8-10 banks, under the existing resolution mechanism some banks would typically oppose the resolution due to differences, which slowed the resolution process.
- It is a huge relief the government is not going to fund the proposed AMC that will house the bad assets of banks before they are sold to buyers like alternative Investment Funds (AIF).
- A bad bank is a bad idea at any time, even in these difficult circumstances, but had the government capitalised the AMC, it would have amounted to a bailout creating a moral hazard.
- From all appearances, the idea is to capitalise the AMC with the capital provisions that banks have already set aside for the bad loans and then transfer the loan exposures seems to be a good way to do it since it would not cost the banks growth capital; the shareholding of each of the banks in the ARC would be proportional to the stressed assets that they transfer.
- The advantage of pooling the toxic loans is that it would be easier to negotiate with a prospective buyer. Else, it takes consortiums forever to come to a decision with one bank or another dragging its feet. The experience with ARCIL and other ARC has been bad.

**RBI Structural Reform: Access to a retail investor for G Securities**

**News Excerpt**

The Reserve Bank of India (RBI) said it would allow retail investors to open gilt accounts with the central bank to invest in government securities directly and without the help of intermediaries.



**Pre-Connect**

- Government Securities (G-Secs) are debt instruments issued by the government to borrow money.
- These securities can be issued by both the central government and the state governments of India.
- The two key categories are treasury bills – short-term instruments which mature in 91 days, 182 days, or 364 days, and dated securities – long-term instruments, which mature anywhere between 5 years and 40 years.
- Like bank fixed deposits, g-secs are not tax-free.
- They are generally considered the safest form of investment because they are backed by the government. So, the risk of default is almost nil.
- However, they are not completely risk free, since they are subject to fluctuations in interest rates.
- So far, retail investors could not individually bid for government securities. Small investors can invest indirectly in g-secs by buying mutual funds or through certain policies issued by life insurance firms.
- However, the RBI had taken many steps to accommodate them, such as introduction of non-competitive bidding in primary auctions and permitting stock exchanges to aggregate primary purchases.
- This meant that the stock exchanges were allowed to aggregate the retail demand and place an order. But the central bank has now decided to move beyond this aggregator model.

**Analytica**

- The Central government and the Reserve Bank have taken several measures to encourage retail investment in government securities.

- These include introduction of non-competitive bidding in primary auctions, permitting stock exchanges to route primary purchases and allowing a specific retail segment in the secondary market.
- In continuation of these efforts, it is proposed to provide retail investors with online access to the government securities market — both primary and secondary — directly through the Reserve Bank (Retail Direct).
- This will broaden the investor base and provide retail investors with enhanced access to participate in the government securities market.
- The RBI is the debt manager for the government. In the forthcoming financial year, the government plans to borrow Rs 12 lakh crore from the market. When the government demands so much money, the price of money (i.e., the interest rate) will move up.
- It is in the government's and RBI's interest to bring this down. That can happen by broadening the base of investors and making it easier for them to buy g-secs.
- This measure together with HTM [hold to maturity] relaxation, will facilitate smooth completion of the government borrowing programme in 2021-22.
- This move has placed India in the select league of nations such as the U.S. and Brazil which have such facilities.
- Allowing retail participation in the G-Sec market is a bold step towards the financialization of a vast pool of domestic savings and could be a game-changer.
- Individuals will be allowed to open a gilt account in the RBI's electronic platform E-kuber (owned by the RBI). Then the retail investor can place a direct bid with the NDS-OM, an electronic anonymous order matching system for secondary market trading in government securities. Currently, NDS-OM members include banks, primary dealers and insurance companies.
- It will not undermine the flow of deposits for banks and mutual funds. Even today, small savings rates offer higher rates than bank deposits, but still substantial money flows into bank deposits.

### Types of G-Secs

- ❖ **Treasury bills (T-bills):** These are issued only by the central government of India. They are short-term money market instruments, which means that their maturity period is less than 1 year. Treasury bills are currently issued with three different maturity periods: 91 days, 182 days, and 364 days. These securities do not pay you any interest (Zero-coupon bond) on your investment. However, they're issued at a discount and are redeemed at face value on the date of maturity.
- ❖ **Cash Management Bills (CMBs):** These are also zero-coupon securities and are issued for maturity periods less than 91 days, making them an ultra-short-term investment option. CMBs are strategically used by the government of India to meet any temporary cash flow requirements.
- ❖ **Dated G-Secs:** These are long-term money market instruments that offer a wide range of tenures, starting from 5 years and going all the way up to 40 years. These instruments come with either a fixed or a floating interest rate, also known as the coupon rate. The coupon rate is applied on the face value of your investment and is paid to you on a half-yearly basis as interest.
- ❖ **State Development Loans (SDLs):** These are issued only by the state governments of India to fund their activities and to satisfy their budgetary needs. They come with a wide range of investment tenures. The only difference between dated G-Secs and SDLs is that the former is issued only by the central government, while the latter is issued solely by the state governments of India.

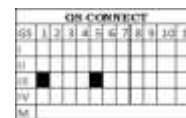
### Conclusion

This new investment will provide more avenues for investments for retail investors beyond the current bank fixed deposits, fixed income mutual funds and government small saving schemes like the public provident fund. The central bank’s decision to allow direct investment will broaden investor base and provide retail investors with enhanced access to participate in the government securities market.

## Hike in Steel Prices

### News Excerpt

Steel prices (HRC as the mother product) went up by Rs 16,700 per tonne during July to December 2020. These prices went down by Rs 3,100 per tonne during January to June 2020.



### Pre-Connect

- The announcements in Budget for the Financial Year, 2021-22 viz. Capex allotment of Rs. 1,07,100 crores for Railways, 2.87 lakh crore outlay for Jal Jeevan Mission, Construction of roads under BharatmalaPariyojana project, Swachh Bharat Mission 2.0, Scheme for Mega Textile Parks etc. will lead to increased demand for steel in the country.
- The Vision for Atmanirbhar Bharat and the Production Linked Incentive (PLI) Scheme will also help attract capital investments and thereby enhance demand and production of steel in the country. The Government has also approved inclusion of 'Specialty Steel' under the PLI Scheme.

### Importance of steel

- Steel is used in almost every aspect of our lives from cars to refrigerators to washing machines to roads, bridges, ships, airplanes, etc, and extensively in engineering and construction work.
- Therefore, production and consumption of steel can be directly linked to the socio-economic development of a country. Steel has played a crucial role in the development of many large economies.
- Steel consumption significantly depends on the overall performance of the economy (GDP) and more specifically on investments made in infrastructure like railways, ports, roads, airports and housing.
- India has replaced Japan as world's second largest steel producing country, while China is the largest producer of crude steel accounting for more than 51 per cent of production, according to World Steel Association (world steel).
- India is also the second largest consumer of the steel.
- According to the Ministry of Steel, the sector contributes around 2 per cent of the country's GDP and employs around 25 lakh people in steel/allied sectors. Evidently, the steel industry is important

**Specialty steel under the Production Linked (PLI) Scheme**

Government has approved inclusion of 'Specialty Steel' under the PLI Scheme with a 5-year financial outlay of Rs 6322 Cr to promote the manufacturing of 'Specialty Steel' within the country by attracting capital investment, generate employment and promote technology up-gradation in the steel sector.

This would help in improving availability of 'Specialty Steel' in the country by making the country Atmanirbhar in meeting the domestic demand. In a deregulated, open market scenario, domestic steel price is determined by market forces of demand and supply, trends in prices of raw materials and is also influenced by global steel trade conditions.

Specialty steels – also referred to as alloy steel – contain additional alloyed materials that deliver special properties to the final product.



for the country because it has one of the highest economic linkages in overall GDP.

- Steel demand in India is expected to grow driven by various government-led initiatives in affordable housing and infrastructure sector, coupled with robust growth in automotive and capital goods segments.
- Also, the National Steel Policy is expected to encourage domestic production of steel and reduce imports. This is expected to benefit the domestic steel companies.
- Lower exports from the world's second largest steel producer are a cause of concern. The domestic steel industry has the potential to be a net exporter.
- This is possible if the government looks at rationalising the cost structure, develop efficient logistics and infrastructure, and make funding available at cheaper rates.
- As China enters a phase of moderate growth in steel demand, India is expected to have healthy domestic demand for steel given its low per capita steel consumption and low income per capita and scope for urbanisation.

### Analytica

- The present government has made a massive push for self-reliance or 'atmanirbharta' in this year's Budget, but the domestic steel industry has suffered a massive setback.
- It has lost its edge against foreign steel manufacturers, with the government either reducing import duties on finished steel products, or temporarily revoking anti-dumping and other duties.
- Over the last few months, steel prices were surging, making it expensive to build houses, roads and other infrastructure. This led to a lot of backlash against the steel industry, with many alleging that it was making massive profits.
- The Indian steel industry has been one of the most protected in the last few years, with customs duty and anti-dumping duties levied on a host of finished and semi-finished products like 'long' products of non-alloy, stainless and alloy steel, and 'flat' products of non-alloy and alloy steel.
- On most products, a basic customs duty, anti-dumping duty and countervailing duty was imposed, making imported steel much more expensive than domestically produced steel.
- While the basic customs duty varied from 10-12.5 per cent, anti-dumping duty, first imposed in 2015, was a fixed amount. The latter was mainly imposed to protect domestic manufacturers from low-cost imported items from China.
- However, with domestic steel prices surging by nearly 50 per cent in the last few months, the government had little choice but to bring them down by facilitating steel imports.
- This was especially important as the government is banking on a massive

#### National steel policy (NSP), 2017

It aspires to achieve 300MT of steel-making capacity by 2030.

The policy also envisages to domestically meet the entire demand of high grade automotive steel, electrical steel, special steels and alloys for strategic applications and increase domestic availability of washed coking coal so as to reduce import dependence on coking coal from about 85% to around 65% by 2030-31.

#### Key Features:

- ❖ Create self-sufficiency in steel production by providing policy support & guidance to private manufacturers, MSME steel producers, CPSEs
- ❖ Encourage adequate capacity additions,
- ❖ Development of globally competitive steel manufacturing capabilities,
- ❖ Cost-efficient production
- ❖ Domestic availability of iron ore, coking coal & natural gas,
- ❖ Facilitating foreign investment
- ❖ Asset acquisitions of raw materials &
- ❖ Enhancing the domestic steel demand.

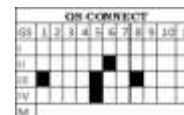
infrastructure push to revive demand after the economy suffered a massive contraction in the aftermath of the pandemic.

- Consequently, in the Budget, the government reduced import duties marginally and did away with anti-dumping duty and countervailing duties for a specific time period.
- The aim behind the government's decision to reduce import is to allow for import of steel at lower prices. If there is an excess supply of steel in the domestic market, prices will come down.

## e-Governance Project: MCA21 Version 3.0

### News Excerpt

During the fiscal 2021-22, the Ministry of Corporate Affairs (MCA) will launch data analytics driven MCA21 Version 3.0 (V3).



### Pre-Connect

- MCA21 is an e-Governance initiative of Ministry of Corporate Affairs (MCA), Government of India that enables an easy and secure access of the MCA services to the corporate entities, professionals and citizens of India.
- The MCA21 application is designed to fully automate all processes related to the proactive enforcement and compliance of the legal requirements under the Companies Act, 1956, New Companies Act, 2013 and Limited Liability Partnership Act, 2008. This will help the business community to meet their statutory obligations.
- The MCA21 application offers the following-
  - Enables the business community to register a company and file statutory documents quickly and easily.
  - Provides easy access of public documents.
  - Helps faster and effective resolution of public grievances.
  - Helps registration and verification of charges easily.
  - Ensures proactive and effective compliance with relevant laws and corporate governance.
  - Enables the MCA employees to deliver best of breed services.
- The Ministry has proposed to revamp the MCA portal by launching MCA21 Version 3.0 in the financial year 2021-22.

### Highlights

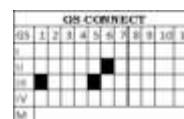
- MCA21 V3 Project is a technology-driven forward-looking project, envisioned to strengthen enforcement, promote Ease of Doing Business, enhance user experience, facilitate seamless integration and data exchange among Regulators.
- The project will have Micro-services architecture with high scalability and capabilities for advanced analytics.
- Aligned with global best practices and aided by emerging technologies such as Artificial intelligence (AI) and Machine Learning (ML), MCA21 V3 is envisioned to transform the corporate regulatory environment in India. The key components of MCA21 to be launched during Fiscal Year 2021-22 are:
  - **e-Scrutiny:** MCA is in process of setting up a Central Scrutiny Cell which will scrutinise certain Straight Through Process (STP) Forms filed by the corporates on the MCA21 registry and flag the companies for more in-depth scrutiny.
  - **e-adjudication:** E-adjudication module, has been conceptualised to manage the increased volume of adjudication proceedings by Registrar of Companies (RoC) and Regional Directors (RD) and will facilitate end to end digitisation of the process of

- adjudication, for the ease of users. It will provide a platform for conducting online hearings with stakeholders and end to end adjudication electronically.
  - **e-Consultation:** To automate and enhance the current process of public consultation on proposed amendments and draft rules etc., e-consultation module of MCA21 v3 will provide an online platform wherein, proposed amendments/draft legislations will be posted on MCA’s website for external users/ comments and suggestions pertaining to the same in a structured digital format.
  - Further, the system will also facilitate AI driven sentiment analysis, consolidation and categorization of stakeholders’ inputs and creation of reports on the basis thereof, for reference of MCA.
  - **Compliance Management System (CMS):** CMS will assist MCA in identifying non-compliant companies/LLPs, issuing e-notices to the said defaulting companies/LLPs, generating alerts for internal users of MCA. CMS will serve as a technology platform/solution for conducting rule-based compliance checks and undertaking enforcement drives of MCA wherein e-notices will be issued by MCA for effective administration of corporates.
  - **MCA Lab:** As part of MCA21 V3, an MCA LAB is being set up, which will consist of corporate law experts. The primary function of MCA Lab will be to evaluate the effectiveness of Compliance Management System, e-consultation module, enforcement module, etc. and suggest enhancements to the same on an on-going basis. The Lab will help MCA in ensuring the correctness of results produced by these key modules in view of the dynamic corporate ecosystem.
- Additionally, MCA21 V3 will have a cognitive chat bot enabled helpdesk, mobile apps, interactive user dashboards, enhanced user experience using UI/UX technologies, and seamless data dissemination through APIs.

**Companies Fresh Start Scheme (CFSS), 2020**

**News Excerpt**

As per records available with the Ministry of Corporate Affairs (MCA), 4,73,131 number of Indian Companies and 1,065 number of Foreign Companies have been benefited by availing the Companies Fresh Start Scheme (CFSS), 2020 for filing their pending documents.



**Pre-Connect**

- As per the provisions of the Companies Act, 2013, all companies are required to follow statutory compliances annually.
- This includes the Annual Return, Financial Statements and all the other necessary forms, documents and statements that are specified, within that particular time frame.
- Non – compliance of the same results in the imposition of penalties and fines. A company that fails to adhere to the compliances is called a defaulting company.
- The Ministry of Corporate Affairs (MCA) vide its circular dated 30th March 2020 has issued “Companies Fresh Start Scheme, 2020” (CFSS 2020) and revised the “LLP Settlement Scheme, 2020” (LLP Scheme 2020) to promote defaulting

**Kalam Program for Intellectual Property Literacy and Awareness Campaign (KAPILA)**

The Government has launched a campaign named KAPILA for Intellectual Property Literacy and creating patent awareness on 15th October, 2020. The objectives of the scheme include creating awareness regarding Intellectual Property Rights (IPR) in Higher Education Institutions (HEIs), enabling of IP protection of inventions originating from faculty and students of HEIs, development of Credit Course on IPR, training program on IPR for faculty and students of HEIs and sensitization and development of vibrant IP filing system.

companies/LLPs to make a fresh start on a clean slate and waive the additional fees for delayed filings by the companies/LLPs with the Registrar of Companies (ROC) during the currency of the Schemes i.e. from 1st April 2020 to 30th September 2020.

- Both the schemes incentivize compliance and reduce compliance burden during the unprecedented public health situation caused by the outbreak of COVID-19.
- The CFSS 2020 and LLP Scheme 2020, both contain provisions for giving immunity from penal proceedings, including relief against imposition of penalties for late submissions and further provide additional time for filing appeals before the concerned Regional Directors against imposition of penalties, if already imposed.
- However, the immunity is only against delayed filings with MCA and not against any substantive violation of law.

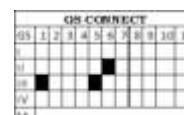
### **Key provisions of CFSS, 2020**

- Under the CFSS 2020 scheme, any company which has failed to file the Annual Returns and Financial Statements or any return or form which are governed under section 403 of the Act, then such defaulting companies can file such belated documents in the MCA-21 registry at a nominal fee as prescribed under the Companies (Registration and Office) Rules, 2014 with the ROC during the currency of the CFSS 2020 i.e., with effect from 1st April 2020 to 30th September 2020.
- The defaulting inactive companies can also simultaneously apply for obtaining dormant status under the provisions of section 455 of the Act or apply for striking off the name of the company by filing e-form STK-2, by paying the normal fees as applicable under the Act.
- On completion of CFSS 2020 on 30th September 2020, CFSS-2020 e-form shall be available for filing for companies availing benefit under the scheme and an immunity certificate will be issued by the MCA.
- The CFSS 2020 does not apply to companies struck off by ROC under section 248, companies which have already applied for strike off, companies which have been amalgamated under a scheme of arrangement or merger, companies which have already filed for obtaining dormant status under section 455 of the Act, the vanishing companies and on forms for increase in capital & charge related forms i.e. form SH-7, CHG-1, CHG-4, CHG-8 and CHG-9.

## **National Coal index**

### **News Excerpt**

In the wake of the government's decision to allow foreign direct investment and open up coal sector to commercial mining, the Centre is in the process of formulating a National Coal Index (NCI).

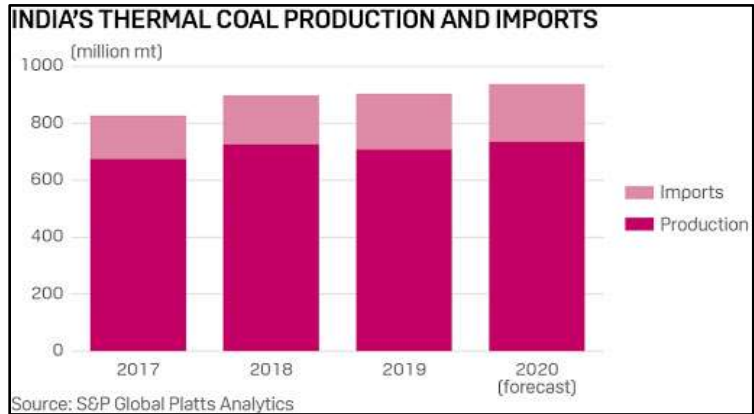


### **Pre-Connect**

- The Parliament, last year, passed the Mineral laws (Amendment) Bill that will remove end-use restrictions for participating in coal mine auctions and open up the coal sector fully for commercial mining by domestic and global companies.
- The Bill aimed to transform the mining sector in the country, boosting coal production and reducing dependence on imports.
- The amended provisions provided that companies which do not possess any prior coal mining experience in India or have mining experience in other minerals or in other countries could participate in auction of coal/lignite blocks.
- Commercial mining allows the private sector to mine coal commercially without placing any end-use restrictions. The private firms have the option of either gasification of the coal or exporting it.



- They can also use it in their own end-use plants or sell them in the markets. Further, with 100 per cent foreign direct investment allowed in the coal sector, global companies can also participate in the auctions.
- The revenue sharing bidding process has replaced model contracts offered earlier in the auction of coal blocks for captive mining, which entailed reverse bidding on fixed price of coal with the lowest quote offered winning the bid.
- A high-powered panel, in 2018, had recommended to develop a Coal Index for determining the value of blocks and a revenue-sharing model with the states.



### Revenue sharing model

- It is the distribution of the total amount of income generated by the sale of goods or services between the stakeholders or contributors.
- It should not be confused with profit shares (Production sharing contract). As with profit shares only the profit is shared, that is the revenue left over after costs have been removed.
- Under this, a bidder pays the government a wholesale price for each unit purchased plus a percentage of the revenue.
- Some advantages of Revenue Sharing model are as follows:
  - The Government need to audit only the production and revenue by the exploring company.
  - There is no need for micro-management or control over budget and expenditure of the exploration company.
  - Hence, there is minimum regulatory burden and ease of doing business.
  - There is significant reduction in administrative discretion while granting greater freedom to the operator.

### Highlights

- ✓ The Ministry of Coal has started Commercial Auction of coal mines on revenue share basis. In order to arrive at the revenue share based on market prices of coal, one National Coal Index (NCI) was conceptualized.
- ✓ The NCI is a price index which reflects the change of price level of coal on a particular month relative to the fixed base year.
- ✓ The base year for the NCI is FY 2017-18.
- ✓ This index will be used to calculate the amount of performance security companies need to pay after winning coal blocks, and will also have a bearing on prices of coal to be sold from these mines.

#### **Coking Coal or Metallurgical coal**

It is used in manufacturing steel, where carbon must be as volatile-free and ash-free as possible. It is also heated to produce coke, a hard porous material which is used to blast in furnaces for the extraction of iron from the iron ore.

#### **Non-Coking Coal**

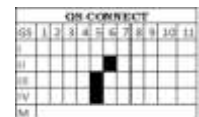
It does not have any caking properties and it is mainly used as thermal coal for power generation. It has a higher ash content and also used in industries like cement, fertilizer, glass, ceramic, paper, chemical and brick manufacturing. Indian Non-Coking Coal is classified on the basis of Gross Calorific Value (GCV) which consists of 17 GCV bands.

- ✓ Prices of coal from all the sales channels of coal, including import, as existing today are taken into account for compiling the NCI.
- ✓ The amount of revenue share per tonne of coal produced from auctioned blocks would be arrived at using the NCI by means of defined formula.
- ✓ NCI has already been rolled out on 4th June 2020 and the same is placed on the website of the Ministry of Coal.
- ✓ NCI is composed of a set of five sub-indices: three for Non-Coking Coal and two for Coking Coal.
- ✓ The three sub-indices for Non-Coking Coal are combined to arrive at the Index for Non-Coking Coal and the two sub-indices for Coking Coal are combined to arrive at the Index for Coking Coal.
- ✓ Thus, indices are separate for Non-coking and Coking Coal. As per the grade of coal pertaining to a mine, the appropriate sub-index is used to arrive at the revenue share.

## FASTag declared mandatory

### News Excerpt

The Indian government has made it mandatory for all vehicles to use FASTag, an electronic toll collection, starting midnight of February 15.



### What is FASTag?

- It is a simple to use, reloadable tag which enables automatic deduction of toll charges and lets you pass through the toll plaza without stopping for the cash transaction.
- It is linked to a prepaid account from which the applicable toll amount is deducted.
- The tag employs Radio-Frequency Identification (RFID) technology and is affixed on the vehicle's windscreen after the tag account is active.
- FASTags are issued by 24 certified banks on point of sale (PoS) locations, at toll plazas or banks' sales offices.

### Radio-frequency identification (RFID)

- ❖ It refers to a technology whereby digital data encoded in RFID tags or smart labels are captured by a reader via radio waves.
- ❖ It is similar to barcoding in that data from a tag or label are captured by a device that stores the data in a database.
- ❖ RFID, however, can be read outside the line-of-sight, whereas barcodes must be aligned with an optical scanner.
- ❖ It belongs to a group of technologies referred to as Automatic Identification and Data Capture (AIDC).
- ❖ AIDC methods automatically identify objects, collect data about them, and enter those data directly into computer systems with little or no human intervention.
- ❖ At a simple level, RFID systems consist of three components: an RFID tag or smart label, an RFID reader, and an antenna.
- ❖ RFID tags contain an integrated circuit and an antenna, which are used to transmit data to the RFID reader.
- ❖ The reader then converts the radio waves to a more usable form of data. Information collected from the tags is then transferred through a communications interface to a host computer system, where the data can be stored in a database and analyzed at a later time.

### Benefits of using FASTag

- FASTag will help to reduce the waiting time at the plaza.
- Accommodating the increasing traffic without additional lanes.
- Eliminating the acceleration and idling, harmful vehicular emissions, and air using FASTag.
- Reducing congestion around plazas.

- Pollution reduction.
- To save fuel for the future which will also help to reduce the operating cost of the vehicles.
- To provide customers the flexibility of paying their plaza bills with RFID Tag.
- Reduce cash handling which aids in enhanced audit control by centralizing user accounts.
- Enhancing data collection, information such as vehicle count of the day.

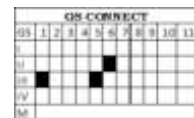
**Highlights**

- ✓ The Ministry of Road Transport & Highways has decided that all lanes in the fee plazas on National Highways (NH) shall be declared as “FASTag lane of the fee plaza” w.e.f midnight of 15th/16th February 2021.
- ✓ Therefore, as per NH Fee Rules 2008, any vehicle not fitted with FASTag or vehicle without valid, functional FASTag entering into the FASTag lane of the fee plaza shall pay a fee equivalent to two times of the fee applicable to that category.
- ✓ This has been done to further promote fee payment through digital mode, reduce waiting time and fuel consumption, and provide for a seamless passage through the fee plazas.
- ✓ The Ministry had mandated fitment of FASTag in M&N categories of motor vehicles with effect from 1st January 2021.
- ✓ Category ‘M’ stands for a motor vehicle with at least four wheels used for carrying passengers and Category ‘N’ stands for a motor vehicle with at least four wheels used for carrying goods, which may also carry persons in addition to goods.
- ✓ However, in a respite to highway commuters, the NHAI has withdrawn the requirement of maintaining a minimum amount in the FASTag wallet to ensure seamless movement at electronic toll plaza.
- ✓ With this decision, a user will now be allowed to pass through the toll plaza, if the FASTag account/ wallet balance is non-negative.
- ✓ The guideline issued by the ministry pertains to the process of toll-collection, and all vehicles passing through a toll plaza are to have the FASTag, the electronic toll collection, affixed to their windshields.

**Mega Investment Textiles Parks**

**News Excerpt**

The Government has proposed a scheme of Mega Investment Textiles Parks (MITRA) to enable the textile industry to become globally competitive, attract large investments, boost employment generation and exports.



**Pre-Connect**

- India’s textiles sector is one of the oldest industries in the Indian economy, dating back to several centuries.
- The industry is extremely varied, with hand-spun and hand-woven textiles sectors at one end of the spectrum, while the capital-intensive sophisticated mills sector on the other end.
- The close linkage of textiles industry to agriculture (for raw materials such as cotton) and the ancient culture and traditions of the country in terms of textiles makes it unique in comparison to other industries in the country.
- India’s textiles industry has a capacity to produce wide variety of products suitable for different market segments, both within India and across the world.
- India’s textiles industry contributed 7% to the industry output (by value) in 2018-19. The Indian textiles and apparel industry contributed 2% to the GDP, 12% to export earnings and held 5% of the global trade in textiles and apparel in 2018-19.
- Textiles industry has around 4.5 crore employed workers including 35.22 lakh handloom workers across the country.
- The domestic textiles and apparel market stood at an estimated US\$ 100 billion in FY19.

- The textile sector, India's second largest employment generator after agriculture, had been badly hit by the Covid lockdown.
- As the fifth largest exporter of textiles and apparel in the world, the country has also not realised its full potential.

### Highlights

- In a move to make the country's textile sector a manufacturing and export hub, and create global export champions, India will set up seven textile parks over three years under the scheme of mega investment textile parks.
- Government believes that this will create world class infrastructure with plug and play facilities to enable create global champions in exports.
- MITRA will be a game changer for the Indian Textiles Industry. Along with the Production Linked Incentive (PLI) scheme, MITRA will lead to increased investments and enhanced employment opportunities.
- Emphasis on state-of-the-art infrastructure through MITRA will give our domestic manufacturers a level-playing field in the international textiles market & pave the way for India to become a global champion of textiles exports across all segments.
- The parks to be setup over 1,000 acres of land with world class infrastructure, and plug-and-play facilities, will be addition to the Rs 10,683-crore production linked incentive (PLI) scheme for technical textiles and manmade fibre.
- The textiles ministry has proposed to develop seven MITRA parks as part of a plan to double the industry size to \$300 billion by 2025-26 aimed to position India as a fully integrated, globally competitive manufacturing and exporting hub.
- The parks are targeted to have uninterrupted water and power supply, common utilities and research and development labs.
- Similar parks already exist in China, Vietnam and Ethiopia where the entire textiles value chain is covered.
- India has already sanctioned 59 textile parks under the Scheme for Integrated Textile Parks (SITP), of which 22 have been completed.
- However, their slow progress due to delays in obtaining land and other statutory clearances from state governments and tardy fund mobilisation, have prompted the government to develop MITRA parks.
- Under the SITP, which was launched in 2005, infrastructure for textile units was to be developed in a public-private partnership model, with the government granting up to 40% of the project cost, subject to a ceiling of Rs 40 crore for each park.
- The PLI scheme, announced earlier for 10 key sectors including textile and automobiles, will help India become self-reliant, boost manufacturing and enhance exports.

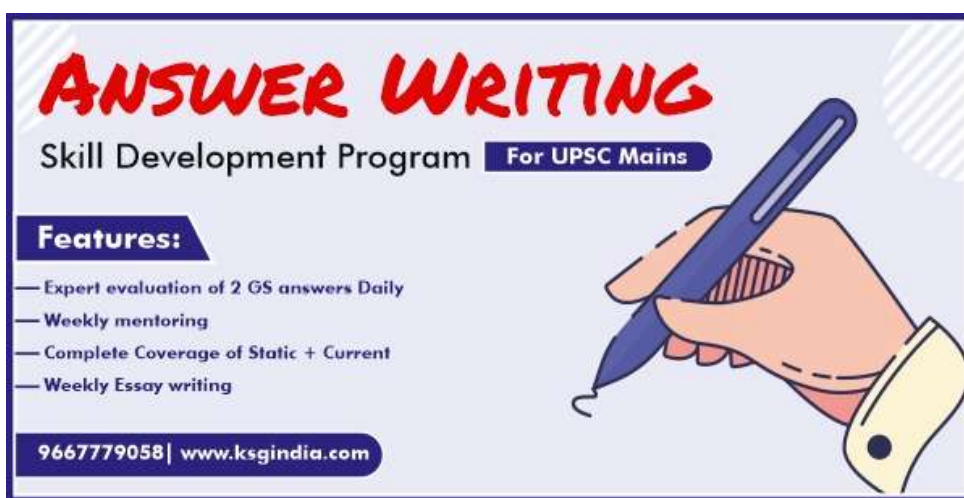


**PEPPER IT WITH**  
STIP, PLI Scheme



## Conclusion

This is an opportune time for India to give a big boost to its textile sector. The global sentiment against China in the manufacturing space could be capitalised on to gain more mileage for Indian products. The several textile manufacturers were relocating their manufacturing bases outside China and searching for new emerging markets. As we are competing with other destinations, such as Bangladesh, Vietnam, Turkey, countries in eastern Europe, Ethiopia, Mexico and other Latin American countries, the Indian textile industry, in coordination with the central and state governments, is taking several steps, including labour reforms, to remain competitive.



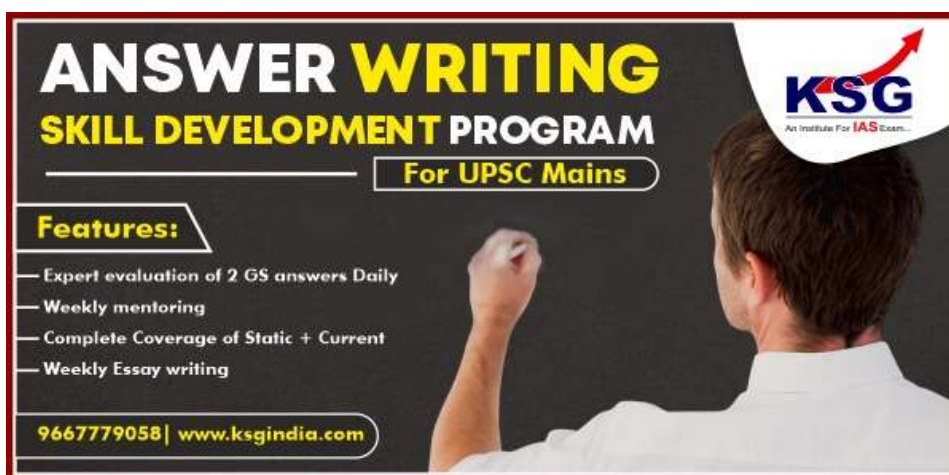
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## INTERNATIONAL RELATIONS

### Colombo Port Issue

#### News Excerpt

After strong opposition from trade unions across the country, Sri Lanka has unilaterally pulled out of a 2019 agreement with India and Japan for developing the strategic East Container Terminal (ECT) at the Colombo Port.

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#### Highlights

- In 2019, India and Sri Lanka signed a memorandum of understanding (MoU) for “co-operation on economic projects”.
- The governments of India, Sri Lanka and Japan had signed a memorandum of cooperation in May 2019 to develop and operate the East Container Terminal of Colombo Port in a trilateral framework.
- The Colombo port trade unions opposed the proposal of investors from India and Japan buying 49 per cent stake in the ETC. They demanded the ECT to remain 100 per cent owned by the SLPA as opposed to the 51 per cent.
- After Prime Minister Rajapaksa announced the Sri Lankan government decision that the East Container Terminal (ECT) would be developed and operated as a “wholly owned container terminal of the Sri Lanka Ports Authority (SLPA)”, a cabinet meeting approved a proposal to develop the West Terminal at the Colombo Port as a Public Private Partnership with India and Japan, seen as a bid to compensate for taking away the ECT.
- India has not commented on this offer. India’s first response was that the island nation should not be taking a decision in a unilateral manner on an existing tripartite agreement.
- Sri Lanka’s recent decision to pull out of the ECT deal with India and Japan is not the only challenge to New Delhi’s interests emerging this year.
- A week before reneging on the 2019 Colombo Port terminal agreement, Sri Lanka cleared a Chinese energy project in three islands off Jaffna peninsula that are barely 50 km from the Tamil Nadu coast.



#### Analytica

- Although India and Sri Lanka have seemingly friendly ties and much cultural affinity and people-to-people contact, the relationship is complex — and the majority Sinhala-Buddhist public opinion is layered with the memory of Indian intervention in the ethnic conflict.
- By extension, the current dispute over an Indian firm participating in the ‘East Container Terminal’ (ECT) of the Colombo Port should be seen as a part of the unresolved trade issues, in which successive governments in Sri Lanka have baulked at upgrading the two-decade old Free Trade Agreement (FTA) into a differently-titled CEPA (Comprehensive Economic Partnership Agreement) or ETCA (Economic and Technology Co-operation Agreement), after successive governments in Colombo had negotiated the drafts to a point of no return.

- For India, the ECT deal was important as more than two-thirds of trans-shipment at this port is tied to India, making it an important trade and connectivity link..
- The ECT is also considered more strategic than any other in Colombo Port. It is located next to the Colombo International Container Terminal (CICT) project, a joint venture between China Merchants Port Holdings Company Ltd. and SLPA.
- In the midst of it all, sections of the Indian strategic community have been linking the two issues, especially the high-profile ECT deal, to India’s vote on Sri Lankan war-crimes probe in the UNHRC, that too ahead of the Tamil Nadu assembly elections in May, and also New Delhi’s ‘COVID diplomacy,’ including the recent vaccine-gift to neighbours, including Sri Lanka.

**Pakistan-Sri Lanka Tango**

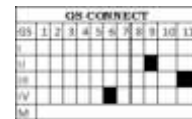
- ✓ Pakistan is Sri Lanka’s second largest trading partner in South Asia after India. Sri Lanka and Pakistan have a free trade agreement dating back to 2005.
- ✓ Over the last decade, Pakistan has also tried to work on a cultural connect with Sri Lanka by highlighting its ancient Buddhist connections and sites.
- ✓ Defence ties are a strong pillar of the Sri Lanka-Pakistan bilateral relationship.
- ✓ The recent visit of Pakistan’s PM to Sri Lanka signalled that despite India’s best efforts at “isolating” Pakistan, Islamabad has friends in the neighbourhood.
- ✓ Sporadically, the Indian security establishment has voiced concerns about Pakistan’s role in the radicalisation of Muslims — especially in Eastern Sri Lanka where funds have poured in for new mosques from some West Asian countries — and the effect this could have in India.
- ✓ Now, there is some wariness about a convergence of interests between Sri Lanka, China, and Pakistan in the Indian Ocean region and in defence co-operation.

**PEPPER IT WITH**  
 India-Sri Lanka relation,  
 China presence in  
 Indian Ocean, India-  
 Pakistan relation

**Sino India Disengagement**

**News Excerpt**

In the first major breakthrough in talks to resolve the nine-month military standoff along the Line of Actual Control (LAC) in Ladakh, China’s Defence Ministry announced that Chinese and Indian troops on the southern and northern shores of Pangong Tso began “synchronized and organized disengagement” in line with the consensus reached between Corps Commanders when they last met on January 24.



**Pre-Connect**

- In 2020, India faced the most serious national security crisis since the Kargil War in 1999.
- India-China reported the first such violent clash since 1975, even though over the past few years there have been frequent stand-offs along the disputed border.
- On the intervening night of May 5 and May 6, Indian and Chinese troops had a scuffle at Pangong Tso in Ladakh. This resulted in injuries in large numbers on both sides. Over 70 Indian Army personnel including a Commanding Officer were injured.
- A clash between troops took place at Naku La in North Sikkim on May 9 resulting in injuries on both sides.
- On May 18, China accused India of "trespass" and building "illegal" infrastructure on the LAC. It accused the Indian Army of crossing into its territory and of “blocking” its patrols and “attempting to unilaterally change the status” on the LAC between the two countries in Sikkim and Ladakh.

- On May 21, the Ministry of External Affairs rejected Beijing's claim and said Chinese troops were "hindering normal patrols" by Indian soldiers.
- On the intervening night of June 15 and June 16, 20 Indian soldiers were killed after a violent face-off with the Chinese People's Liberation Army in Galwan during the "de-escalation" process.
- On June 19, China's government said it claimed the entire Galwan valley, including to areas that are currently on India's side of the LAC.

### Highlights

- In recent development, troops from both sides have started disengaging from the Pangong Tso area in eastern Ladakh.
- China will pull its troops on the north bank towards the east of Finger 8.
- Similarly, India will also position its forces at its permanent base at the Dhan Singh Thapa post near Finger 3.
- Similar action will be taken by both the parties in the south bank area as well.
- Both sides have also agreed that the area between Finger 3 and Finger 8 will become a no-patrolling zone temporarily, till both sides reach an agreement through military and diplomatic discussions to restore patrolling.
- Further, all the construction done by both sides on the north and south banks of the lake since April 2020 will be removed.

### Analytica

- ✓ The north and south banks of Pangong Tso are two of the most significant and sensitive regions when it comes to the current standoff that began in May 2020.
- ✓ Further, it is in the south bank of the lake that Indian forces in an action in late August had gained strategic advantage by occupying certain peaks, outwitting the Chinese.

- ✓ Indian troops had positioned themselves on heights of Magar Hill, Mukhpari, Gurung Hill, Rezung La and Rechin La, which were unoccupied by either side earlier.



- ✓ Since then, the Chinese side had been particularly sensitive as these positions allowed India to not only dominate Spanggur Gap, which is a two-km wide valley that can be used to launch an offensive, as China had done in 1962, they also allow India a direct view of China's Moldo Garrison.

- ✓ After this action India had also re-positioned its troops on the north bank to occupy heights overlooking Chinese positions on the north bank as well.

### Why does the Kailash Range matter?

- On August 30, 2020, the Special Frontier Force (SFF) troops secured Kailash Ridge as a pre-emptive operation, taking the People's Liberation Army (PLA) by surprise.
- This action proved a game-changer, neutralising gains made by the Chinese along the northern bank of Pangong Tso and rendering PLA positions east of Spanggur Gap-Maldo Garrison totally vulnerable.

- The Kailash Range was the theatre of conflict during the 1962 Chinese offensive, with key battles at Rezang La and Gurung Hill.
- The Karakoram Range ends on the northern side of the Pangong Tso. The Kailash Range originates from the southern bank and runs northwest to southeast for over 60 km.
- The Kailash Ridge is characterised by rugged, broken terrain with heights varying between 4,000-5,500m, and its key features include Helmet Top, Gurung Hill, Spanggur Gap, Muggar Hill, Mukhpari, Rezang La and Rechin La. The Ridge dominates Chushul Bowl; an important communications centre.
- Today, given a rich experience in high altitude-cum-glacial warfare, coupled with vastly improved equipment and infrastructure, the Indian Army is well positioned to hold the Kailash Range for good. The Chinese, on the other hand, are beginning to realise the harsh realities of winters at the Line of Actual Control (LAC).

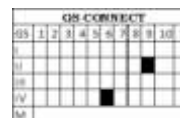
### Way Forward

- ✦ Two of the main stumbling blocks in finding a permanent resolution are lack of trust and no clarity on intent. The situation in Depsang Plains continues to be a concern.
- ✦ Any permanent resolution will include first, disengagement of troops from the frontlines from all friction points, then de-escalation that will entail sending the troops from the depth areas to their original bases.
- ✦ The Kailash Ridge marks a tryst with history, a turning point, as it is the first piece of territory that has been recovered from Chinese illegal occupation, but definitely not the last one as India's claim line is the Johnson Line of 1865.
- ✦ External Affairs S Jaishankar recently said that India was being tested in the seven-month-long standoff with China in eastern Ladakh. Therefore, it is time to convey a stern message to the Chinese leadership that India will not compromise on its sovereignty.

## **Conflict between Britain and China over Citizenship row**

### News Excerpt

From today, the UK is opening a special visa scheme that will allow lakhs of Hong Kong residents a chance to migrate and eventually apply for British citizenship. The move comes months after China imposed a sweeping national security law over the former British colony, taking aim at pro-democracy protests that had captured global attention since 2019.



### Pre-Connect

- On June 30, 2020, an hour before the 23rd anniversary of Hong Kong's transfer from Britain, China implemented its far-reaching new national security law for Hong Kong, greatly expanding Beijing's power in the city.
- UK called the imposition of the security law "a serious and clear breach of the Sino-British Joint Declaration", referring to a 1984 treaty between the two countries under which China promised to honour Hong Kong's liberal policies, system of governance, independent judiciary, and individual freedoms for a period of 50 years from 1997.
- The UK offered a pathway to eventual citizenship for Hong Kong residents. London unveiled its plan in July last year to take eligible Hong Kongers after Beijing's imposition of the draconian National Security Law.
- The scheme potentially covers over two-thirds of the city's population of around 70 lakhs. According to the BBC, some 29 lakhs people are eligible, who along with 23 lakh dependents would be able to move to the UK.

### China's response and its potential impact

- China is expected to step up retaliation against the UK's scheme to offer citizenship to millions of Hong Kong people through British National (Overseas) (BNO) passport.

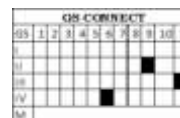


- Analysts suggested that Beijing may strip the Chinese citizenship and Hong Kong permanent residency of BNO passport holders.
- People given British citizenship under the BNO scheme would enjoy fewer job opportunities in Hong Kong because they would face more challenges when applying for a visa to enter mainland China.
- Minorities from India, Pakistan and Nepal will have to face the brunt, who only hold BNO passports. They cannot apply for Hong Kong SAR passports and Mainland Travel Permits. These people used to apply for China visas with their BNO passports but they could not do so now. (According to Asia Times, there were about 36,000 Indians, 18,000 Pakistanis and 25,000 Nepals in Hong Kong, according to the last census in 2016.)

## Recalibration of India-Russia ties

### News Excerpt

India's Foreign Secretary is on a two-day trip to Russia to "add momentum" to bilateral ties. The visit comes after the annual India-Russia summit was cancelled in December 2020.



### Pre-Connect

- Despite the occasional hiccups in the India-Russia ties, the cordial relations with Moscow have been integral to India's foreign policy. The two countries share a Special and Strategic Partnership.
- Apart from close cooperation on defence, the two sides have jointly worked in fields like oil and gas, nuclear energy, space, science, and technology.
- The annual summit is a unique feature of the India-Russia relations since 2000.
- Notwithstanding the threat of sanctions from the US, India would be receiving five S-400 air defence systems from Russia, which reflects the thrust India puts on its engagement with Russia.
- India is actively following the developments in Afghanistan and remains engaged with other regional countries, and Russia. Russia is an important ally as well as an important stakeholder in the region.
- Similarly, the two countries are closely working on UNSC reforms and have a converging view of many issues of regional and global significance.

### Analytica

- Soon after the cancellation of the annual summit in December 2020, it was speculated that there were tensions between the two countries over India's decision to join the US-led Quadrilateral Security Dialogue or QUAD.
- In the current changing geopolitical scenario when the US and China are in conflict, India-Russia ties are also evolving.
- India's strategic ties with Russia have very deep historic roots which provide stability and trust strong enough to navigate the complexities of the current world.
- India's relations with the U.S. and Russia stand on their own merits and all the major powers recognise fully India's tradition of an independent foreign policy.
- Chinese aggression in the border areas of eastern Ladakh brought India-China relations to an inflection point, but also demonstrated that Russia is capable of contributing to defusing tensions with China.

### Russia's unease with Quad

- India sees it as a framework for engagement with Russia. Russia is an important Pacific power. During his speech in Vladivostok in Russia in September 2019, Prime Minister Modi referred to Vladivostok as a junction between Eurasia and the Indo-Pacific.



- The Chennai-Vladivostok Maritime Corridor which will further link to the Northern Sea Route and the Pacific will create a connectivity continuum that will bind India and Russia together from the Arctic to the Indian Ocean.
- Contrary to certain speculation, India and Russia have more in common on the concept of Indo-Pacific. A multi-polar world and multi-polar Asia has to recognise the indispensable role of India and Russia.
- Moreover, India does not see the Indo-Pacific Region as a club of limited members nor as a new theatre for geostrategic contestation. It includes all nations in this geography as also others beyond who have a stake in it aimed at Security and Growth for All in the Region (SAGAR).

**Conclusion**

In the post-pandemic world, we would see a redefining of our understanding in a number of areas, including our understanding of security, which until now, was thought largely in the military, intelligence and economic terms. Today, greater weight is being assigned to health security and resilience of supply chains. Likewise, we will have to focus on the reform of multilateral institutions and recalibrate our approach to address global challenges such as climate change, terrorism, etc. In all these areas, India and Russia can work together for the common good.

**Myanmar’s military coup**

**News Excerpt**

For India, the return to military rule by Myanmar’s Tatmadaw (Army) and the arrest of Aung San Suu Kyi and the political leadership of the National League of Democracy (NLD), are a repeat of events thirty years ago, but the Indian government’s reaction, is likely to be starkly different to India’s strong public criticism of the Junta’s actions in 1989-90.

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**Pre-Connect**

- Myanmar, also known as Burma, is in South East Asia. It neighbours Thailand, Laos, Bangladesh, China and India.
- The country gained independence from Britain in 1948. It was ruled by the armed forces from 1962 until 2011, when a new government began ushering in a return to civilian rule.
- The military is now back in charge and has declared a year-long state of emergency. Military commander-in-chief Min Aung Hlaing has taken power.
- It seized control on 1 February following a general election which Ms Suu Kyi's NLD party won by a landslide.
- The protests over the coup have been the largest since the so-called Saffron Revolution in 2007, when thousands of monks rose up against the military regime.



- Protesters include teachers, lawyers, students, bank officers and government workers.
- Numerous countries have condemned the military takeover. UN Secretary-General António Guterres said it was a "serious blow to democratic reforms".
- The US and UK have responded with sanctions on military officials.
- However, China blocked a UN Security Council statement condemning the coup. Beijing, which has previously opposed international intervention in Myanmar, urged all sides to "resolve differences".

### Highlights

#### Analytica

#### (Impact on India’s Act East policy)

- Myanmar is a neighbour with which India had very ancient, old, strong, emotional, spiritual, cultural ties — and we have a lot of shared interests, economic but more importantly, strategic interests. For instance, India has stepped up its strategic engagement with Myanmar because of insurgent groups from the Northeast which have set up base in Myanmar.
- Apart from strategic concerns, India has cultivated several infrastructure and development projects with Myanmar, which it sees as the “gateway to the East” and ASEAN countries. These include the India-Myanmar-Thailand Trilateral highway and the Kaladan Multi-modal transit transport network, as well as a plan for a Special Economic Zone at the Sittwe deep-water port.
- India still hopes to help resolve the issue of Rohingya refugees that fled to Bangladesh, while some still live in India, and will want to continue to engage the Myanmar government on that.
- But the biggest stake of all is Sittwe in the Rakhine province where India has built a large, deep seaport. The location of the port, which will play a central role in connecting the Northeast region to the sea, and China’s string of pearls policy are the reasons why India has shied away from taking a clear position against the generals.
- New Delhi has repeatedly stated that it has “direct stake” in a stable, democratic federal Myanmar. The 1643-kilometre long land boundary means that Myanmar military is a stakeholder in northeast India’s security, even as New Delhi aspires to have the country act as a connectivity bridge between north-eastern India and southeast Asia.

#### Conclusion

- ✓ With the Myanmar military showing no signs of backing down, India will likely not follow in Washington’s footsteps. Instead of adopting a punitive strategy, its strategy is likely to be akin to ASEAN’s under-the-radar engagement approach.
- ✓ The choice between India’s democratic ideals that it has expressed in Nepal and Maldives recently, and ‘Realpolitik’, to keep its hold in Myanmar and avoid ceding space to China, will be the challenge ahead. The government should take a pragmatic approach, by continuing to engage with the military, while pushing for strengthening democracy and more freedoms in Myanmar. The stress on democracy is also a way for India to distinguish itself from China – which has extended its full support to the military and is facing the wrath of pro-democracy protesters on the streets of Yangon.

### India-Ukraine Defence Cooperation

#### News Excerpt

In an interview, YuriyHusyev, director-general of UkrOboron Prom, said Ukraine wished to increase its presence in India and offered various defence equipment at Aero India 2021.

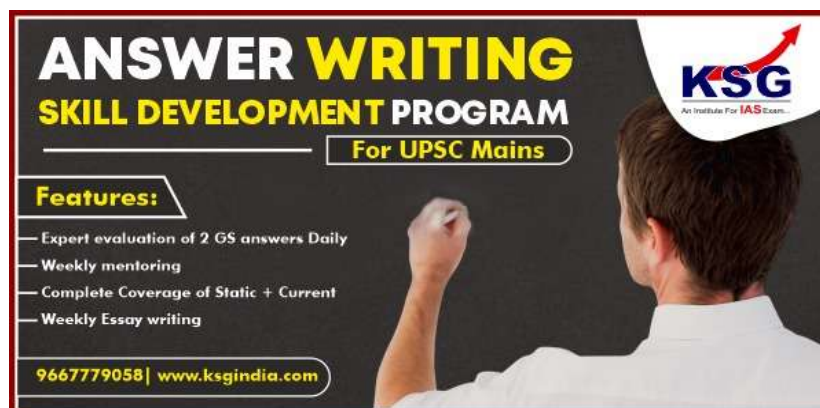
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#### Pre-Connect

- At present, the biggest ongoing defence cooperation between the two countries is the upgrade of nearly 100 AN-32 aircraft of the Indian Air Force by Ukrainian firm Antonov.
- India has also procured gas turbine engines from Ukraine to power many Navy vessels.
- Both nations share strong cooperation in the aerospace industry and are now in the process of negotiation with IAF and Indian partners
- They have signed agreements for new weapons and maintenance of existing Ukrainian systems in the Indian defence inventory.
- Ukraine is keen to offer India its multi-purpose medium transport aircraft, N-178.
- Aside from this, Ukraine has also been focusing on unmanned aerial systems (UAS) and anti-unmanned aerial vehicles (UAV).
- Their PD-2 range of unmanned aerial systems and the RAM 11 combat loitering UAS are on offer.
- The Ukraine team also held discussions with the Defence Research and Development Organisation (DRDO) and looked at possible collaborations in research and development.

### **India-Ukraine relations**

- India has an extensive bilateral relationship with Ukraine, spanning all spheres of cooperation. India was one of the first countries to recognize Ukraine.
- India and Ukraine have signed several MOUs/Agreements in different spheres such as: Diplomatic relations, visa matters, consular matters, trade and commercial matters, space, science and technology, defence, etc.
- Bilateral trade between the two countries has grown significantly in the last 25 years, and in 2018-19, was almost US\$ 2.8 Billion. India is Ukraine's largest export destination in the Asia-Pacific and the fifth largest overall export destination.
- There is a great interest in Indian culture in Ukraine at the public level, covering various aspects such as dances, yoga, philosophy, Ayurveda and spirituality.
- India offers training programs to Ukraine under ITEC (Indian Technical and Economic Cooperation) program, which offers training or capacity building programs in different centers of excellence in India. A small but vibrant Indian community lives in Ukraine, comprising mostly of business professionals and students. There are about 18,000 Indian students studying in Ukraine, mainly in the field of medicine.



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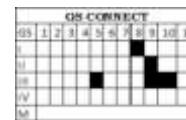
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**ENVIRONMENT**

**Ageing of Dam Infrastructure: UN Report**

**News Excerpt**

The report 'Ageing water infrastructure: An emerging global risk' is released by United Nations University's Canada based Institute. It has focused on assessment of the durability of major dams across the world.



**Key Highlights of the Report**

- The Report provides insights on the current state of knowledge on the ageing of large dams. Thousands of existing dams have reached or exceeded the 'alert' age, threshold of 50 years.
- Many large dams worldwide have reached or approaching the lower bound of their anticipated lifespan. For instance – North America and Asia hold around 16,000 large dams in the range of 50-100 years old and around 2,300 large dams over 100 years old.
- In the USA, the average age of all the 90,580 dams is 56 years, and over 85% of them are reaching the end of their life expectancy in 2020. In China, over 30,000 dams are considered ageing.
- It explores the evolving practice of 'decommissioning of ageing dams', to address issues of ensuring public safety, escalating maintenance costs, reservoir sedimentation, and restoration of a natural river ecosystem.
- The Report shows that 'dam decommissioning' is gaining pace in the USA and Europe, where many dams are older. However, it is limited to small dams, and the decommissioning of large dams is still infancy.
- As per the report, the world is unlikely to witness another large dam-building revolution as in the mid-20<sup>th</sup> century, but dams constructed then will certainly be showing their age.

**The International Commission on Large Dams (ICOLD) Symposium**

- ❖ ICOLD 2021 Symposium on Sustainable Development of Dams and River Basins was held in New Delhi, India.
- ❖ ICOLD is a non-governmental International Organization founded in 1928; it provides a forum for the exchange of knowledge and experience in dam construction engineering.
- ❖ ICOLD members are essentially practising engineers, geologists and scientists from governmental or private organizations, consulting firms, universities, laboratories and construction companies.
- ❖ ICOLD leads the profession in setting standards and guidelines to ensure that dams are built and operated safely, efficiently, economically, and are environmentally sustainable and socially equitable.
- ❖ ICOLD's current **World Register of Dams (WRD)** comprises over 58,700 large dams.
- ❖ India is a member country of ICOLD.

**Concerns related to Ageing Dams**

Key Concerns	Adverse Impacts
<ul style="list-style-type: none"> <li>• Ageing signs include increasing cases of dam failures, increasing costs of dam repair and maintenance, increasing reservoir sedimentation, and loss of a dam's functionality and effectiveness.</li> </ul>	<ul style="list-style-type: none"> <li>• Broke down and Failure of dam may have deep impacts on downstream habitats, people, agriculture, regional economy, water security and overall ecosystem including wildlife. Restoration may be 'beyond management'.</li> <li>• Excess accumulation of sedimentation may reduce the carrying capacity of dam.</li> </ul>
<ul style="list-style-type: none"> <li>• Aged dams would incur quickly rising</li> </ul>	<ul style="list-style-type: none"> <li>• Escalated cost would have extra burden on</li> </ul>

<p>maintenance needs and costs while simultaneously declining their efficiency.</p>	<p>exchequer. Declining effectiveness may pose threat to human safety and farming community at large.</p> <ul style="list-style-type: none"> <li>• Generation of Hydro-electricity may be reduced and availability of energy may compromise.</li> </ul>
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- Though fifty years is not a defining age for all dams but the design life also depends on factors such as construction and maintenance. However, 50 year is roughly the age when a dam may begin to show signs of ageing.
- Further, the climate change will accelerate the dam ageing process. Due to climate change, the changing rainfall patterns and fluctuations mean the inflow into the dams cannot be predicted and may be a lot different than what was assumed during the process of designing. This may induce or increase the ageing at faster rate.

Decommissioning can be defined as removing the dam, partially removing of dam or use it for a different purpose. It may redistribute the accumulated sediments and may help to aquatic ecosystem.

### Report and India's Dam Infrastructure

- As per the report, about 55% of the world's dams are in just four Asian countries, including India. India's current dam construction rate is highest among the world.
- In India, over 1,115 large dams will be at around 50 years mark by 2025. Over 4,250 large dams would pass 50-years of age, with 64 large dams being 150 years old at 2050.
- India's ageing dams may threaten farmers' income, increase instances of flooding and may aggravate the issue of water security. Dams and reservoirs are believed to secure water needs for the future.
- India must conduct a cost-benefit analysis of its ageing dams, and conduct timely safety reviews in order to ensure their operational and ecological safety, as well as the safety of those who inhabit the areas downstream.

**PEPPER IT WITH**  
National Register of Large Dams, DRIP Project, Central water Commission, Jal Shakti Ministry, DHARMA App

### Dam safety initiatives taken by India

- ✓ A dam safety organization was formed within the Central Water Commission (CWC) in 1979. CWC has developed web-based asset management tools named DHARMA and SHAISYS.
- ✓ National Committee on Dam Safety (NCDS) is an advisory body which suggests ways to bring dam safety activities in line with the latest advancements in the field.
- ✓ Ministry of Jal Shakti initiated World Bank assisted Dam Rehabilitation and Improvement Project (DRIP).
- ✓ The Dam Safety Bill 2019 provides for the surveillance, inspection, operation, and maintenance of all specified dams across the country. The Bill is likely to be introduced in Rajya Sabha in near future.

### Conclusion

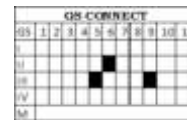
The Report aims to draw global attention to the creeping issue of ageing water storage infrastructure and stimulate national and international efforts to deal with this emerging risk. The report primarily suggests governments and their partners responsible for planning and implementing and monitoring the water infrastructure development and management. The report also seeks to emphasize the importance of adaptation to a changing climate and for subsequent attainment of sustainable development goals.



## National Hydrogen Energy Mission

### News Excerpt

In this year's Union budget, the Government has announced to roll out the National Hydrogen Energy Mission in 2021-22 to use hydrogen as a clean energy fuel source.



### About Hydrogen and NHEM

- The NHEM aims for generation of **hydrogen from green power (Green Hydrogen)** resources and facilitate its commercial use.
- NHEM will focus on R&D and demand formation to use hydrogen in industry and transportation, create an eco-system including policies and bring industry on board along with international partnerships.
- For this purpose, Government has allocated Rs 1,500 crore for Indian Renewable Energy Development Agency (IREDA) and the National Hydrogen Mission in 2021-22 for generating Hydrogen from green energy sources.
- Hydrogen with its abundance is a clean fuel. It has high energy density, better combustion characteristics, and nonpolluting nature.
- Hydrogen could be an efficient substitute to liquid and fossil fuels. Its physical properties are – At standard temperature and pressure, hydrogen is a nontoxic, nonmetallic, odorless, tasteless, colorless, and highly combustible diatomic gas.
- Hydrogen is not a source of energy but an energy carrier that is derived from a source of energy. There are different ways to produce hydrogen–

Grey hydrogen	Blue hydrogen	Green hydrogen
<ul style="list-style-type: none"> <li>• It is produced by using fossil fuels.</li> <li>• It is obtained by a specialized process in which steam (water vapour) is mixed with natural gas that reacts with the methane and breaks the gas down into carbon monoxide and hydrogen.</li> <li>• To a lesser extent, hydrogen is also produced from petroleum and coal.</li> <li>• These processes release a significant amount of CO<sub>2</sub>.</li> <li>• Grey hydrogen accounts for some 95% of the hydrogen produced in the world today.</li> </ul>	<ul style="list-style-type: none"> <li>• It is generated by using non-renewable energy sources such as natural gas.</li> <li>• Natural gas is decarbonised with Carbon Capture, Utilisation and Storage solutions.</li> <li>• It is also possible to decarbonise methane of natural gas into hydrogen by decomposing it to solid carbon and gaseous hydrogen without producing carbon dioxide.</li> <li>• Blue hydrogen is not inherently carbon-free; the production requires carbon-dioxide (CO<sub>2</sub>) monitoring, verification, and certification.</li> </ul>	<ul style="list-style-type: none"> <li>• Green hydrogen refers to hydrogen produced via <b>the electrolysis</b> of water by using renewable energy sources (electricity) such as solar or wind.</li> <li>• It is an ideal solution, especially now that the price of wind and solar energy has been decreasing.</li> <li>• Today, less than 0.1% of global dedicated hydrogen production comes from water electrolysis.</li> </ul>

### Hydrogen as an Alternative Fuel in India

- Hydrogen is one of the cleanest fuels, which on being burnt in air produces only water as a by-product and no carbon-based emissions are released, thereby leading to zero vehicular emissions. Hydrogen can be used as an automotive fuel through both fuel cells and internal combustion engines.
- In the case of green hydrogen, electricity generated from renewable energy is used to split water into hydrogen and oxygen. This is by far the cleanest method of producing hydrogen

at the moment. Majority of the hydrogen production in India takes place via fossil fuels and is used primarily in the chemical and petrochemical sectors.

- Presently, 50 buses are running on hydrogen spiked compressed natural gas (H-CNG) on a six-month pilot project in Delhi.
- Unlike the global trend of blending hydrogen with CNG, these buses will run on a new technology patented by the Indian Oil Corporation Limited that produces H-CNG (18% hydrogen in CNG) directly from natural gas, without having to undertake expensive conventional blending.
- This compact blending process provides a 22% reduction in cost as compared to conventional blending.
- In comparison to CNG, H-CNG allows for a 70% reduction in carbon monoxide emissions and a 25% reduction in hydrocarbon emissions.
- The new H-CNG technology requires only minor tweaks in the current design of existing CNG buses.

### Advantages of Green Hydrogen

- ✓ The adoption of green hydrogen will help India to achieve its emissions pledges and goals under the Paris Agreement. Green hydrogen would foster the process of decarbonizing the economy’s hard-to-electrify sectors, such as long-haul trucking, aviation, and heavy manufacturing.
- ✓ Production of Green Hydrogen would help to reduce import dependency on fossil fuels. Green hydrogen is likely to reduce the carbon footprint.
- ✓ The use of hydrogen can reduce the CO2 related emissions significantly at the point of use and if green hydrogen is used then there is capability to decarbonize the entire value chain, enabling reduced emissions and climate change threats. It can even decarbonize the sectors where it is difficult to reduce emissions.
- ✓ Hydrogen is a basic earth element and found abundantly. It doesn’t produce harmful emissions like internal combustion engine. It is a non-toxic substance which is rare for a fuel source.
- ✓ Hydrogen is three times as powerful as gasoline and other fossil fuels. This means that it can accomplish more with less. It is fuel efficient. It is renewable. It can be produced again and again, unlike other non-renewable sources of energy.

- ❖ In order to becoming carbon neutral by 2035, Reliance Industries plan to replace transportation fuels with hydrogen and clean electricity.
- ❖ The National Thermal Power Corporation (NTPC) is considering setting up a green hydrogen production facility in Andhra Pradesh.
- ❖ The ministry of road transport and highways issued a notification proposing amendments to the Central Motor Vehicles Rules (1989) to incorporate safety standards for hydrogen fuel cell technology vehicles.
- ❖ As per a policy brief issued by TERI, demand for hydrogen in India is expected to increase 3-10 fold by 2050.

### Key challenges with Green Hydrogen

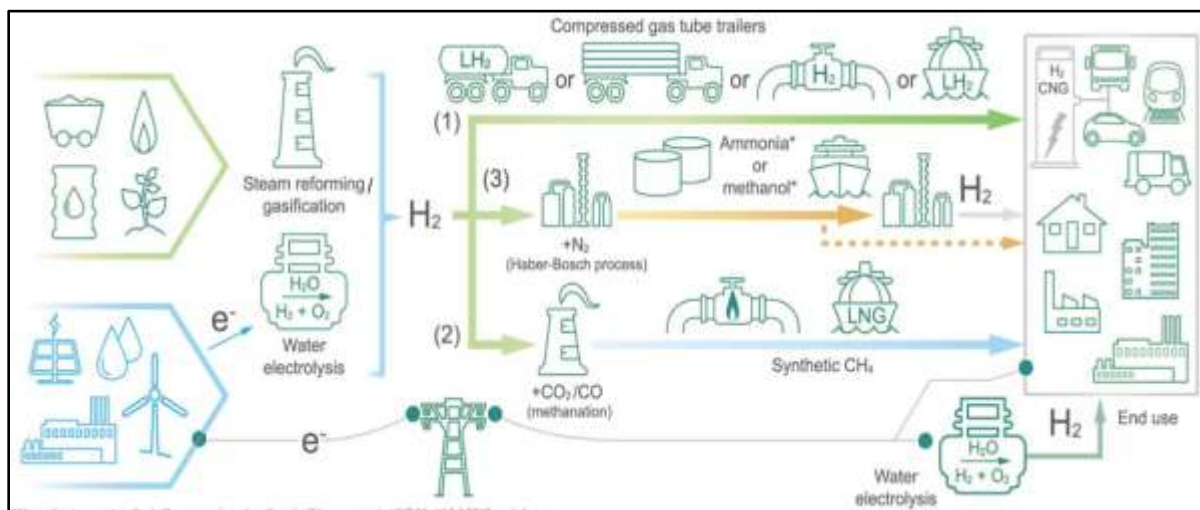
- Hydrogen is a bit expensive. It is difficult to store and transport as it require high pressure all the time. Developing its supply chain distribution is huge challenges. Since, it is a very powerful source of fuel, hydrogen is flammable.
- Although hydrogen energy is renewable and has minimal environmental impact, other non-renewable sources such as coal, oil and natural gas are needed to separate it from oxygen. While the point of switching to hydrogen is to get rid of using fossil fuels, they are still needed to produce hydrogen fuel.

**PEPPER IT WITH**  
 INDC, Paris Agreement,  
 Hydrogen Association of India,  
 Hydrogen Fuel Cells

- Green hydrogen is currently not cost competitive vis-à-vis grey or blue hydrogen, produced from fossil fuels. Cost difference is around US\$ 2.00/kg. Fossil fuel-based Hydrogen is a major deterrent for industries to encourage adoption of green hydrogen initiative.
- Production cost of hydrogen varies based on production technology and input costs, such as natural gas cost, coal gasification process cost, and cost of renewable sources of electricity. Utilisation (production process utilisation) would also be an important factor in arriving at costs.
- Hydrogen blending into natural gas grid may require a new and upgraded pipeline infrastructure.
- There are significant efficiency losses when producing green hydrogen using electricity produced from renewable sources and converting hydrogen back into electricity. Significant energy is loosed during the process of electrolysis. For instance– using electricity to produce hydrogen and then compressing, storing, transporting, and converting it back into electricity using a fuel cell can result in almost 60% loss of the original energy content.
- The cost of green hydrogen mainly depends on the cost of the electrolyser, the price of the renewable electricity used, and system utilisation. These cost inputs would play a vital role in determining the use of green H<sub>2</sub> and large-scale adoption.

### Way forward

- ✦ There is need to create demand for green hydrogen to facilitate its production, and address the infrastructure challenges through appropriate policy and budgetary supports. Boost demand by focusing on major policy areas, including imposing sectoral obligation to replace fossils or grey H<sub>2</sub> with Green H<sub>2</sub>, allowing voluntary blending of hydrogen into gas grid, dedicated hydrogen pipeline, incentivization to end-use sectors, etc.
- ✦ Government should support an accelerated deployment with policies enabling



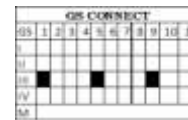
indigenization of large-scale manufacturing of electrolyser and associated systems to mitigate supply chain risks and any international intervention.

- ✦ In order to make robust infrastructure and network of refueling stations mass adoption of Fuel Cell Electric Vehicles (FCEVs), and infrastructure investment is required. Government should offer initial incentives in the form of subsidies, grants, and concessional financing to provide an impetus to green hydrogen.
- ✦ At this juncture, with multi-stake holder calibrated approach, India can uniquely position itself to take advantage with increasing investment in Hydrogen R&D, capacity building, compatible legislation, and the opportunity for creation of demand among its vast population.

## Sustainable Development of Little Andaman Island

### News Excerpt

NITI Aayog is proposing to construct a mega financial-tourist complex on Little Andaman Island.



### Pre-Connect

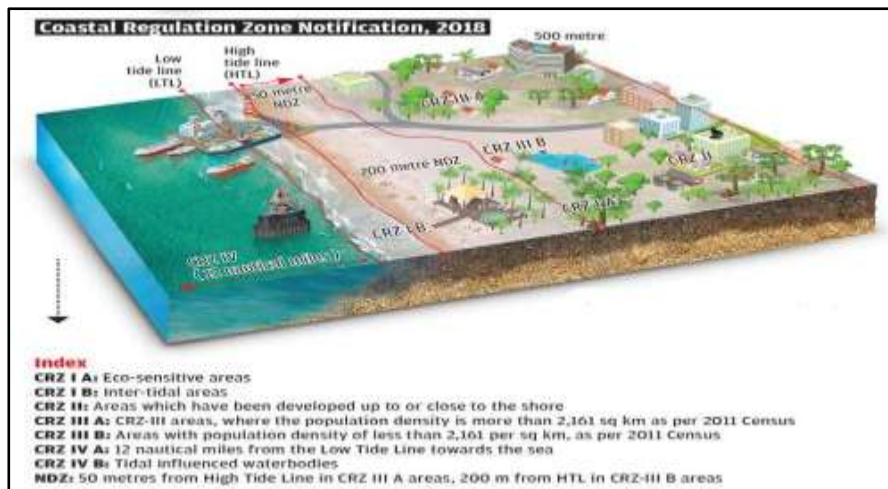
- The Andaman and Nicobar Island region is located further south than Kanyakumari and is closer to Myanmar and Sumatra than to the Indian mainland.
- This island is a part of the Sundaland global biodiversity hotspot. It is home to many endemic species. In 1989, the government had declared the island as a biosphere reserve and later in 2013; it was included in UNESCO’s biosphere programme.
- Earlier in 2020, Andaman and Nicobar Islands was proposed to be developed as a “maritime and startup hub”. Around 12 islands of the archipelago had been selected for high-impact projects with an emphasis on boosting trade for the region.
- This Island region is one of the most important **nesting sites of the globally endangered Giant Leatherback sea turtle.**

### About: Tourist complex on Little Andaman Island

- The ‘Sustainable Development of Little Andaman Island - Vision Document’, is the NITI Aayog’s pitch to leverage the strategic location and natural features of the little Andaman island region. It will be done by building a new Greenfield coastal city that will be developed as a free trade zone. Therefore, foreign investment is likely to come.
- The proposal is pivoted along three development anchors and zones–
  - **Zone 1** — spread over 102 sq km along the east coast of Little Andaman — will be the financial district and medi city and will include an aerocity, and a tourism and hospital district. Spread over 85 sq km of pristine forest.
  - **Zone 2**, the leisure zone, will have a film city, a residential district and a tourism SEZ.
  - **Zone 3** — on 52 sq km of pristine forest — will be a nature zone, further categorised into three districts: an exclusive forest resort, a nature healing district and a nature retreat, all on the western coast.
- An international airport capable of handling all types of aircraft will be central to this development vision. International airport is determinant of all developmental activities.
- A plan for the sustainable and holistic development of the 680 sq km will make Andaman ‘Financial hub’ and will compete with Singapore and Hong Kong.
- It has been cited that the strategic location of the region is best suited for ‘financial center’, separate regulation, relaxed norms, FDI can easily be implement by the government and respective agencies.

### Coastal Regulation Zone (CRZ)

- In India, the Coastal Regulation Zone (CRZ) Rules govern human and industrial activity close to the coastline, in order to protect the fragile ecosystems near the sea.





- They restrict certain kinds of activities — like large constructions, setting up of new industries, storage or disposal of hazardous material, mining, reclamation and bunding — within a certain distance from the coastline.
- CRZ Rules are made by the Union environment ministry; implementation is to be ensured by state governments through their Coastal Zone Management Authorities.

### Pain Points

- Such Greenfield projects require the large diversion of forest land that would cause obvious environmental loss leading to irreversible ecological damages.
- The proposed construction of a mega financial-tourist complex on Little Andaman Island will place at risk a fragile ecosystem and result in habitat loss. For instance—more than 2 million trees stand in the forest land sought for these projects including habitats of various wild animals.
- Moreover, No adaptation, restoration and environment impact assessment report has presented so far. This poses a greater degree of threat to overall ecosystem.
- The Andaman and Nicobar Island is located in the seismic zone, an earthquake-prone area, and the December 2004 tsunami had a devastating impact on them, therefore proximity of this region to natural hazard may yield sub-optimal outcomes.
- In long term, Project may change the demographic pattern, and rights of indigenous tribes may be undermined. Onge tribe could be more vulnerable, and resistance may pose safety issues, further their welfare approach may be changed due to changed developmental priorities.
- There are several other concrete obstacles like— 95% of Little Andaman is covered in forest, a large part of it the pristine evergreen type. Some 640 sq km of the island is Reserve Forest under the Indian Forest Act, and nearly 450 sq km is protected as the Onge Tribal Reserve, creating a unique and rare socio-ecological-historical complex of high importance.
- The vision needs 240 sq km (35%) of this land and the solutions suggested are simple and straightforward — de-reserve 32% of the reserved forest and de-notify 138 sq km or 31% of the tribal reserve. And if the tribals become an impediment, the vision suggests that they “can be relocated to other parts of the island”. Therefore, tribal welfare approach may change in the name of development, their rehabilitation would be an another issue that would remain unaddressed.

**Artificial Energy Island Project**

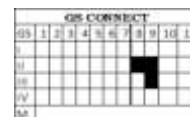
- ❖ Denmark has proposed to build Artificial Energy Island in North Sea. An energy island is based on a platform that serves as a hub for electricity generation from surrounding offshore wind farms.
- ❖ Denmark wants to become the first country in the world to begin working on such energy islands with a total capacity of about 5 GW offshore winds.
- ❖ The construction of both islands is expected to be complete by 2030. It is a part of country’s efforts to produce green energy.
- ❖ The move has come after the EU announced its plans to transform its electricity system to rely mostly on renewables within a decade and to increase its offshore wind energy capacity by over 25-fold by the year 2050.

**PEPPER IT WITH**  
 EIA, Shailesh Nayak  
 Committee, GIFT City,  
 Environment Protection Act,  
 1986 Biodiversity Hotspot

## World Sustainable Development Summit

### News Excerpt

Recently, during the 20th edition of the Energy and Resources Institute's (TERI) flagship event, the World Sustainable Development Summit (WSDS) 2021, was held in New Delhi.





## About WSDS

- Over the years, the Summit has brought together around 50 Heads of State and Government, many Nobel Laureates, thousands of Business Leaders and many delegates from around the world.
- WSDS is often cited as the only Summit on global issues which taken place in the developing world, WSDS now strives to provide long-term solutions for the benefit of global communities by assembling the world's most enlightened leaders and thinkers on a single platform.
- WSDS has established itself as a responsible and an effective platform for mobilizing opinion-makers to identify and advance pioneering actions to address some of the most relevant issues concerning sustainable development.

## Key Highlights of Summit

- Energy and industry transition, adaptation and resilience, nature-based solutions, climate finance, circular economy, clean oceans, air pollution, among a range of topics is being discussed at the 2021 edition of TERI's WSDS.
- India has cited that Climate justice is inspired by a vision of trusteeship- where growth comes with greater compassion to the poorest. Togetherness and Innovation is the two most important tools to achieve the sustainable development goals.
- India cited that sustainable development will only be achieved by collective and streamlined efforts. When every individual thinks of national good, every nation thinks of global good, that is when sustainable development will become a reality.
- Climate justice also means giving the developing countries enough space to grow. When each and every one of us understands our individual and/ collective duties, climate justice will be achieved.
- India asserted that conventional approaches cannot solve the contemporary problems. Therefore, the need of the hour is to invest in our youngsters and work towards sustainable development.

**PEPPER IT WITH**  
NITI Aayog's Baseline Report of the Sustainable Development Goals (SDG) Index, SDG Targets, Agenda 21, Rio Declaration

## Some of India's Initiative for sustainable development

- ✓ India is on the right track to exceed its commitment, target and pledges made under Paris Agreement.
- ✓ India is implementing its all SDG related pledges and four international reports substantiated that, for instance—the United Nations Environment Program's emission gap report, the climate change action tracker report, the climate change performance index, and the transparency report, state that India is leading from the front and is implementing all its pledges well before time.
- ✓ In March 2019, India achieved nearly 100% electrification. This was done through sustainable technologies and innovative models.
- ✓ Through the Ujala program, three sixty seven million LED bulbs became a part of people's lives. This reduced over thirty eight million tonnes carbon dioxide per year.

### Hyderabad wins Global 'Tree City' status

- ❖ Hyderabad's urban forestry campaign gets global recognition.
- ❖ The city has grabbed 'Tree Cities of the World' status conferred by the UN-FAO and Arbor Day Foundation.
- ❖ Now, the city became the part of an important global network leading the way in urban and community forestry.
- ❖ The city was evaluated based on the five standards –'Establish Responsibility', 'Set the Rules', 'Know What You Have', 'allocate the Resources', and 'Celebrate the Achievements'.
- ❖ Hyderabad is the only city in the country to have been selected for this recognition. The recognition stands Hyderabad alongside 120 cities from 23 countries, including developed nations such as USA,

- ✓ The Jal Jeevan Mission has connected over thirty-four million house-holds with tap connections in just about 18 months.
- ✓ Through the PM UjjwalaYojna more than 80 million house-holds below poverty line have access to clean cooking fuel.
- ✓ India is working to increase the share of natural gas in India's energy basket from 6 percent to 15 percent.
- ✓ India has significantly reduced its emission intensity and implements many efforts to increase forest cover.

**Conclusion**

- Sustainable development is important as it saves national budget, fulfills the need of people, saves natural resources, helps in the coordination between the natural resources and people and conserves natural resources for future generation. Stabilising and reducing carbon emissions are the key component under sustainable development.
- There is need to balance our economic, environmental and social needs in order to achieve the goals of sustainable development, allowing well-being for now and up-coming generations.
- Sustainable development encourages us to conserve and enhance our resource base, by gradually changing the methods in which we develop and use technologies.

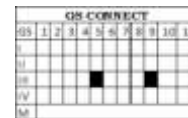
**Carbon watch**

- ❖ Chandigarh became first in India to launch ‘Carbon Watch’ to assess the carbon footprint of an individual.
- ❖ This app utilizes individual data on energy, water, waste generation and transport (vehicular movement)
- ❖ With the mentioned information, the mobile application will automatically calculate the carbon footprint of the individual.
- ❖ The application will also provide information such as the national and world average of the emission, and the individual’s level of emission generation.

**IEA: India Energy Outlook 2021**

**News Excerpt**

India Energy Outlook 2021, report has released by International Energy Agency (IEA). The report scrutinizes pathways out of the crisis that emerged from the Covid-19 pandemic, as well as long-term trends in India’s energy sector.



**Key Points of the report**

- India Energy Outlook 2021 explores the opportunities and challenges ahead for India as it seeks to ensure reliable, affordable and sustainable energy to a growing population.
- India at present is the fourth-largest global energy consumer behind China, the United States and the European Union. India to overtake EU as world’s third largest energy consumer by 2030.
- In its India Energy Outlook 2021, IEA saw primary energy consumption almost doubling to 1,123 million tonnes of oil equivalent as the Gross Domestic Product (GDP) expands to USD 8.6 trillion by 2040.
- India accounts for nearly one-quarter of global energy demand growth from 2019-40 — the largest for any country. Its share in the growth in renewable energy is the second-largest in the world, after China.
- A five-fold increase in per capita car ownership will result in India leading the oil demand growth in the world. Also, it will become the fastest-growing market for natural gas, with demand more than tripling by 2040.
- India’s continued industrialization becomes a major driving force for the global energy economy. Over the last three decades, India accounted for about 10 per cent of world growth in industrial value-added (in PPP terms).

- By 2040, India is set to account for almost 20 per cent of global growth in industrial value-added, and to lead global growth in industrial final energy consumption, especially in steelmaking. The nation accounts for nearly one-third of global industrial energy demand growth to 2040.
- India will become the fastest-growing market for Natural gas, with demand more than tripling by 2040. Natural gas import dependency increased from 20% in 2010 to almost 50% in 2019 and is set to grow further to more than 60% in 2040.
- Coal currently dominates India's electricity sector, accounting for over 70% of overall generation. Coal demand is seen rising to 772 million tonnes in 2040 from the current 590.
- India's share in the growth in renewable energy is the second-largest in the world, after China.

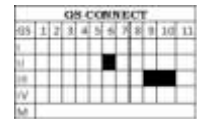
### **Conclusion**

- As the world seeks ways to accelerate the pace of transformation in the energy sector. India is in a unique position to pioneer a new model for low-carbon, inclusive growth. Many aspects of such a model are already evident in India's policy vision, and many more are highlighted in the Sustainable Development Scenario that points the way for India towards net-zero emissions.
- India is already a global leader in solar power – and solar combined with batteries will play a massive part in India's energy future. But India will need a whole host of technologies and policies to chart this new path. As new industrial sectors emerge and clean energy jobs grow, India will also need to ensure that no one is left behind, including in those regions that are heavily dependent on coal today.

## **Centre for Wetland Conservation and Management (CWCM)**

### **News Excerpt**

On the World Wetlands Day (2 Feb), India has established a First dedicated Wetland Conservation and Management Centre under Ministry of Environment, Forest and Climate Change (MoEFCC) in Chennai.



### **Pre-Connect**

- India is home to 42 wetlands of international importance, also known as Ramsar sites.
- India has nearly 4.6% of its land as wetlands, covering an area of 15.26 million hectares.
- The year 2021 also commemorates the 50<sup>th</sup> anniversary of the signing of the Ramsar Convention on Wetlands. It was established in 1971 and came into force in 1975.



- Wetlands include mangroves, peat lands and marshes, rivers and lakes, deltas, floodplains and flooded forests, rice-fields, and even coral reefs. Wetlands exist in almost every climatic zone, from the Polar Regions to the tropics, and from high altitudes to dry regions.

### About CWCM

- The newly-established CWCM will sustain partnership and networks with national and international agencies that work on wetlands conservation.
- The Centre (CWCM) would give a fillip to capacity development and cutting-edge research on wetlands of India.
- This Centre would address the need of specific research, conservation and knowledge gaps, and will aid in the application of integrated approaches for conservation, management and wise use of the wetlands in sustainable manner.
- The Centre would act as a knowledge hub and facilitate exchanges between States and Union Territory Wetland authorities, users, managers, researchers, policy-makers and practitioners.
- The Centre will also help national and State/UT governments plan, monitor, design and implement policy and regulations, as well as carry out targeted research for effective conservation strategies.

**PEPPER IT WITH**  
 Montreux Record,  
 Biodiversity Act, Wild life  
 protection act, Wetland  
 conservation rules

### Way forward

- ✓ India should set up a stringent regulatory mechanism for all wetlands, so as to maintain their ecological character and ultimately support their integrated management.
- ✓ Wetlands should be protected by passing appropriate laws and promoting programs, including citizenry participation that would help to protect existing wetlands. Regulated and permit-based activities should allow for the extraction of resources from wetland wetlands.
- ✓ Through restoration wetlands can also be created by turning non-wetlands into wetlands. Government and newly formed CWCM should explore this aspect and deliver a 'win-win' practice to not only conserve the existing but to increase the total areas of wetlands.

## Climate change and Lake Chad Crisis

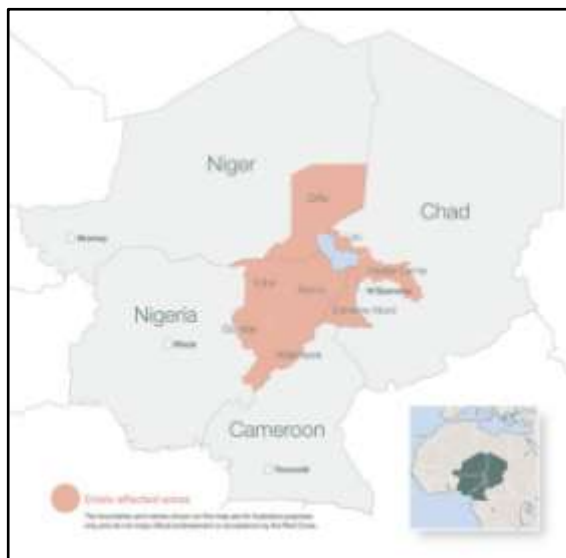
### News Excerpt

The United Nations described the Lake Chad crisis as 'one of the worst in the world'. Lake Chad has shrunk by 90 per cent over the last 60 years.

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### Pre-Connect

- The Convention on **the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention)** was adopted in Helsinki in 1992 and entered into force in 1996.
- The Convention is a unique legally binding instrument promoting the sustainable management of shared trans-boundary water resources.
- Following an amendment procedure, since March 2016 all UN Member States can accede to the convention. **Chad and Senegal have become the first African Parties in 2018** and Ghana acceded in 2020.
- The Lake Chad basin includes World Heritage sites, biosphere reserves and





Ramsar sites. Some Internationally important sites are also the part of Lake Chad basin.

### About Lake CHAD

- Lake Chad is a freshwater body located in the Central African region, it borders with four countries — Chad, Nigeria, Niger and Cameroon. It is blessed with rich aquatic and terrestrial biodiversity.
- Moreover, the ‘inland Lake Chad Basin’ covers almost 8% of the continent, spreads over seven countries like Algeria, Cameroon, Central African Republic, Chad, Libya, Niger and Nigeria. Its mean depth is between 3.5 to 4 feet.
- Lake Chad is vital for indigenous, pastoral and farming communities. It supports drinking water, irrigation, fishing, livestock and economic activity for over 30 million people in the region for many years. However, climate change has fueled a massive environmental and humanitarian crisis.
- In times of political instability, the local rebel groups further escalate the humanitarian crisis and forcing people to move in a feared milieu. This causes social mistrust and along with it, the issue of environmental crisis is looming in the absence of active citizenry.

### Issues with Lake CHAD

- ✓ The lake has shrunk 90 per cent since 1960s, due to prolonged droughts, overuse, irregular extraction and climate change adversaries. The surface area of the lake was 26,000 square kilometres in 1963; it has now reduced to less than 1,500 square kilometres.
- ✓ Diminishing water body aggravates conflict between herders and settled farmers as they are losing their livelihoods. Families who relied on the lake started migrating to other areas in search of water, food and living stability. The drying of the lake may be attributed to the perils of poverty including the ache of migration. This causes serious setbacks to Sustainable development goals and overall peace in the region.
- ✓ Due to years of depletion, climate variability has largely contributed to fueling insecurity in Lake Chad’s riparian communities. These include persistence economic losses; divisive reforms; poor governance; rising inequality and burgeoning corruption among the ruling elite.
- ✓ Boko Haram is an insurgent group which has a strong foothold in the region. People who are facing risks due to climate-induced adversaries may find a solution in terms of their engaging in violent conflict to feed and protect themselves. This crisis fueled by environment reasons and security concerns has already displaced nearly 2.5 million people across the neighbouring countries. Over 10,000 deaths were reported between 2009 and 2016.

**PEPPER IT WITH**  
FOCUS-Africa, Sahel  
Region of Africa, SDGs,  
Horn of Africa

### Analytica

- The population of African continent is exploding and Lake Chad is shrinking due to climate change, further instable political regime hampers the conservation initiative. This poses multifarious challenges in terms of food insecurity, conflicts, terrorism, displacement of people and climate change.
- Indigenous people are facing challenges to sustain their lives — their ability to adapt to climate change is diminishing and the region has been ripped apart from conflict at an unprecedented scale. This is a great setback to the inherent ability of the people to deal with climate change and its effects.
- The depleting natural resources and grazing lands in the region has increased conflict between farmers and pastoralists. Poor livelihood and lack of income generation opportunities in the region compels young people to join rebel groups and engage in anti-social activities.
- As per the Global Terrorism Index report, 2020 Countries of the Lake Chad basin are among the 10 least peaceful countries in Africa. For more than a decade, the people of Lake Chad were engulfed in a violent conflict. The ever-changing climate has exaggeratedly

deteriorated the situation, intensifying food and nutritional insecurity, temperature is rising one-and-a-half times faster than the global average, the seasonal and inter-rainfall patterns have been drastically changing each year. This may pushed communities into cycle of poverty and in the arms of terrorist groups.

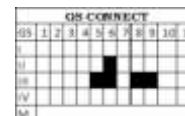
### Way forward

- ✦ Sustainable management of natural resources is likely to strengthen regional stabilization, lessen people’s vulnerability and increase resilience. The major focus should be given to empower and integrate the internally displaced persons and refugees into the mainstream society. In order to cope with sustained engagement, good governance and international cooperation is required.
- ✦ Region oriented management of water resources is a much needed step. Climate and conflict-sensitive livelihood models might empower youths amidst the changing climate and violent conflicts. Cultivation of climate-tolerant crops such as millets, tubers and cereals, could efficiently ameliorate the socio-economic situation. This will sustainably diversify rural income as well along with stability in livelihood.
- ✦ Food security analysis and early warning systems should be reinforced to help communities, and prepared them effectively for threats and future climate related shocks. To make this happen, there is a need to implement systematic data collection and institutional research.

## Go Electric Campaign

### News Excerpt

The Union Minister for Road Transport & Highways launched the “Go Electric” Campaign to spread awareness on e-mobility and related infrastructure.



### About Go Electric Campaign

- The campaign is aimed at creating awareness at the national level and is expected to boost the confidence of electric vehicle manufacturers.
- Bureau of Energy Efficiency (BEE), under the aegis of the Ministry of Power, is mandated to undertake an awareness drive for promoting public charging, e-mobility and its ecosystem.
- To implement the Go Electric campaign at the national and state levels, BEE will extend technical support to the State Designated Agencies (SDAs) and other partners to ensure uniformity of information.
- Go Electric campaign is an important initiative that would help to reduce the import dependence in the coming years and would be an important step towards a cleaner and greener future.

### Steps Taken for adoption of E-Vehicles

The various central and state ministries and nodal agencies have come up with policies and initiatives to push the adoption of electric vehicles at an accelerated pace. The policies and initiatives such as National Electric Mobility Mission Plan, FAME-I and II, National Mission for Transformative Mobility and Battery Manufacturing, Phased Manufacturing Program, Advanced Chemistry Cell Production Linked Incentive Scheme have been devised to give the required boost to the sector

### Significance of such moves

Such campaigns will make energy transition and to move ahead on the path of a low carbon economy, thereby saving planet including India from the adverse impact of climate change. Electrification of public transport is not only economical but also ecofriendly.

## E-Mobility and Related Infrastructure

### What more needs to be done-

- **Demand-side Support:** It involves well-designed incentives (fiscal and non-fiscal) to kick-start EV programmes by motivating to acquire EVs by reduction in costs and increased returns on investments.
- **Supply-side factors** include strengthening the manufacturing base through a host of interventions and promote research and development activities by encouraging Original Equipment Manufacturers (OEMs) and ancillary industries like spares and component vendors.
- **Enablers** are expected to bridge the gap between the demand and supply factors and help develop a cohesive environment.

### Analytica

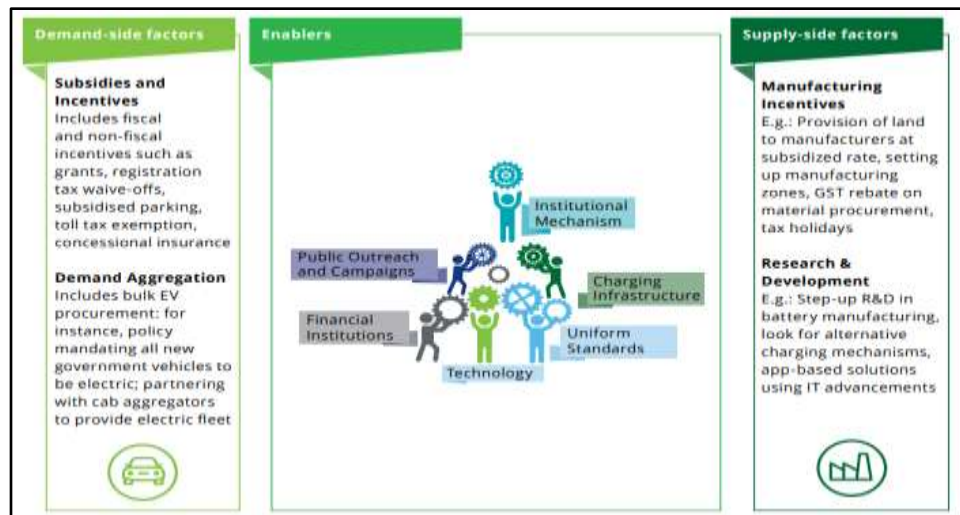
- Keeping in view the climate change commitments made by Government of India during the COP21 Summit held at Paris to reduce emission intensity by 33-35% by 2030 from 2005 levels, it is pertinent to introduce alternative means in the transport sector which can be coupled with India's rapid economic growth, rising urbanization, travel demand and country's energy security. Electric mobility presents a viable alternative in addressing these challenges, when packaged with innovative pricing solutions, appropriate technology and support infrastructure.

- Electric mobility comes with zero or ultra-low tailpipe emissions of local air pollutants and much lower noise, and, by being one of the most innovative clusters for the automotive sector, can provide a major boost to the economic and industrial competitiveness, attracting investments, especially in countries.

- Electric vehicles could help to diversify the energy needs required to move people and goods, mix of primary energy sources used in power generation attribute to the energy

**Switch Delhi Scheme**

- ❖ To promote the use of electric vehicles in the Capital, Delhi government launched a 'Switch Delhi' campaign. It will educate people about the benefits of electric vehicles (EV) and urge them to make a switch towards cleaner fuel.
- ❖ To address the vehicular pollution in Delhi, the government notified the Delhi Electric Vehicle Policy in August 2020. The vision is that 25% of all vehicles in Delhi should run on electricity by 2024.
- ❖ The Delhi government has rolled out the highest incentive on the purchase of EVs among all States. Incentives on EVs range from a maximum of ₹30,000 for two and three-wheelers and up to ₹1,50,000 on the purchase of 4-wheelers. This subsidy is received directly bank account within three days of the purchase.
- ❖ Additionally, Road tax and registration fees have also been made completely free and tenders have been floated to develop 100 public charging stations across the city.



security. If coupled with the decarbonization of the power sector, electric vehicles that would provide major contributions to keep the world on track to meet its shared climate goals.

### Advantages and benefits of e-mobility

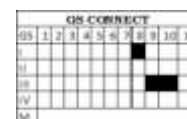
- **Economic benefits:** Adoption of e-mobility would contribute to green economic growth, Employment opportunities, Lower consumer cost (if support by government) and Reduced e-vehicle maintenance costs. It would be ‘win-win’ situation for all the stakeholders.
- **Environmental benefits:** Moving to e-vehicles would improve the air quality through a reduction of hydrocarbons, Less reliance on fossil fuels, Reduced energy usage and Reduced noise pollution.
- **Technology benefits:** e-mobility would encourage manufacturer and innovation of EV, Power grids modernization etc.

**PEPPER IT WITH**  
 FAME-I & II, Production  
 Linked subsidies, INDC,  
 BEE, NITI Aayog

### Uttarakhand Glacial Lake Outburst Floods

#### News Excerpt

Recently, Nanda Devi glaciers broke off that caused an avalanche and deluge, and subsequently, they have caused Glacial Lake Outburst Floods (GLOFs) in the Chamoli district of Uttarakhand.

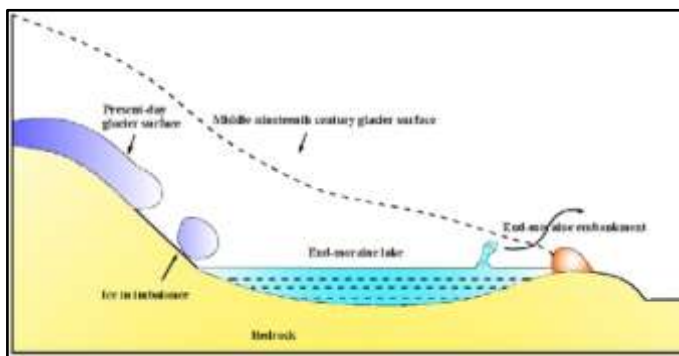


#### About GLOF

- When glaciers melt, the water in glacial lakes accumulates behind loose, natural ‘glacial/moraine dams’ made of ice, sand, pebbles and ice residue. Such moraine-dammed lakes appear to be the most common type of glacial lakes.
- Unlike earthen dams, the weak structure of the moraine dam leads to the abrupt failure of the dam on top of the glacial lake, which holds large volume of water.
- As the volume of the glacial lake grows, so does the pressure on the dam containing it. Fragmentation of the source glacier, landslides and other processes can trigger displacement waves in the lake, potentially compromising the stability of the dam and resulting in a GLOF. A GLOF refers to the flooding that occurs when the water dammed by a glacier or a moraine is released suddenly.
- A failure of the dam has the potential of releasing millions of cubic metres of water in a short period, causing catastrophic flooding downstream.
- There are 352, 283 and 1,393 glacial lakes and water bodies in the Indus, Ganga and Brahmaputra basins respectively.

#### Possible Reasons

- According to NDMA, glacial retreat due to climate change occurring in most parts of the Hindu Kush Himalaya has given rise to the formation of numerous new glacial lakes, which are the major cause of GLOFs.
- Since glaciers in the Himalayas are in a retreating phase, glacial lakes are growing and pose a potentially large risk to downstream infrastructure and life.





- The frequency of GLOFs and risk from potential GLOFs are expected to increase as the climate continues to change. As temperatures rise, new lakes form, existing ones expand and sometimes merge, increasing the potential flood volumes in the high mountains.

### Mitigation Strategies

- ✓ The risk reduction has to begin with identifying and mapping of GLOF lakes, taking structural measures to prevent their sudden breach, and establishing mechanism to save lives and property in times of a breach.
- ✓ Potentially dangerous lakes can be identified based on field observations, records of past events, geomorphologic and geotechnical characteristics of the lake/dam and surroundings, and other physical conditions.
- ✓ NDMA has recommended use of Synthetic-Aperture Radar imagery to automatically detect changes in water bodies, including new lake formations, during the monsoon months. Methods and protocols could also be developed to allow remote monitoring of lake bodies from space.
- ✓ To manage lakes structurally, the NDMA recommends reducing the volume of water with methods such as controlled breaching, pumping or siphoning out water, and making a tunnel through the moraine barrier or under an ice dam can mitigate the threat of collapse of any moraine dam.

**Shrinking Hindukush Glaciers**

- ❖ The Assessment of Climate Change over the Indian Region report has stated that snowfall over the higher reaches of the Hindukush Himalayan mountain ranges has been increasing in recent decades, which has shielded the region from glacier shrinkage.
- ❖ Several areas of Hindukush Karakoram Himalayas have experienced a declining trend in snowfall and also retreat of glaciers in recent decades has been noticed.
- ❖ In contrast, the high-elevation Karakoram Himalayas have experienced higher winter snowfall that has shielded the region from glacier shrinkage—report published by the Ministry of Earth Sciences, suggests. This was the first such report prepared for India

### Way forward

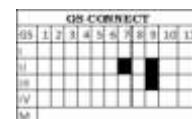
- Glacier lake outburst floods (GLOFs) have become emblematic of a changing mountain cryosphere. The Himalayas suffered from the highest losses due to these sudden pulses of melt water. Therefore, Region oriented flood hazard studies have to be acknowledged. For instance—The Eastern Himalayas are a hotspot of GLOF hazard that is 3 times higher than in any other Himalayan region. The size of growing glacier lakes and the frequency of lake outbursts determine GLOF hazard.
- Different factors such as avalanche, rock fall, upstream GLOF, lake expansion, identification of the presence of ice cores, and assessment of the stability of moraine should considered for the hazard modeling and early warning systems.
- Further, a stochastic inundation model must adopt to quantify the potential number of buildings, bridges, and hydropower systems that could be inundated by GLOF in each lake.

**PEPPER IT WITH**  
NDMA, SENDAI Framework,  
Glacial landforms,  
Topography of Himalaya

## The Fishing Cat Conservation Alliance

### News Excerpt

The Fishing Cat Conservation Alliance would kick-start a worldwide month-long campaign to raise awareness and garner support across the globe to ensure survival of fishing cat.



### Pre-Connect

- The Fishing Cat Conservation Alliance is a team of conservationists, researchers and enthusiasts across the world working to achieve a single dream — a world with functioning floodplains and coastal ecosystems that ensure survival of the fishing.
- With its regional group of conservationists and researchers, it has initiated an understanding of the bio-geographical distribution of the fishing cat in the unprotected and human-dominated landscapes of the northeastern Ghats of Andhra Pradesh.

### About Fishing Cat

- The highly elusive fishing cat, a lesser-known feline species, is facing several threats due to its depleting habitat. Listed as 'vulnerable' on International Union for Conservation of Nature's Red List, the species has a high probability of becoming endangered unless circumstances threatening its survival and reproduction improve.
- Fishing cats have a patchy distribution along the Eastern Ghats. They abound in estuarine floodplains, tidal mangrove forests and also inland freshwater habitats. Apart from Sundarbans in West Bengal and Bangladesh, fishing cats inhabit the Chilika lagoon and surrounding wetlands in Odisha, Coringa and Krishna mangroves in Andhra Pradesh
- The alliance aims to use techniques like ecological niche modelling, camera trapping, signs and tracks survey, interviews with locals and documentation of historical records in order to conserve the fishing cat.

**Pong Dam Lake Sanctuary**

- ❖ Over 1 lakh migratory water birds arrived at the Himachal Pradesh's Pong dam lake sanctuary this winter. Pong Dam Lake was declared as Ramsar Site in November 2002.
- ❖ Besides the Bar Headed Geese, other species having a high population at the wetland include Eurasian Coot, Northern Pintail, Common Teal, Little Cormorant, Great Cormorant, Grey Lag Goose, Northern Shoveler and Common Pochard.
- ❖ The species which find noticeable mention are Red Necked Grebe, Great Bittern, Lesser White-Fronted Goose, Red Crested Pochard, Ferruginous Pochard, Pied Avocet, Northern Lapwing, Peregrine Falcon etc.
- ❖ During the counting exercise, one Bar-headed Goose and one Grey Lag Goose with collars was also spotted
- ❖ However, the total population of birds as well as number of species counted this year is marginally less as compared to the previous year, probably due to the impact of the avian influenza outbreak.
- ❖ Last winter, around 1.16 lakh birds of 114 different species were found at the lake during the annual census conducted by the local wildlife officials.

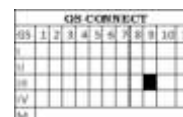
### Reasons for Habitat Loss

- ✓ The conservation threats to fishing cats in the Eastern Ghats are mainly habitat loss like-wetland degradation and conversion for aquaculture and other commercial projects, sand mining along river banks, agricultural intensification resulting in loss of riverine buffer and conflict with humans in certain areas resulting in targeted hunting and retaliatory killings.
- ✓ Major shifts in land use management like agricultural intensification in prime fishing cat habitats and wetland degradation are the main factors that can influence the population distribution of these cats in the Eastern Ghats and in other areas.

### Caracal wildcat

#### News Excerpt

The National Board for Wildlife and Union Ministry of Environment, Forest and Climate Change has included the caracal in the list of critically endangered species.



#### About

- **Its conservation status** is–IUCN Red List: Least Concern, Wildlife Protection Act, 1972: Schedule I and CITES: Appendix I.
- **Habitat:** Presently, this wildcat is found in some parts of Rajasthan and Gujarat. Besides India, the caracal is found in several dozen countries across Africa, the Middle East, Central and South Asia. While it flourishes in parts of Africa, its numbers in Asia are declining.
- **Its habitat in India** has shrunk by almost a half. For instance– the caracal has historically lived in 13 Indian states, in nine out of the 26 biotic provinces. In the period before Independence, the animal roamed an estimated area of 7.9 lakh sq km. After 2001, sightings have been reported from only three states.
- **The wildcat** has long legs, a short face, long canine teeth, and distinctive ears — long and pointy, with tufts of black hair at their tips. The caracal has traditionally been valued for its litheness and extraordinary ability to catch birds in flight; it was a favourite coursing or hunting animal in medieval India.

### Possible reason for decline in population

- The caracal is rarely hunted or killed in recent years, cases have been detected of the animal being captured to be sold as exotic pets and the decline of its population is attributable mainly to loss of habitat and increasing urbanisation.
- Experts point out that the caracal’s natural habitat — for example the Chambal ravines — is often officially notified as wasteland. Land and environment policies are not geared towards the preservation of such wasteland ecology, rather they seek to ‘reclaim’ these areas to make them arable.
- Infrastructure projects such as the building of roads lead to the fragmentation of the caracal’s ecology and disruption of its movement. The loss of habitat also affects the animal’s prey which includes small ungulates and rodents.

#### Rare Mandarin duck

- ❖ Mandarin duck has shown up in Assam after a century. It is considered as the most beautiful duck in the world.
- ❖ It is a small-exotic looking bird native to East Asia, and describes the male as–very ornate with big orangey ‘sail fins’ on the back, streaked orangey cheeks, and a small red bill with a whitish tip.
- ❖ The duck seems to have strayed from its regular migratory path.
- ❖ They usually breed in Russia, Korea, Japan and the northeastern parts of China. The species is also found in Western Europe and the US. The bird rarely visits India as the wintering grounds of the birds are Mongolia and China.
- ❖ It could even be a species that escaped from an illegal wildlife trader. The ducks is often captured and traded because of its beauty. Illegal trading of exotic species is rampant along China, Bangladesh, and Myanmar border.

### Benefits

- ✓ The listing of the caracal as critically endangered is expected to bring central funding to conservation efforts. It is likely to ensure that the animal is studied comprehensively for the first time, including its home range, population, prey, etc.
- ✓ Such study will also throw light on the much neglected “wastelands” in the country, which are home to a large number of animal and bird species, including leopards, Asiatic wild cats, rust spotted cats, sloth bears, wolves, wild dogs, civets, etc.

### Way forward

There is no reliable data on population of Caracal Wildcat. Quality data collection should be compiled in order to conserve the species. Lack of data also undermines the habitat related approaches as well. Therefore, both need to be streamlined. Sighting based population count will further help to conserve wildcat.

## SCIENCE & TECHNOLOGY

### Liberalisation of Geo-Spatial Data

#### News Excerpt

The Ministry of Science and Technology recently released new guidelines for the Geo-spatial sector in India, which deregulates existing protocol and liberalises the sector to a more competitive field.

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#### Pre-Connect

#### What is geo-spatial data?

- Geospatial data is data about objects, events, or phenomena that have a location on the surface of the earth.
- The location may be static in the short-term, like the location of a road, an earthquake event, malnutrition among children, or dynamic like a moving vehicle or pedestrian, the spread of an infectious disease.
- Geospatial data combines location information, attribute information (the characteristics of the object, event, or phenomena concerned), and often also temporal information or the time at which the location and attributes exist.
- Geo-spatial data usually involves information of public interest such as roads, localities, rail lines, water bodies, and public amenities.
- The past decade has seen an increase in the use of geo-spatial data in daily life with various apps such as food delivery apps like Swiggy or Zomato, e-commerce like Amazon or even weather apps.



#### Analytica

#### Factors leading to deregulation of geo-spatial data

- This system of acquiring licenses or permission, and the red tape involved, can take months, delaying projects, especially those that are in mission mode – for both Indian companies as well as government agencies.
- The deregulation eliminates the requirement of permissions as well as scrutiny, even for security concerns.
- Indian companies now can self-attest, conforming to government guidelines without actually having to be monitored by a government agency- these guidelines therefore place a great deal of trust in Indian entities.
- There is also a huge lack of data in the country which impedes planning for infrastructure, development and businesses which are data-based. The mapping of the entire country, that



too with high accuracy, by the Indian government alone could take decades. The government therefore felt an urgent need to incentivise the geo-spatial sector for Indian companies and increased investment from private players in the sector.

- While for decades, geo-spatial data has been a priority for strategic reasons and for internal and external security concerns, this priority has seen a shift in the past 15 years – geo-spatial data has now become imperative for the government in planning for infrastructure, development, social development, natural calamities as well as the economy, with more and more sectors such as agriculture, environment protection, power, water, transportation, communication, health (tracking of diseases, patients, hospitals etc.) relying heavily on this data.
- There has also been a global push for open access to geo-spatial as it affects the lives of ordinary citizens, and the new guidelines has ensured such an open access, with the exception of sensitive defence or security-related data.

#### **Present Policy on Geo-Spatial Data**

- ❖ There are strict restrictions on the collection, storage, use, sale, dissemination of geo-spatial data and mapping under the current regime.
- ❖ The policy had not been renewed in decades and has been driven by internal as well as external security concerns.
- ❖ The sector so far is dominated by the Indian government as well as government-run agencies such as the Survey of India and private companies need to navigate a system of permissions from different departments of the government (depending on the kind of data to be created) as well as the defence and Home Ministries, to be able to collect, create or disseminate geo-spatial data.
- ❖ Initially conceptualised as a matter solely concerned with security, geo-spatial data collection was the prerogative of the defence forces and the government.
- ❖ GIS mapping was also rudimentary, with the government investing heavily in it after the Kargil war highlighted the dependence on foreign data and the need for indigenous sources of data.

- Large amounts of geo-spatial data are also available on global platforms, which makes the regulation of data that is freely available in other countries, untenable.

#### **Impact of the move**

- ✓ By liberalising the system, the government will ensure more players in the field, competitiveness of Indian companies in the global market, and more accurate data available to both the government to formulate plans and administer, but also for individual Indians.
- ✓ Start-ups and businesses can now also use this data in setting up their concerns, especially in the sector of e-commerce or geo-spatial based apps – which in turn will increase employment in these sectors.
- ✓ Indian companies will be able to develop indigenous apps, for example an Indian version of google maps.
- ✓ There is also likely to be an increase in public-private partnerships with the opening of this sector with data collection companies working with the Indian government on various sectoral projects.
- ✓ The government also expects an increase in investment in the geo-spatial sector by companies, and also an increase in export of data to foreign companies and countries, which in turn will boost the economy.

#### **Conclusion**

- The next generation of technologies will use hyper-resolution maps. Availability of comprehensive, highly accurate, granular and constantly updated representation of Geospatial Data will significantly benefit diverse sectors of the economy and will

significantly boost innovation in the country and greatly enhance the preparedness of the country for emergency response.

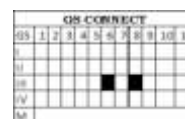
- The availability of data and modern mapping technologies to Indian companies is also crucial for achieving the vision of AatmaNirbhar Bharat and a five trillion-dollar economy.
- What is readily available globally does not need to be regulated in India.
- This is one more distinct example of removal of some of the colonial legacies that India was still grappling with and deregulation of Map-making is historic in the sense that Geo-Map is now going to be recognised as an instrument for development rather than only a tool for securing the country.

**PEPPER IT WITH**  
NavIC, GAGAN,  
GPS, GIS

### Detection of Flares by Indian Astronomers

#### News Excerpt

Indian astronomers have recently reported one of the strongest flares from a feeding super massive black hole or blazar called BL Lacertae, analysis of which can help trace the mass of the black hole and the source of this emission. Such analysis can provide a lead to probe mysteries and trace events at different stages of evolution of the Universe.



#### Highlights

- Blazars or feeding super massive black holes in the heart of distant galaxies receive a lot of attention from the astronomical community because of their complicated emission mechanism.
- They emit jets of charged particles travelling nearly at the speed of light and are one of the most luminous and energetic objects in the Universe.
- The data collected from the flare observed will help calculation of the black hole mass, size of emission region, and mechanism of the emission from one of the oldest astronomical objects known, hence opening a door to the origin and evolution of the Universe.

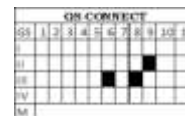
**BL Lacertae blazar**

It is 10 million light-years away and is among the 50 most prominent blazars that can be observed with the help of a relatively small telescope. It was among the 3 to 4 blazars that was predicted to be experiencing flares by the Whole Earth Blazar Telescope (WEBT), an international consortium of astronomers.

### Square Kilometre Array

#### News Excerpt

Recently, the **Square Kilometre Array Observatory (SKAO)** Council held its maiden meeting and approved the establishment of the world’s largest radio telescope.



#### Pre-Connect

#### What is Radio Telescope?

- Unlike optical telescopes, radio telescopes can detect invisible gas and, therefore, they can reveal areas of space that may be obscured by cosmic dust.
- Significantly, since the first radio signals were detected by physicist Karl Jansky in the 1930s, astronomers have used radio telescopes to detect radio waves emitted by different objects in the universe and explore it.
- According to NASA, the field of radio astronomy evolved after World War II and became one of the most important tools for making astronomical observations since.

- The Arecibo telescope in Puerto Rico, which was the second-largest single-dish radio telescope in the world, collapsed in December 2020.
- The telescope was built in 1963 and because of its powerful radar, scientists employed it to observe planets, asteroids and the ionosphere, making several discoveries over the decades, including finding prebiotic molecules in distant galaxies, the first exoplanets, and the first-millisecond pulsar.

### **Analytica**

#### **What is SKAO?**

SKAO is a new intergovernmental organisation dedicated to radio astronomy and is headquartered in the UK. At the moment, organisations from ten countries are a part of the SKAO. These include Australia, Canada, China, India, Italy, New Zealand, South Africa, Sweden, the Netherlands and the UK.

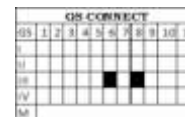
#### **Significance of SKA telescope**

- The telescope, proposed to be the largest radio telescope in the world, will be located in Africa and Australia whose operation, maintenance and construction will be overseen by SKAO. The completion is expected to take nearly a decade at a cost of over £1.8 billion.
- Some of the questions that scientists hope to address using this telescope include the beginning of the universe, how and when the first stars were born, the life-cycle of a galaxy, exploring the possibility of detecting technologically-active civilisations elsewhere in our galaxy and understanding where gravitational waves come from.
- As per NASA, the telescope will accomplish its scientific goals by measuring neutral hydrogen over cosmic time, accurately timing the signals from pulsars in the Milky Way, and detecting millions of galaxies out to high redshifts.
- Significantly, the development of SKA will use the results of various surveys undertaken using another powerful telescope called the Australian Square Kilometre Array Pathfinder (ASKAP), which is developed and operated by the country's science agency CSIRO.
- This telescope, which has been fully operational since February 2019 mapped over three million galaxies in a record 300 hours during its first all-sky survey conducted late last year.
- ASKAP surveys are designed to map the structure and evolution of the Universe, which it does by observing galaxies and the hydrogen gas that they contain.

### **Mars Missions**

#### **News Excerpt**

NASA's Perseverance rover recently touched down on Mars. Also, the UAE's Hope mission entered Martian orbit, and was followed closely by a Chinese mission.



#### **What is the UAE's Hope Probe?**

- First announced in July 2014, the Emirates Mars Mission was developed and operated by the Mohammed Bin Rashid Space Centre in collaboration with the University California, Berkeley, Arizona State University and the University of Colorado-Boulder in the United States.
- In July 2020, it was launched from the Tanegashima Space Centre in Japan aboard a Mitsubishi Heavy Industries' H-II A rocket and its launch became the 45th for H-II A.
- Carrying three instruments, including a high-resolution camera and a spectrometer, the spacecraft is on an orbital mission to collect data on Martian climate dynamics and help scientists understand why Mars's atmosphere is decaying into space.

- Hope is the UAE's fourth space mission and first interplanetary one. The previous three were all Earth-observation satellites. Once it is successfully able to reach the planet, it will start orbiting the planet. Its overall mission life is one Martian year, which is about 687 days on Earth.

### What is the objective of the Hope Probe?

- The primary objective of the mission is to study Martian weather dynamics.
- By correlating the lower atmosphere and upper atmosphere conditions, the probe will look into how weather changes the escape of hydrogen and oxygen into space.
- By measuring how much hydrogen and oxygen is spilling into space, scientists will be able to look into why Mars lost so much of its early atmosphere and liquid water.
- Over the next two months, the spacecraft will continue to move into its final orbital position — around 20,000-43,000 kilometres about the planet. The distance is calculated in a way that allows the craft to use all three instruments to capture a complete view of the Martian atmosphere every nine days for the next two years.
- It is expected to create the first complete portrait of the planet's atmosphere. With the information gathered during the mission, scientists will have a better understanding of the climate dynamics of different layers of Mars' atmosphere.
- Al-Amal will be the first "true weather satellite" orbiting around the planet.
- The UAE also wants the mission to inspire the country's youth to take up careers in the sciences. The government also hopes that the mission will boost the UAE's science and technology sector.



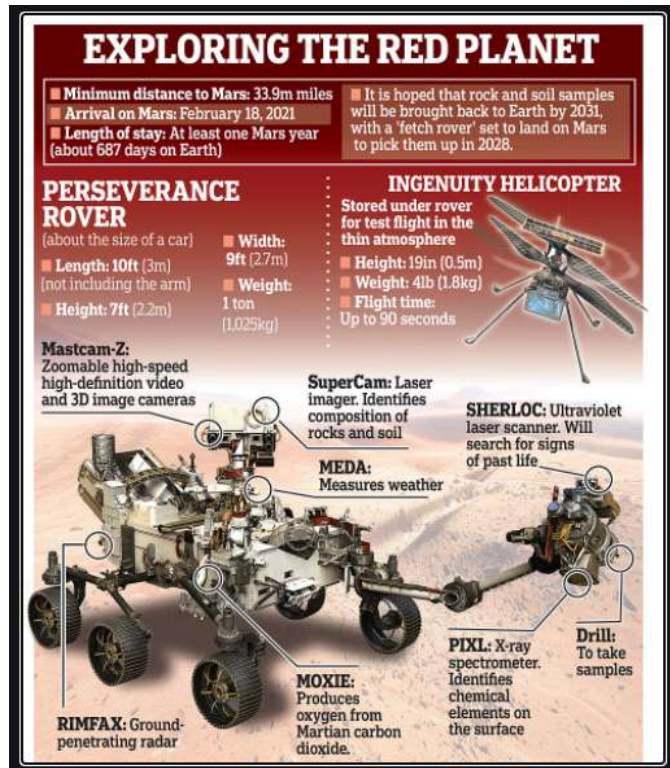
### Mars Orbiter Mission (MOM)

- ❖ Also called Mangalyaan, unmanned mission to Mars that is India's first interplanetary spacecraft.
- ❖ The Indian Space Research Organisation (ISRO) launched the MOM on November 5, 2013, using its Polar Satellite Launch Vehicle (PSLV) from the Satish Dhawan Space Centre on Sriharikota Island, Andhra Pradesh state.
- ❖ MOM will explore and observe Mars surface features, morphology, mineralogy and the Martian atmosphere. Further, a specific search for methane in the Martian atmosphere will provide information about the possibility or the past existence of life on the planet.
- ❖ Recently, the chief of ISRO K. Sivan said that India would send a second Mars mission and this mission is likely to be an orbiter.
- ❖ According to reports, **Mangalyaan-2** will be undertaken only after the launch of Chandrayaan-3, India's upcoming Moon mission.
- ❖ In Chandrayaan-3, ISRO would be aiming to land a rover on the Lunar surface. This mission has been delayed due to the coronavirus-induced pandemic. It is expected that that the mission will lift off in 2022.



### The Chinese experiment

- ✓ China's first Mars probe is called Tianwen-1 (formerly Huoxing 1), which means "Questions to Heaven".
- ✓ The spacecraft is carrying 13 payloads (seven orbiters and six rovers) consisting of an orbiter, a lander and a rover, and the mission aims to study the thickness and sub-layer distribution of the Martian soil.
- ✓ The spacecraft, weighing five tonnes, launched on a Long March 5 rocket—a launch system developed by the China Academy of Launch Vehicle Technology (CALT)—from Xichang, China.
- ✓ The scientific goals of the mission include studying Martian topography and geology and determining the composition of the surface material, climate and environment.
- ✓ The orbiter will use high-resolution cameras to search for a suitable landing site somewhere in the Utopia Planitia region. It weighs around 240 kg and will carry cameras, a subsurface radar, a spectrometer, a magnetometer, and atmospheric sensors.
- ✓ Recently, China's Tianwen-1 mission successfully entered the orbit of Mars, making it the first time for a Chinese mission to be able to successfully make a journey to another planet.
- ✓ The rover is expected to land on Mars in May and the success of the mission will make China the third country to achieve a Mars landing after the USSR and the US.
- ✓ As per a report in the Air and Space Magazine, the Chinese mission will be the first to place a ground-penetrating radar on the Martian surface, which will be able to study local geology, as well as rock, ice, and dirt distribution.
- ✓ China's previous 'Yinghuo-1' Mars mission, which had piggybacked on a Russian spacecraft, had failed after it could not leave the Earth's orbit and disintegrated over the Pacific Ocean in 2012.



### NASA's Perseverance rover

- NASA's Perseverance rover has successfully landed on Mars, and it is the most advanced rover that the US space agency has sent to the red planet till date.
- Perseverance is NASA's 4th generation Mars Rover — starting with Sojourner from the Mars Pathfinder Mission in 1997, followed by Spirit and Opportunity from the Mars Exploration Rover Mission in 2004, and Curiosity from the Mars Science Laboratory in 2012.
- The goal is to look for biosignatures in the dried up lake bed at Jezero Crater. The thought is that early life on Mars may have resembled early ocean-dwelling life on Earth, like stromatolites. If indeed this was the case, Perseverance would find fossils or some biosignatures — hints of life — in either the chemical measurements or morphological observations.
- In addition, Perseverance will produce oxygen on the Martian surface for the first time, using atmospheric CO2 from the Martian atmosphere. Perseverance will cache rock

samples that will be returned to Earth by a subsequent European Space Agency/NASA mission.

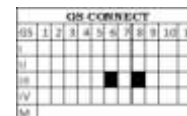
- The rover has seven primary science instruments. It also has the most cameras ever sent to Mars, and has a “complex sample caching system”.
- Mastcam-Z is a pair of zoomable science cameras on Perseverance’s head. These can create high-resolution, colour 3D panoramas of the Martian landscape.
- The head also has a SuperCam, which relies on a pulsed laser “to study the chemistry of rocks and sediment and has its own microphone to help scientists better understand the property of the rocks, including their hardness”.
- The rover also has an instrument to help determine how different layers of Martian surface formed over time. The data could help pave the way for future sensors that hunt for subsurface water ice deposits.
- Another instrument on Perseverance will try and manufacture oxygen out of the thin air. This one is called Mars Oxygen In-Situ Resource Utilization Experiment or MOXIE. This is crucial because the planet’s atmosphere is mostly carbon dioxide and future human missions will need oxygen.
- Finally, the rover has an ‘Ingenuity Mars Helicopter’ on its belly, which will “attempt the first powered, controlled flight on another planet.” NASA will still have to test out whether the helicopter is able to fly on the red planet, and it could again help in future human missions. NASA notes that once Ingenuity’s test flights are complete, the rover’s search for evidence of ancient microbial life will begin.

### Significance of Mars

#### News Excerpt

The flotilla of missions on Mars represents the spread of planetary exploration in general, and Mars necessitates the discussion on why scientists.

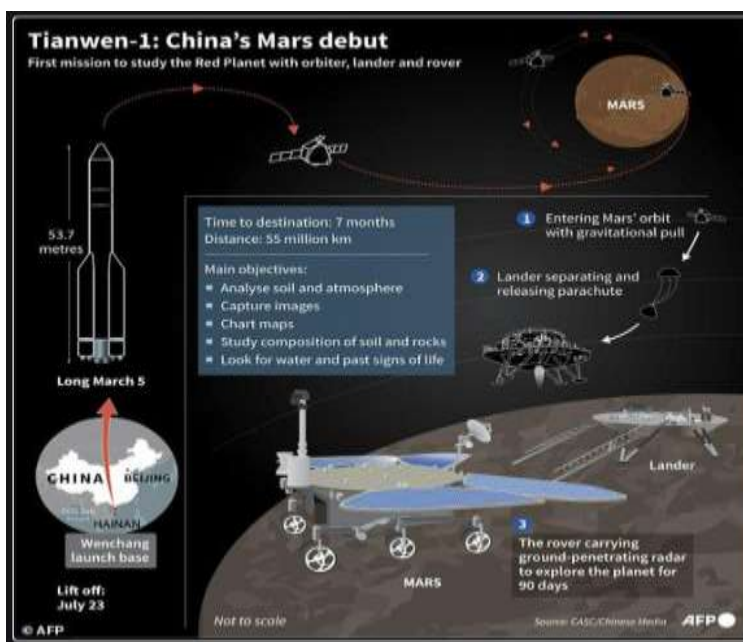
represents the spread of planetary exploration in particular. This also Mars exploration is so important for



#### Pre-Connect

#### Mars Science in the past 30 years

- We have come a very long way in understanding Mars from the time of the first-generation missions in the 1960s. The Viking missions in the mid-seventies carried out the first chemical analysis of Martian soil, as well as four biology experiments to detect biological activity. The experiments did not yield any conclusive evidence of life.
- In the early 1980s, scientists hypothesised, based on mineralogic composition and rock texture, that certain meteorites might have a source region in Mars, in contrast to the asteroid belt.
- In 1984, a study showed that

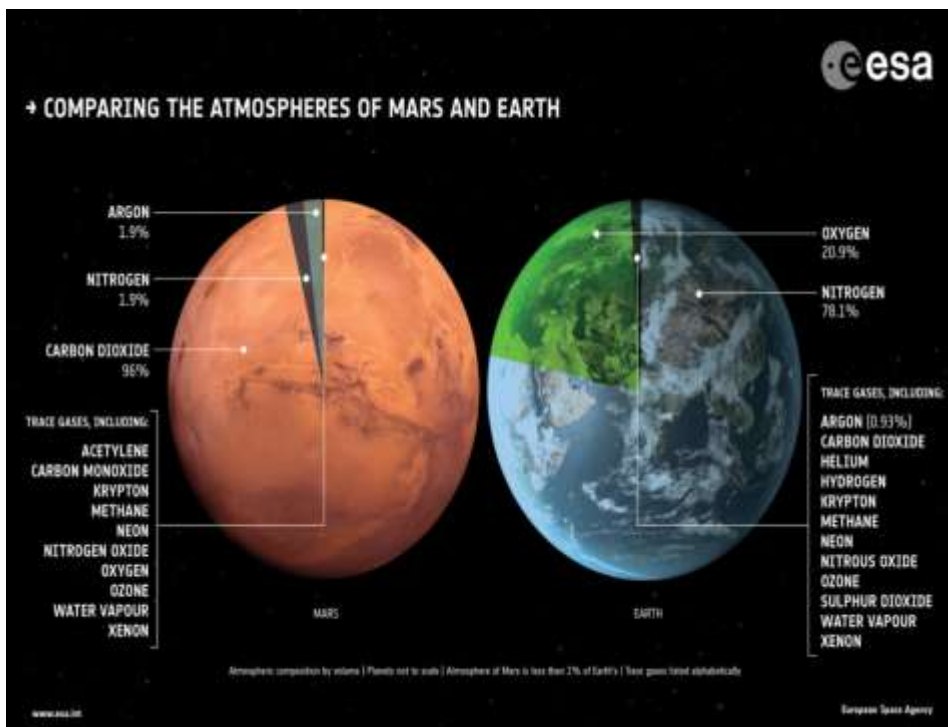


the isotopic composition of rare gases (Xenon, Krypton, Neon and Argon) matched the isotopic ratios of the Martian atmosphere measured by the Viking spacecraft. This discovery provided a way for geochemists to study Martian samples – and provided a huge boost to our understanding of the geochemical evolution of Mars.

- Mars was considered to be a dry planet in the 20th century. This changed in 2001, when the Gamma Ray Spectrometer on board the Mars Odyssey spacecraft detected a fascinating hydrogen signature that seemed to indicate the presence of water ice. But there was ambiguity – this was because hydrogen can be part of many other compounds as well, including organic compounds.
- To test for the presence of water, NASA sent a spacecraft to land near the Martian South Pole in 2007. The spacecraft studied the soil around the lander with its robotic arm and was able to establish, without any ambiguity, the presence of water on Mars for the first time.
- The Curiosity rover carries an instrument called SAM (Sample Analysis at Mars), which contains a suite of spectrometers with the goal of detecting organic compounds on Mars. SAM has a mass spectrometer that can measure not just the elements, but the isotopes as well.
- This instrument has made the fascinating discovery of large chain organic compounds on Mars. It is not known how these organics form on Mars: the process would likely be inanimate, but there is a fascinating possibility that such complex molecules were formed by processes associated with life.
- Mars Insight is creating history right now, by monitoring seismic activity and heat flow on Mars – this will help understand the composition of the Martian interior.

### The enduring fascination with Mars

- Mars is a planet where life may have evolved in the past. Life evolved on Earth 3.8 billion years ago.
- Conditions on early Mars roughly around 4 billion years ago were very similar to that of Earth. It had a thick atmosphere, which enabled the stability of water on the surface of Mars. If indeed conditions on Mars were similar to those on Earth, there is a real possibility that microscopic life evolved on Mars.





- Mars is the only planet that humans can visit or inhabit in the long term. Venus and Mercury have extreme temperatures – the average temperature is greater than 400 degree C, or hotter than a cooking oven.
- All planets in the outer solar system starting with Jupiter are made of gas – not silicates or rocks – and are very cold. Mars is comparatively hospitable in terms of temperature, with an approximate range between 20 degrees C at the Equator to minus 125 degrees C at the poles.

### Mars Explorations

- ✓ The growing number of missions to Mars by different space agencies across the world is part of the competitive space race, a bid to establish themselves as a leader in space exploration.
- ✓ Not only national space agencies but aerospace manufacturers such as Elon Musk's SpaceX too harbour ambitious missions to the Red planet. SpaceX, for instance, sees Mars as an alternative to living on Earth since it is its "closest habitable neighbour".
- ✓ What makes scientists and researchers curious about Mars is also the possibility that the planet was once warm enough to allow water to flow through it, which means life could have existed there too. This question makes the planet more intriguing for scientists since "almost everywhere we find water on Earth, we find life," as NASA puts it.
- ✓ However, no human has set foot on Mars yet because the atmosphere on Mars is very thin, consisting of mostly carbon dioxide with no breathable oxygen, making it difficult for astronauts to survive there.
- ✓ Further, the landscape of Mars is freezing, with no protection from the Sun's radiation or passing dust storms. Therefore, more research, technology and testing is required to be able to send humans to Mars. NASA plans to do so by the 2030s.
- ✓ According to the Planetary Society, Mars has historically been "unfriendly" to Earth's attempts to visit it and more missions have been planned to reach Mars than any other planet or place in the solar system, barring the Moon.
- ✓ According to Science magazine, out of the 18 lander or rover missions to Mars, only 10 have been successful.



### A Human Mission to Mars

- A human mission to Mars has been the holy grail of space exploration.
- Ever since Neil Armstrong landed on the Moon 50 years ago, man has not been able to proceed to the next logical destination: Mars.
- The primary reason is the enormous price tag of a human Mars mission. In comparison to the Moon, which is only about three days away, Mars is seven months away.



- Carrying humans, in engineering terms, translates to maintaining a temperature controlled pressurised module. It also entails carrying supplies required by astronauts, including water and oxygen, for an approximately 18-month trip.
- In addition, human missions, unlike robotic spacecraft missions, need to be returned to Earth, which in engineering terms translates into carrying an enormous amount of fuel from Earth, to be able to launch from Mars for the return journey.
- The engineering complexity and the increased mass requirement of a human mission to Mars, compared to the Moon, pushes costs to between \$250 billion and \$1 trillion.
- Starship promises to reduce mission costs by >95% to as much as 99% by using multiple innovations like refuelling the spacecraft in orbit, and manufacture of rocket fuel on Mars using materials that are found on Mars (and therefore, fuel for the return journey would not need to be carried from Earth).

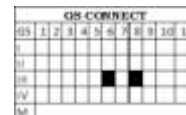
### A decade of Mars missions

- ✚ As the decade starts up, multiple missions are on the drawing board: prominently, the ESA ExoMars rover mission to return rock samples from Mars, ISRO’s plans for Mangalyaan-2, and the Chinese Space Agency’s plans for Tianwen-2 that will return rock samples from Mars.
- ✚ In addition, there will likely be multiple flights of SpaceX’s Starship, first with cargo and finally with astronauts.
- ✚ In the history of humankind, 2020 will be remembered for the Covid-19 pandemic, but the 2020s may well be the decade of a flurry of spacecraft missions to Mars, ending with the first human footsteps on Martian soil.

## **Einsteinium**

### News Excerpt

With a new study published in the journal Nature recently, for the first time, researchers have been able to characterise some of the properties of the element called Einsteinium.



### Pre-Connect

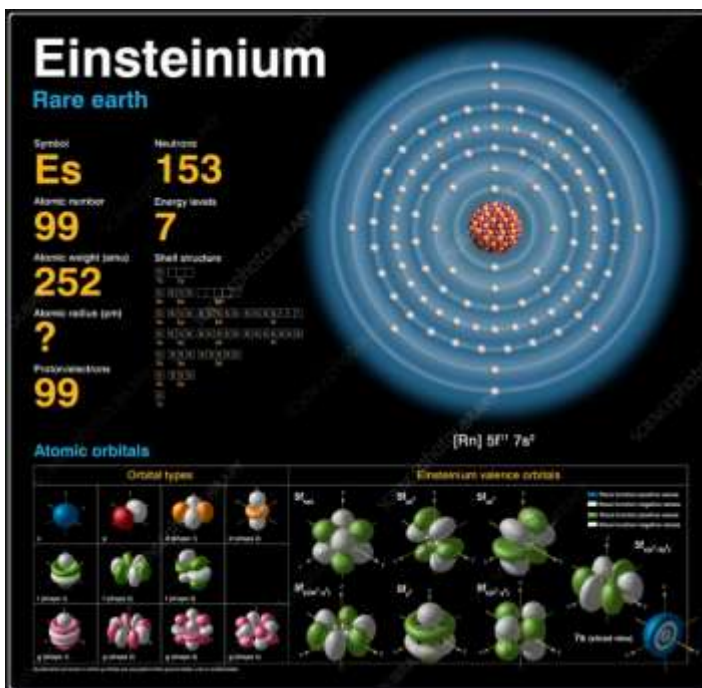
- A team of scientists at the Berkeley Lab has reported some of the properties of element 99 in the periodic table called “Einsteinium”, named after Albert Einstein.
- It was discovered in 1952 in the debris of the first hydrogen bomb (the detonation of a thermonuclear device called “Ivy Mike” in the Pacific Ocean).
- Since its discovery, scientists have not been able to perform a lot of experiments with it because it is difficult to create and is highly radioactive. Therefore, very little is known about this element.
- With this new study published in the journal Nature last week, for the first-time researchers have been able to characterise some of the properties of the element.

SpaceX, a private US-based company promoted by Elon Musk and backed by select investors, has a long-range goal of starting a commercial service to transport passengers to Mars. Boca Chica, a name that apparently no one had heard a few years ago, is now the site of development of Starship, which represents arguably the best shot at landing humans on Mars.

### The discovery of the element

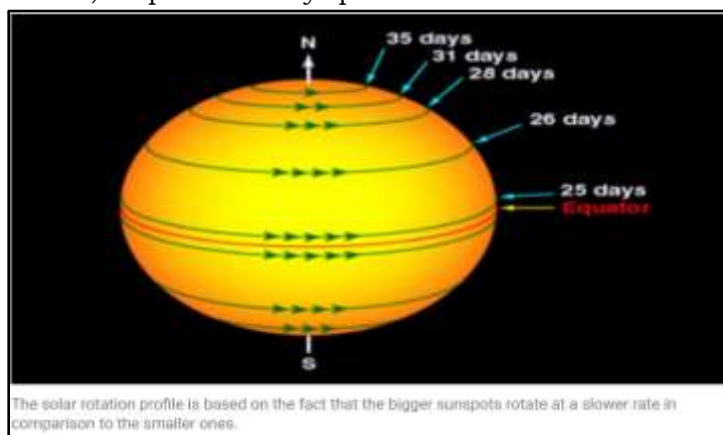
- When Ivy Mike was detonated on November 1, 1952, as part of a test at a remote island location called Elugelab on the Eniwetok Atoll in the South Pacific, it produced an explosion that was about 500 times more destructive than the explosion that occurred at Nagasaki.

- Subsequently, the fallout material from this explosion was sent to Berkeley in California for analysis, which was examined by Gregory Choppin, Stanley Thompson, Albert Ghiorso, and Bernard Harvey, who within a month had discovered and identified over 200 atoms of the new element.
- According to a podcast run by Chemistry World, the discovery of the element was not revealed for at least three years and it was first suggested that the element be named after Einstein in the Physical Review in 1955.



**Analytica**

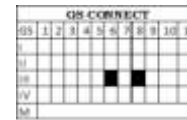
- ✓ The scientists worked with less than 250 nanograms of the artificial element, which was manufactured at the Oak Ridge National Laboratory’s High Flux Isotope Reactor, which is one of the few places in the world capable of making einsteinium.
- ✓ Specifically, the team worked with einsteinium-254, one of the more stable isotopes of the element that has a half-life of 276 days. The most common isotope of the element, einsteinium 253 has a half-life of 20 days.
- ✓ Because of its high radioactivity and short half-life of all einsteinium isotopes, even if the element was present on the Earth during its formation, it has most certainly decayed. This is the reason that it cannot be found in nature and needs to be manufactured using very precise and intense processes.
- ✓ Therefore, so far, the element has been produced in very small quantities and its usage is limited except for the purposes of scientific research. The element is also not visible to the naked eye and after it was discovered, it took over nine years to manufacture enough of it so that it could be seen with the naked eye.
- ✓ According to the Chemical World podcast, in part the tiny quantities of Einsteinium that have been made reflect the difficulty of producing it. But it also receives the sad accolade of having no known uses. There really isn’t any reason for making einsteinium, except as a waypoint on the route to producing something else. It’s an element without a role in life.
- ✓ For the recent research, using a precise X-ray produced by a particle accelerator, the scientists were able to examine this element to find out how it bonds with atoms. By studying this atomic arrangement, scientists can find out interesting chemical properties of other elements and isotopes that may be useful for nuclear power production and radiopharmaceuticals.



## Solar Rotation Profile

### News Excerpt

Recently, a team of international solar researchers, led by Bibhuti Kumar Jha, a PhD scholar from Aryabhata Research Institute of Observational Sciences (ARIES) in Nainital, has designed a rotation profile of the Sun after studying the varying behaviours of sunspots observed over 100 years.



### Analytica

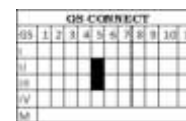
- Sunspots are small and dark but cooler areas on the solar surface having strong magnetic forces.
- The solar rotation profile is based on the fact that the bigger sunspots rotate at a slower rate in comparison to the smaller ones.
- The presence of strong magnetic fields around bigger sunspots prevents them from having a faster rotation rate. This, as opposed to smaller sunspots which possess a comparatively less intense magnetic field allowing it to rotate faster.
- Unlike the Earth — a solid mass of body having uniform rotation, the Sun has differential rates of rotation. This means, the solar equator rotates faster than its poles.
- The scientists have attempted to precisely track sunspots at various latitudes of the Sun in order to understand the rotational behaviours at different latitudes.
- Besides, sunspots and solar cycles have helped scientists understand the Sun's behaviour from the past. These continue to remain observable characters to predict the Sun's future.
- However, what makes the tracking of sunspots challenging is the time and the position on the Sun's surface. Generally, they start appearing at higher latitudes and later shift towards the equator as the solar cycle (which spans 11 years) progresses.
- Generally, sun spots cannot be seen across all latitudes at all times. As sunspots do not appear beyond 45 degrees latitude, sunspots are not formed around the poles.
- Due to limited camera resolution at the time of image capturing during telescope observations, results from several past studies were based only on larger sun spots. But the KoSO image data-set featured sun spot images captured in all sizes. Even using the dynamo models, the rate of differential rotation still remains unestablished.
- Contrary to what is believed, no variation in rotation rates was noted between solar activity extremes, that is, between a solar maxima and minima, the researchers confirmed.
- If one can understand solar dynamo, it can give a better insight into the solar cycle which in turn, will help predict how the Sun will behave in future.

- ❖ Researchers at ARIES, in collaboration with their counterparts at Max Planck Institute for Solar System Research, Germany and Southwest Research Institute, US, studied several thousand digitised images of sunspot images retrieved from older photographs and films.
- ❖ The images were generated by the Kodaikanal Solar Observatory (KoSO) between 1923 and 2011.
- ❖ Run by the Indian Institute of Astrophysics, Bengaluru, KoSO has a repository of about 4 lakh images of the Sun recorded since 1904. All of them have been digitised in the recent years.

## One Nation, One Standard

### News Excerpt

Food and Consumer Affairs Minister Piyush Goyal recently stressed on the need for 'One Nation One Standard' to bring uniformity and said labs testing in India should be of global standards. The minister said this while reviewing



the work of Bureau of Indian Standards (BIS).

### Highlights

- According to the minister, while all areas of production and services should be included in this national mission, bringing a national uniformity and standardization in all kinds of public procurement and tendering can be an immediate deliverable.
- The minister said that strength and character of nation is often exemplified by the standards it sets for the quality of its products and services.
- For achieving this aim, the BIS should explore international partnerships and associations to achieve synergy in the field. Gap analysis of BIS and government labs should also be done on priority basis.
- The minister said that lab testing in India should be of world standards and added that modern equipment and latest technologies should be used there.
- Given the fact that different institutions and PSUs have variety of non-uniform standards, efforts should be made to merge different standards under one standard as much as possible.
- Industry should be invited for more dialogue, participation and collaboration in this mission of "one nation one standard".
- Process of granting certification should be kept as simple as possible and duplication of work should be avoided.
- We should aim to be the world leader in having maximum industrial products under Indian Standards and no one should feel the need to go abroad to get quality certification.

### Bureau of Indian Standards

- ❖ BIS is the National Standard Body of India established under the BIS Act 2016 for the harmonious development of the activities of standardization, marking and quality certification of goods and for matters connected therewith or incidental thereto.
- ❖ BIS has been providing traceability and tangibility benefits to the national economy in a number of ways – providing safe reliable quality goods; minimizing health hazards to consumers; promoting exports and imports substitute; control over proliferation of varieties etc. through standardization, certification and testing.
- ❖ BIS has its Headquarters at New Delhi and its 5 Regional Offices are at Kolkata (Eastern), Chennai (Southern), Mumbai (Western), Chandigarh (Northern) and Delhi (Central).

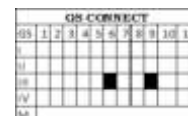
### Analytica

- The BIS, the only national body that frames standards, has come out with more than 20,000 standards for various products and services so far. Besides this, there are about 50-odd agencies that have framed about 400 standards in the country.
- The BIS frames standards and cannot regulate its implementation.
- It is suggested by the government think tank NITI Aayog that the department concerned should monitor the process of its implementation or a separate regulator needs to be set up.
- Having uniform national standards will help in making it mandatory for more products. It will help in ensuring that quality products are made available for all consumers across the country.

### Stardust 1.0

#### News Excerpt

Recently, Stardust 1.0 was launched from Loring Commerce Centre in Maine, US, a former military base, becoming the first commercial space launch powered by biofuel, which is non-toxic for the environment as opposed to





traditionally used rocket fuels.

### What is Stardust 1.0?

- Stardust 1.0 is a launch vehicle suited for student and budget payloads.
- The rocket is 20 feet tall and has a mass of roughly 250 kg. The rocket can carry a maximum payload mass of 8 kg and during its first launch carried three payloads.
- According to a report in Politico, the payloads included a cubesat prototype built by high school students, a metal alloy designed to lessen vibrations, which is developed by Kellogg's Research Labs and a cubesat from software company Rocket Insights.
- The rocket is manufactured by bluShift, an aerospace company based in Maine that is developing rockets that are powered by bio-derived fuels. Stardust 1.0 is being developed by the company since 2014.

### Significance of the launch

- These rockets will help to launch small satellites called cubesats into space in a way that is relatively cheaper than using traditional rocket fuel and is less toxic for the environment.
- Other rockets being developed by the company include Stardust Gen. 2, Starless Rouge and Red Dwarf, which is a low-Earth orbit (LEO) vehicle and is designed to fly a maximum payload of 30 kg.
- There are other companies working towards making access to space easier. For ex. Amazon founder Jeff Bezos's space company called Blue Origin tested a rocket system called New Shepard in October 2020. The rocket system is meant to take tourists to space eventually and offers flights to space over 100 km above Earth and accommodation for payloads.
- Such efforts are a part of a growing number of commercial space companies that are working to provide easier and cheaper access to space to laypeople and also to make access to space cost-effective for purposes of academic research, corporate technology development and entrepreneurial ventures among others.

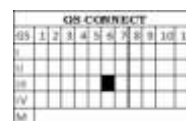
### What is biofuel?

- ✓ What the biofuel used for the launch of Stardust 1.0 is made up of is not yet clear, but as per media reports it can be sourced from farms around the world.
- ✓ But broadly, biofuels are obtained from biomass, which can be converted directly into liquid fuels that can be used as transportation fuels.
- ✓ According to the US government's office of Energy Efficiency and Renewable Energy, the two most common kinds of biofuels in use today are ethanol and biodiesel and they both represent the first generation of biofuel technology.
- ✓ Ethanol, for instance, is renewable and made from different kinds of plant materials. Biodiesel on the other hand is produced by combining alcohol with new and used vegetable oils, animal fats or recycled cooking grease.

## Voyager Mission

### News Excerpt

Recently, communication channels of the Earth with the Voyager-2 i.e., NASA's sole means of sending commands to the distant space probe, launched 44 years ago, were restored after almost a year.



### Voyager Mission

- The twin Voyager 1 and 2 spacecraft are exploring where nothing from Earth has flown before. Continuing on their more-than-40-year journey since their 1977 launches, they each are much farther away from Earth and the sun than Pluto.
- In August 2012, Voyager 1 made the historic entry into interstellar space, the region between stars, filled with material ejected by the death of nearby stars millions of years ago.

- Voyager 2 entered interstellar space on November 5, 2018 and scientists hope to learn more about this region. Both spacecraft are still sending scientific information about their surroundings through the Deep Space Network, or DSN.
- The primary mission was the exploration of Jupiter and Saturn. After making a string of discoveries there — such as active volcanoes on Jupiter's moon Io and intricacies of Saturn's rings — the mission was extended.
- Voyager 2 went on to explore Uranus and Neptune, and is still the only spacecraft to have visited those outer planets. The adventurers' current mission, the Voyager Interstellar Mission (VIM), will explore the outermost edge of the Sun's domain and beyond.

### Recent Developments

- Last March, the agency was compelled to shut down its only means of reaching 12 billion miles across the heavens to this robotic trailblazer. However, this silence recently came to an end as NASA was able to switch on the communication channel with the Voyager.

- Because of the direction in which it is flying out of the solar system, Voyager 2 can only receive commands from Earth via one antenna in the entire world. It's called DSS 43 and it is in Canberra, Australia.

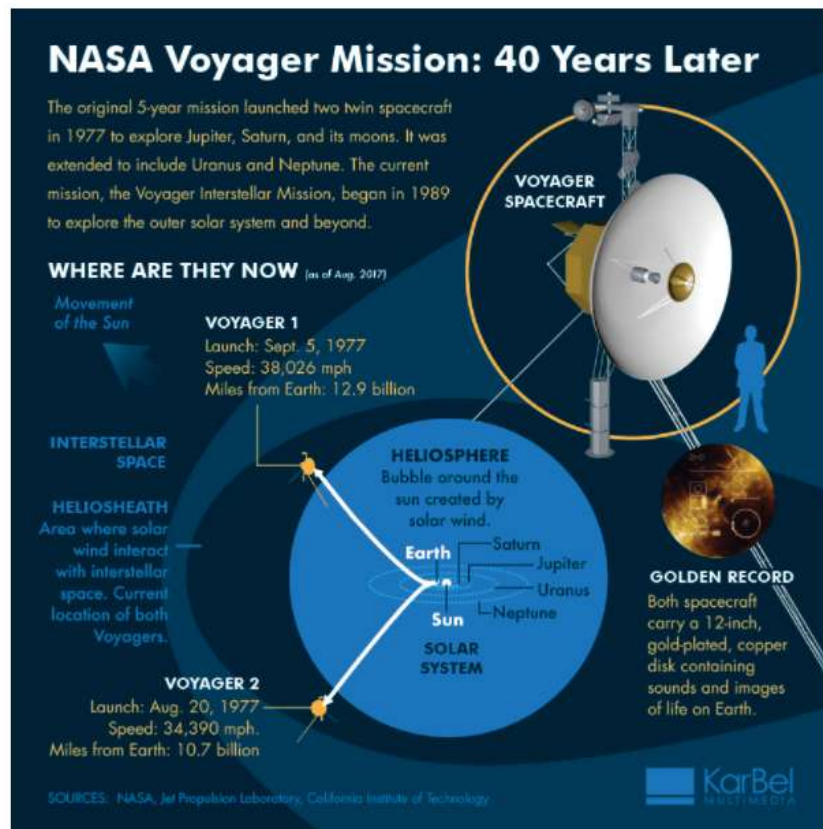
- It is a part of the Deep Space Network, or DSN, which along with stations in California and Spain, is how NASA and allied space agencies stay in touch with the armada of robotic spacecraft exploring everything from the sun's corona to the regions of the Kuiper belt beyond the orbit of Pluto.

- A round-trip communication with Voyager 2 takes about 35 hours — 17 hours and 35 minutes each way.

- DSS 43 is a 70-meter dish that has been operating since 1973. It was long overdue for upgrades, especially with new robotic missions headed to Mars this year and even more preparing to launch to study other worlds in the months and years to come. So last year, the dish was switched off and dismantled, even though the shutdown posed considerable risk to the geriatric Voyager 2 probe.

- Usually, the mission's managers at NASA's Jet Propulsion Laboratory in California would send about 30 experts to oversee the dish's makeover. But restrictions imposed during the Covid-19 pandemic reduced the team to four.

- While Voyager 2 was able to call home on the Canberra site's smaller dishes during the shutdown, none of them could send commands to the probe. If anything had gone wrong aboard the probe during the last year, NASA would have been powerless to fix it.

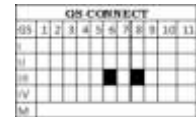


- Although NASA has been unable to send full commands to Voyager 2, it did send one test message to the spacecraft at the end of October when the antenna was mostly reassembled.
- A device on board called the command loss timer is used to help the spacecraft determine whether it's lost contact with Earth and should protect itself by going into a form of electronic slumber. The October test reset the timer, and successfully told the spacecraft to continue operating.
- Both Voyager 1 and Voyager 2 hold the records for the farthest a spacecraft has ever travelled and for the longest operating mission.

## National Technology Awards 2020

### News Excerpt

Recently, a total of 12 companies have been selected for the National Technology Awards 2020 for successful commercialization of innovative indigenous technologies.



### Highlights

- Awards have been selected under three categories --indigenous technologies, MSME, and startups.
- Every year, for furtherance of its mandate, the Technology Development Board (TDB) seeks applications for prestigious National awards for commercialization of technologies under these three categories.
- These awards conferred to various industries provides a platform of recognition to Indian industries and their technology provider, who have worked as a team, to bring innovation to the market and contributed to the vision of "AatmaNirbhar Bharat".

### The Technology Development Board

- It is a statutory body of the Government of India functioning under Department of Science of Technology which provides financial assistance to companies working for commercialization of indigenous technologies and adaptation of imported technologies for domestic applications.
- TDB was established in 1996 with a novel aim of providing financial assistance to Indian companies for commercialization of innovative indigenous technologies.
- Since its inception, TDB has funded more than 300 companies for commercialization of technologies. Ex. Bharat Biotech International Limited.

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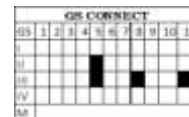


## SECURITY

### **Ease of Doing Business in Defence Manufacturing**

#### News Excerpt

Recently, some measures have been taken up by Government to increase the ease of doing business in defense.



#### Pre-Connect

- Most of the investment in research and development across sectors has done by the public sector units so far and the private businesses too must increase its investment in the area.
- The move has been part of larger government efforts to boost ease of doing business since 2018. The government last year trimmed the headline corporate tax rate to 22 per cent from 30 per cent, and to 15 per cent from 25 per cent for new manufacturing companies as measures to boost ease of doing business.

#### Highlights

- The initial validity of industrial licenses under the I(D&R) Act, 1951 which was earlier 7 years, extendable up to 3 years for existing as well as future licenses, has been revised to 15 years, further extendable up to 18 years for existing as well as future licenses.
- Further, under Arms Act 1959/Arms Rules 2016, license granted shall be valid for the life time of the licensee company provided the licensee shall be required to setup facility and fulfill other conditions within a period of seven years from the date of grant of a license.
- Guidelines have been issued to streamline the processing of applications for grant of extension of validity of Industrial License.
- Partial commencement of production is treated as commencement of production of all the items included in the license.
- The advanced version of National Industrial Classification (NIC-2008) has been adopted, which is a superior/sophisticated industrial classification.
- The ‘Security Manual for Licensed Defence Industry’ has been issued. With the issue of the Security Manual, the requirement of affidavit from the applicants has been done away with.
- Restriction of annual capacity in the Industrial Licence for Defence Sector has been removed under Industries (Development & Regulation) Act, 1951.
- Licensee has been allowed to sell the defense items to the government entities under the control of Ministry of Home Affairs (MHA), Public Sector Undertakings (PSUs), State Governments and other Defence Licensee companies without approval of Department of Defence Production.
- Licensee has been allowed to manufacture enhanced capacity up to fifteen percent of the existing capacity with prior intimation to the licensing authority under Arms Act, 1959.
- A new online portal has been developed for facilitating filing of online applications for Industrial Licence under Industries (Development & Regulation)-IDR Act, 1951/Arms Act, 1959.
- Defence products list requiring compulsory license from DPIIT under Industries (Development & Regulation) Act, 1951 and Arms Act, 1959 has been pruned, the licensing in defense sector has been further liberalized.
- To facilitate further ease of doing business in Industrial Licensing, No Industrial Licence/Arms Licence is required for manufacture of any parts or accessories in Defence Sector, unless they are specifically listed in any of the Annexures of Press Note 1(2019 Series). This shall not apply to issue of Arms Licence for small arms by MHA.

#### Analytica

- ✓ Pushing for self-reliance in the defense sector, the government has taken steps to move forward in the sector with “transparency, predictability and ease of doing business”.



- ✓ The government is focusing on developing a strong domestic capability in defense to give greater impetus for economic growth, skilled job creation in manufacturing and to support growth of domestic manufacturers and MSMEs.
- ✓ The government has reinstated services as an avenue for discharge of offset obligations and provided a level playing field to Indian vendors in Capital acquisitions to boost ' Make in India'.
- ✓ The government is actively promoting not only domestic manufacturing but also an export-oriented defense industry.

## TROPEX 21

### News Excerpt

Recently, the exercise had commenced in January 2021 involving all three Commands of the Indian Navy, the Tri-Services Command at Port Blair, and elements of Indian Army, Indian Air Force and Coast Guard.

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### Pre-Connect

- As a prelude to this Theatre Level exercise, a coastal defense exercise –the 'Sea Vigil' exercise from January 12-13 was billed as India's largest coastal defense drill and it was aimed at validating the coastal defense setup which was revamped after the 26/11 terror attack.
- This was followed by an amphibious exercise (AMPHEX- 21) in which Indian naval amphibious ships, units of the Indian Army and Indian Air Force undertook joint exercise in the Bay of Bengal and Andaman Sea, with an aim to validate India’s capabilities to safeguard the territorial integrity of its Island territories.

### Highlights

- The biennial 'Theatre Level Operational Readiness Exercise (TROPEX)' aims to validate the Navy's offensive as well as defense capabilities and safeguard national interests in the maritime domain besides promoting peace and stability in the Indian Ocean.
- The Biennial exercise is the largest exercise conducted by Indian Navy aimed to validate its concepts of war-fighting across the entire spectrum of warfare.
- Live combat firings of missiles and torpedoes were also undertaken from warships, aircraft and submarines in complex multi- threat scenarios.
- The lessons learnt from the exercise will provide the planners accurate assessments to fine tune force structuring requirements, warfighting concepts, operational logistics, as also material and training imperatives.

## NAVDEX 21 and IDEX 21

### News Excerpt

Recently, Indian Naval Ship Pralaya reached at Abu Dhabi, UAE today 19 February 2021 to participate in the NAVDEX 21 (Naval Defence Exhibition) and IDEX 21 (International Defence Exhibition), scheduled from 20 to 25 February 2021.

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### Pre-Connect

Towards enhancing interactions between the two navies, inaugural edition of Indian Navy – UAE Navy bilateral exercise GULF STAR - 1 was conducted in March 2018.

### Highlights

- INS Pralaya, the second ship of the indigenously built Prabal Class Missile Vessels, built indigenously at Goa Shipyard Limited, was commissioned in the Indian Navy on 18 December 2002 to perform a wide variety of surface warfare missions.

- Participation of INS Pralaya in NAVDEX 21 and IDEX 21, one of the leading international naval and defense exhibitions of the region, is aimed at showcasing the strengths of India's indigenous ship building, in line with Hon'ble Prime Minister's vision of 'Atmanirbhar Bharat'.
- Deployment of Indian Navy ships to Abu Dhabi, UAE underscores deep rooted friendly ties and multi-faceted cooperation between India and UAE, and will further strengthen defense cooperation between the two countries.

### Anti-Tank Guided Missile Systems 'Helina' and 'Dhruvastra'

#### News Excerpt

Recently, Joint User Trials for Helina (Army Version) and Dhruvastra (Air Force Version) Missile Systems have been carried out from Advanced Light Helicopter (ALH) platform in desert ranges.

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#### Highlights

- The missile systems have been designed and developed indigenously by the Defence Research and Development Organisation (DRDO).
- While the Helina weapon systems has been developed for the Indian Army, its IAF variant Dhruvastra has also been developed by the DRDO and now both variants are ready for induction into services.
- Helina, which is the helicopter-launched version of the Nag missile system, is a third-generation fire and forget class anti-tank guided missile (ATGM) system mounted on the ALH.
- The Helina and Dhruvastra are third generation, Lock on Before Launch (LOBL) fire and forget Anti-Tank Guided Missiles that can engage targets both in direct hit mode as well as top attack mode.
- The system has all-weather day and night capability and can defeat battle tanks with conventional armour as well as with explosive reactive armour.
- It is one of the most-advanced anti-tank weapons in the world.

- ❖ **eChhawani:**eChhawani is an unified portal for 62 Cantonment Boards using which citizens have ready access to information regarding their cantonment board and are aware of the day to day activities of their cantonment board.
- ❖ Using eChhawani portal citizens can avail all civic services offered by respective Cantonment Board. eChhawani aims to improve citizen interaction with Cantonment Boards while making Cantonment Board employees better equipped, informed and responsive to public needs with transparency and in an effective manner.
- ❖ The major services which are currently offered to citizens include – Information portal, Trade License, Public Grievances, Online Challan payment system, Lease renewal, Birth and death certificates, Water and Sewerage connection facility. Other Civic services provided by Cantonment Boards will be extended in eChhawani by the inclusion of Online Property Tax payment facility, Online building plan approval facility, Community hall booking facility, Hospital OPD registration facility, school admission and fee payment in the near future.

### Arjun Main Battle Tank

#### News Excerpt

Recently, Prime Minister handed over the indigenously developed Arjun Main Battle Tank (MK-1A) to the Indian Army at a ceremony in Chennai.

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#### Pre-Connect

- The Arjun Main Battle Tank project was initiated by DRDO in 1972 with the Combat Vehicles Research and Development Establishment (CVRDE) as its lead laboratory.

- The objective was to create a “state-of-the-art tank with superior fire power, high mobility, and excellent protection”.

**Highlights**

- The state-of-the-art indigenous main battle tank has been indigenously designed, developed and manufactured by CVRDE, DRDO along with 15 academic institutions, eight labs and several MSMEs.
- Heavy Vehicle Factory (HVF) at Avadi, Chennai is the production agency of MBT Arjun. The focus on making India Atmanirbhar (self-reliant) in the defense sector.

**Features of the Arjun tank**

- ✓ The Arjun tanks stand out for their ‘Fin Stabilized Armor Piercing Discarding Sabot (FSAPDS)’ ammunition and 120-mm calibre rifled gun.
- ✓ It also has a computer-controlled integrated fire control system with stabilised sighting that works in all lighting conditions.
- ✓ The secondary weapons include a co-axial 7.62-mm machine gun for anti-personnel and a 12.7-mm machine gun for anti-aircraft and ground targets.

**How is the Mk-1A different?**

The Mk-1A version has 14 major upgrades on the earlier version. However, the biggest achievement with the latest version is 54.3 per cent indigenous content against the 41 per cent in the earlier model.

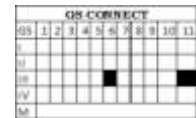
**Defence Research and Development Organisation (DRDO):**

- ❖ Defence Research and Development Organisation (DRDO) was established in 1958 by amalgamating Defence Science Organisation and some of the technical development establishments.
- ❖ The main objective of DRDO is to Design and develop cutting edge defense technologies for Indian Armed Forces.
- ❖ DRDO works under the administrative control of the Ministry of Defence, Government of India.

**Sandes App**

**News Excerpt**

Recently, The National Informatics Centre has launched an instant messaging platform called Sandes on the lines of WhatsApp.



**Pre-Connect**

- The idea for a secure communication network dedicated exclusively to government employees has been in the works for the past four years.

**Highlights**

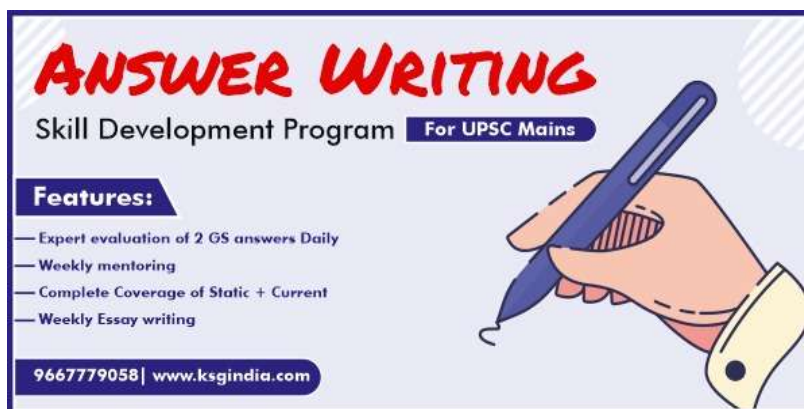
- The instant messaging app, called Sandes, has an interface similar to many other apps currently available in the market.
- Although there is no option to transfer the chat history between two platforms, the chats on government instant messaging systems or GIMS can be backed up to a users’ email.
- GIMS, like other instant messaging apps in the market, uses a valid mobile number or email id to register the user for the first time.
- It also offers features such as group making, broadcast message, message forwarding and emojis.
- Further, as an additional safety feature, it allows a user to mark a message as confidential, which, the app’s description says, will allow the recipient to be made aware the message should not be shared with others. The confidential tag, however, does not change the way the message is sent from one user to another.

- The limitation, however, is that the app does not allow the user to change their email id or registered phone number. The user will have to re-register as a new user in case they wish to change their registered email id or phone number on the app.

### **Analytica**

#### **Why has NIC felt the need of launching ‘Sandes’?**

- ✓ Following the nationwide lockdown imposed in March 2020 to contain the spread of Covid-19, the government felt the need to build a platform to ensure secure communication between its employees as they worked from home.
- ✓ After security scares, the Ministry of Home Affairs had in April last year issued an advisory to all government employees to avoid using platforms like Zoom for official communication. This was after the Computer Emergency Response Team (Cert-In) had also posted an advisory against Zoom over safety and privacy concerns.
- ✓ The idea for a secure communication network dedicated exclusively to government employees has been in the works for the past four years.
- ✓ In August 2020, the NIC released the first version of the app, which said that the app could be used by both central and state government officials “for intra and inter-organisation communication.” The app was initially launched for Android users and then the service was extended to iOS users.
- ✓ The launch of the app is also a part of the government strategy to push for use of India-made software so as to build an ecosystem of indigenously developed products. Open initially only to government officers, it has now been released for the common public as well.

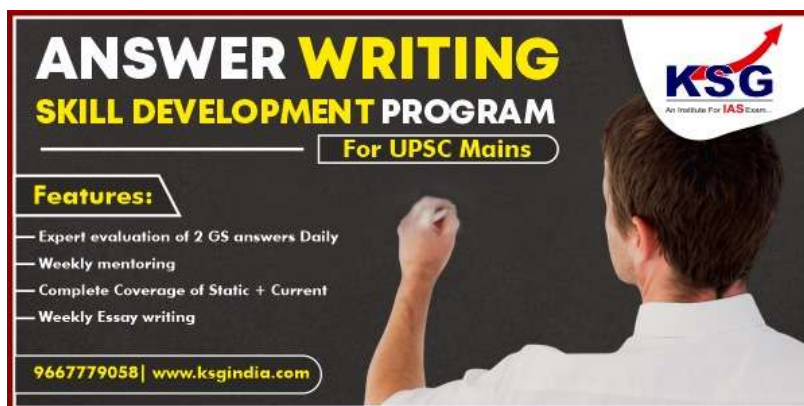


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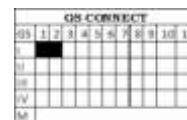


## ART & CULTURE

### Buddhist Monastery found by Archaeological Survey of India (ASI)

#### News Excerpt

Recently, Ancient Buddhist monastery found in a hilly area of Hazaribagh district of Jharkhand.



#### Pre-Connect

- The Archaeological Survey of India (ASI) has unearthed a Buddhist monastery, believed to be at least 900 years old, buried under a mound in a village situated in a hilly area of Hazaribagh district of Jharkhand.

- Earlier an ancient Buddhist shrine, buried under a similar mound was found, barely 100 metres away.

#### Highlights

- A branch of ASI has excavated 10 stone statues of deity Tara and the Buddha in Burhani village near JuljulPahar of Sitagarhi Hills.
- ASI team found a sculpture which appears to be that of Shaivite deity Maheswari – with a coiled crown and chakra – indicating cultural assimilation in the area.
- In December 2020, ASI found a Buddhist shrine with three rooms near an agricultural land on the eastern side of JuljulPahar. The central shrine had Tara's statue and two subsidiary shrines had the Buddha's.
- In a recent discovery, four statues of deity Tara in Varad Mudra [gesture of hand showing dispensing of boons] and six statues of the Buddha in Bhumisparsha Mudra [gesture of hand showing five fingers of right hand towards the earth symbolising the Buddha's enlightenment] are found.
- Last year, during excavation a script of four-five words was found. According to ASI officials, it was a Nagri script which is dated between 10th century AD to 12th century AD.
- Nagri is a previous version of Devnagri script and the words indicate Buddhist religious affiliation. This time also Nagri script is found on a Tara statue.

#### Vajrayana Buddhism

- ❖ **Vajrayana** in Sanskrit means "Thunderbolt or a Diamond Vehicle".
- ❖ It is known as **Vajrayana** because of the ritual use of the vajra, a symbol of thunder and lightning as well as a symbol of an indestructible diamond.
- ❖ **Vajrayana Buddhism** is widely followed across the Himalayan countries like Tibet, Nepal, and Bhutan and also in some parts of Mongolia.
- ❖ It is a form of *tantric Buddhism* that was originally introduced in India in around 6th Century BC.
- ❖ Gaining the ultimate truth is believed to be the main purpose of numerous tantric techniques that are practiced in **Vajrayana**. This also involves advanced meditation practice.
- ❖ The followers of **Vajrayana Buddhism** in general do not claim or believe that the **Theravada and Mahayana practices** are invalid.
- ❖ Instead, the teachings from these schools of Buddhism are believed to have laid an important foundation of understanding on which the practices of Vajrayana are built.

#### Significance of the Findings

- ✓ The findings were significant since the monastery is on the old route to Varanasi, 10 km from Sarnath, where the Buddha gave his first sermon.
- ✓ The presence of statues of deity Tara shows possible proliferation of Vajrayana form of Buddhism in this region.

## Monpa Handmade Paper of Tawang

### News Excerpt

Recently, The PM mention in his radio program Mann kiBaat about the 1000-years old heritage Monpa handmade paper or “Mon Shugu”.

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### Pre-Connect

- In the mid-1990s, a KVIC team in partnership with the United Nations Development Program (UNDP) had study the craft.

### Highlights

- In the forests of Mukto, a village perched at an altitude of 10,800 feet in Tawang district, grows the shugu sheng shrub (*Daphne papyracea*).
  - Monpa Handmade paper is made by the Monpa tribe from the bark of tree Shugu Sheng grown locally in Tawang and is identified by its distinctive translucent fibrous texture.
  - The bark from the shrub has to be extricated, dried, boiled with a solution of ash, made into pulp and then cut into sheets of paper.
- For centuries, the paper has made its way to the many Buddhist monasteries not just locally, but in Tibet, Bhutan, China and Japan too, where it serves as a medium for religious scriptures, manuscripts, prayer flags, and sometimes as part of flag poles and prayer wheels.
  - Writing on this paper is also known to be tamper-proof.
- Khadi and Village Industries Commission, has made Monpa Handmade paper available online through its e-portal [www.khadiindia.gov.in](http://www.khadiindia.gov.in).

### Analytica

- ✓ Monpa Handmade Paper is not only supporting environment protection but has also opened new avenues of income for the local artisans.
- ✓ The paper is weightless but its natural fibers add great tensile strength to this paper making it apt for various art works.
  - The paper serves as a good material for religious scriptures.
- ✓ The Monpa Handmade paper industry set up in Tawang aims at engaging the local youths with this art professionally and earn.

## Swami Dayanand Saraswati

### News Excerpt

Recently, Information and Broadcasting minister paid tributes to Swami Dayanand Saraswati on his birth anniversary.

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### Highlights

- Dayanand Saraswati was born on February 12, 1824 in Tankara, Gujarat as Mool Shankar to Karshanji Lalji Tiwari and Yashodabai.
- Brought up in a devout, affluent family, the boy became proficient in Sanskrit and imbibed the wisdom of Hindu scriptures, especially the Vedas.
- The YajnopavitaSanskara or the investiture of the "twice-born" was performed, when he was 8 and that initiated Mool Shankar into the world of Brahmanism.
- In Mathura, where he came across Swami VirajanandDandeesha and became his disciple.
- Under his guru's guidance, Shankar took up the study of the Vedas and strived to spread the message of these holy books among the masses.
- Swami Virajanand bestowed on him the new name of Rishi (which means sage) Dayanand and is considered as one of the Makers of Modern India. He promised to his mentor that he would devote life to disseminate the teachings of the Vedas.

- Dayananda was poisoned during his stay at the palace of the Maharaja of Jodhpur, Jaswant Singh II. The Swami suffered in pain for a month before he died on October 30, 1883. He was 59.

### **Contribution of Swami Dayanand to Society**

- Dayanand Saraswati, a great thinker and a social reformer was the founder of Arya Samaj. He was more than a religious leader of India who left deep impact on the Indian society.
- In April 1875, Dayanand established the Arya Samaj in Bombay. Formed with the motto Krinvanto Vishvam Aryam (Make this world noble), the socio-cultural movement aimed to reform society by raising awareness among people about Vedic knowledge.
- He voiced his opinions against idolatry and the pointless emphasis on empty ritualism, and man-made dictates that women are not allowed to read the Vedas.
- Dayanand also strongly backed the granting of equal rights for all, emphasized the need for the social uplift of women and of the underprivileged sections.
- He also denounced superstitions and practices such as animal sacrifice.
- His idea of denouncing the caste system inherited by oneself in lieu of their birth was nothing short of radical.
- Spread of education to all irrespective of one being a boy or girl, of being a Brahmin or of other so called castes.
- He supported widow re-marriages amongst the Hindus and also opposed Sati- Pratha and Polygamy.
- He succeeded in removing the Purdah System from Hindu Society and Brought Hindu women at par with men-folk.
- He emphasized on Swadeshi & patronizing of Swadeshi Products amongst all the Hindu Community.
- He brought about a complete overhaul of the education system by introducing Anglo-Vedic schools to offer Indian students an updated curriculum teaching both the knowledge of the Vedas along with contemporary English education.
- Although he was never really involved in politics directly, his political observations were the source of inspiration for a number of political leaders during India's struggle for independence.
  - They also influenced and inspired a large number of freedom fighters such as Ram Prasad Bismil, Subhas Chandra Bose, Bhagat Singh and Lala Lajpat Rai.
- Dayanand strongly believed in a National Religion, based on intense dedicated, true, selfless, fearless nationalism, a thought which he propagated amongst all, preparing for Self-Rule & Freedom, based on equality; its details are enshrined in "Satyarth Prakash" by Maharishi Dayanand Saraswati. This was his life's greatest mission.
  - He authored an estimated 60 books, the most important among them being Satyarth Prakash (meaning The Light of Truth), to spread knowledge among people about the principles of the Vedas and to promote qualities that he considered were truly divine. Other books include the Sanskarvidhi, Rigved Bhashyam, etc.
- Swami Dayanand Saraswati emerged as an early proponent of cow protection, who first published Gokarunānidhi, a pamphlet in 1881, which circulated his concerns against cattle slaughter.
  - In it, Saraswati stated the 'economic' favourability of cow protection, arguing that a cow was more beneficial to people alive, as opposed to it being dead, since it gave milk and eased agricultural labour.
  - Saraswati later on went to establish a committee for the protection of cows called Gaurakshini Sabha in 1882.

## Sant Ravidas

### News Excerpt

Recently, 644<sup>th</sup> Jayanti of Sant Ravidas was celebrated on – 27th of February, 2021.

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### Highlights

- Sant Ravidas Jayanti or birthday anniversary is celebrated every year on Magh Purnima on full moon day of Magh month with great enthusiasm and happiness all over India.
- He was born in Harijan caste in the Varanasi to Kalsa Devi Ji and Baba Santokh Dass Ji in the Seer Goverdhanpur village, Varanasi, U.P., India in the 15th century.
- He is loved and respected all over the world however the most respected regions were Uttar Pradesh, Punjab, and Maharashtra for his Bhakti movement and devotional songs.

### Analytica

- Sant Ravidas Ji was a great Saint, philosopher, poet, social reformer, and follower of God in India during the 15th century.
- During the early days of his teachings, his popularity was prohibited by the conservative Brahmins living in Kashi as he was also an untouchable guru.
- He gained prominence due to his belief in one God and his unbiased religious poems.
- Ravidas Ji had unwavering faith in values of harmony and brotherhood. He did not believe in any kind of discrimination.
- He dedicated his whole life to the abolition of the caste system and openly despised the notion of a Brahminical society.
- He was one of the most famous and leading stars of the nirguna sampradaya (santparampara) and was one of the prominent leaders of the North Indian Bhakti movement.
- He taught people that one is not known by his caste, religion, or believes in God, he is known only for his great actions (or karma). He also worked against the system of untouchability in the society by the higher caste people for lower caste people. He spread a message that “God created man and not man created God”.
- His padas, devotional songs, and other writings (around 41 verses) are mentioned in the Sikh Scriptures, Guru Granth Sahib who was compiled by the 5th Sikh’s Guru, Arjan Dev. The followers of Guru Ravidas Ji’s teachings are commonly called Ravidassia and a collection of teachings called Ravidassia Panth.
- Ravidas Ji is considered as a spiritual Guru of Meera Bai who was the queen of Chittoor and daughter of one of the famous kings in Rajasthan naming Rao Dudaji.

**PEPPER IT WITH**  
Bhakti Movement, Sufi Movement

## Bharat Parv 2021

### News Excerpt

The annual event Bharat Parv was celebrated from 26th to 31st January, 2021 on a virtual platform created by the Ministry of Tourism.

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### Highlights

- The mega event envisages generating patriotic fervor and showcases the rich and varied cultural diversity of the country. The Bharat Parv celebrates the “Essence of India”.
- The Ministry of Tourism organizes Bharat Parv every year since 2016 in front of the ramparts of the Red Fort on the occasion of Republic Day Celebrations.
- Bharat Parv 2021 also showcases many pavilions of Central Ministries, State Theme Pavilions, handicraft, Folk performances from various states and UTs.



- On the occasion, the Ministry dedicated three virtual pavilions - **Dekho Apna Desh, Statue of Unity & Incredible India.**

### Statue of Unity

- The Statue of Unity pavilion in virtual Bharat Parv -2021 provides detailed information about the destination with High Resolution Videos, Images & E- Brochures etc.
  - The 'Statue of Unity' Pavilion also exhibits the idea of 'Ek Bharat Shreshtha Bharat (EBSB)' with an aim to enhance interaction & promote mutual understanding between people of different States/UTs through the concept of State/UT pairing.
  - Further, promoting a sustained and structured cultural connect in the areas of language learning, culture, traditions & music, tourism & cuisine, sports and sharing of best practices, etc.

### 'Dekho Apna Desh' campaign

- The second pavilion by the Ministry of Tourism is on 'Dekho Apna Desh' campaign in virtual Bharat Parv – 2021 with aim to promote domestic tourism and to increase the flow of domestic travellers.
  - The pavilion exhibits information on various tourist destinations majorly focusing on 'lesser known destinations' and excursions.
  - The pavilion also has recordings of series of webinars that has been organized by Ministry of Tourism under 'Dekho Apna Desh' initiative /campaign.
  - The 'Dekho Apna Desh' Pavilion also showcases India's varied tourism offerings and experiences to its own citizens while showcasing various tourism assets and products of the country.

### Incredible India Pavilion

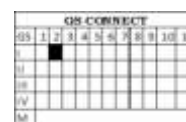
- Incredible India Pavilion comprises information on UNESCO World Heritage Sites.
  - There are 38 World Heritage Sites located in India. These include 30 cultural sites, 7 natural sites and 1 mixed-criteria site.

**PEPPER IT WITH**  
Statue of Unity, Padho Pradesh scheme

## Maharaja Suheldev's contribution

### News Excerpt

Recently, PM lays the foundation stone of Maharaja Suheldev Memorial and development work of Chittaura Lake at Bahraich, Uttar Pradesh.



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### Highlights

- Suheldev was the king of Shravasti in Uttar Pradesh's (UP) Bahraich district during the 11th century.
- Suheldev was deeply moved by the loot and destruction of the magnificent Somnath temple by invader Mahmud Ghazni that he decided to unite Indians across religions, castes, and regions, under his leadership, and mounts a fierce resistance against the foreign invaders.
- His army defeated and killed Ghazi Salar Masud, the nephew of Mahmud Ghazni, at Bahraich.
- He is known in history for waging guerrilla warfare against Mahmud Ghazni's large army.
- Suheldev is alternatively known as Sakardev, Suhirdadhvaj, Suhar Deo, Sahardev, etc.
- He is mentioned in the 17th century Persian-language historical romance Mirat-i-Masudi.
  - Mirat-i-Masudi was written by Abd-ur-Rahman Chishti During the reign of the Mughal emperor Jahangir.
  - Suheldev was the eldest son of King Mordhwaj of Shravasti.
  - According to Mirat-i-Masudi, Suheldev belonged to the "BharTharu" community.
- In local folklore, Suheldev is said to be a Rajbhar.

### Chitaurajheel (Chitauraj lake)

- Chitaurajheel, also known as Ashtwarkajheel is a lake in Uttar Pradesh.
- The site is believed to be the place where the fight between Raja Sukhdeo and Ghazi SaiyyadSalarMasud took place in June 1033.
- A small river, Teri Nadi, flows from this lake.
- Chitaurajheel is a Hindu pilgrimage site. According to local legends, Ashtwarka Muni, the Guru of Maharaja Janak used to live here in his ashram.

**Battle of Bahraich:** was a decisive battle between forces of Raja Suheldev and Ghazi SaiyyadSalarMasud on 13-14 June 1033 CE. The battle was fought near Chitauraj Lake near the present day Bahraich city, Uttar Pradesh. Ghaznavid army was completely destroyed which halted the Islamic conquest of India for about a century.

### Chhatrapati Shivaji Maharaj

#### News Excerpt

Recently, The Prime Minister has paid tributes to Chhatrapati Shivaji Maharaj, on his Jayanti.

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#### Highlights

- Chhatrapati Shivaji Maharaj, great Maratha ruler was born on February 19, 1630 to Shahaji Bhosle and Jijabai in the fort of Shivneri, near the city of Junnar of the Pune district.
- Shivaji's father Shahaji was in service of the Bijapuri Sultanate - a tripartite association between Bijapur, Ahmednagar, and Golconda, as a general. Shivaji's mother Jijabai, a deeply religious woman, who instilled in him a strict sense of right and wrong.
- KanhojiJedhe and BajiPasalkar were appointed to train Shivaji in military and martial arts. Shivaji was married to Saibai Nimbalkar in 1640.
- Chatrapati Shivaji Maharaj was the founder of the Maratha Empire in western India.
- After establishing his rule, Shivaji implemented a competent and progressive administration with the help of a disciplined military and well-established administrative set-up.
- Shivaji is well-known for his innovative military tactics that centered around non-conventional methods leveraging strategic factors like geography, speed, and surprise to defeat his more powerful enemies. Shivaji was also considered a master of the guerrilla warfare.
- By 1645, Shivaji acquired control of several strategic from under the Bijapur Sultanate around Pune – Torna from Inayat Khan, Chakan from FirangojiNarsala, Kondana from Adil Shahi Governor, along with Sinhagarh and Purandar.
- Adil Shah of Bijapur then got Shahaji imprisoned in a bid to contain Shivaji. Shivaji resumed his conquests after Shahaji's death in 1665.
- Mohammed Adil Shah sent Afzal Khan, a powerful general in his employ to subdue Shivaji. He achieved a great name when he defeated Afzal Khan.
- In the Battle of Pratapgarh (1659), where around 3000 Bijapuri soldiers were killed by the Maratha forces. Overnight, Shivaji had become a formidable warlord, possessing the horses, the guns, and the ammunition of the Bijapur army.
- Shivaji's conflicts with the Bijapuri Sultanate and his continuous victories brought him under the radar of Mughal Emperor Aurangzeb.

- Shivaji's generals raided and looted Mughal territories near Ahmednagar and Junnar. Aurangzeb directed Shaista Khan, Governor of Deccan and his maternal uncle, to subdue Shivaji but the Mughal prince soon became engaged with his own battles with his brothers for the possession of the Mughal throne upon his father's illness.
- Shaista Khan launched a massive attack against Shivaji, capturing several forts under his control and even his capital Poona. To replenish his depleted treasury, Shivaji attacked Surat, an important Mughal trading center and looted the Mughal wealth.
- The Treaty of Purandar was signed between Shivaji and Jai Singh on June 11, 1665. Shivaji agreed to surrender 23 forts and pay a sum of 400000 as compensation to the Mughal Empire.
- Later, Aurangzeb invited Shivaji to Agra with an aim to use his military prowess to consolidate Mughal empires in Afghanistan. Shivaji travelled to Agra with his eight year old son Sambhaji and was offended by Aurangzeb's treatment of him. He stormed out of the court and an offended Aurangzeb placed him under house arrest.
- He disguised as one of the carriers and hid his son in one of the baskets, and escaped on August 17, 1666.
- In subsequent times, Mughal and Maratha hostilities were pacified to a large extent by constant mediation through Mughal Sardar Jaswant Singh. Peace lasted till 1670, after which Shivaji launched an all-out offense against the Mughals. He recovered most of his territories sieged by the Mughals within four months.
- In October 1670, he also harassed the English forces at Bombay for their support of the Mughals.
- After having consolidated a considerable control over territories adjoining Poona and Konkan. He was crowned the King of Marathas on June 6, 1674, at Raigadh in an elaborate coronation ceremony. He aimed at unification of the Deccan states under the rule of a native Hindu ruler and protect it from outsiders.
- Under his reign, the Maratha administration was established where Chhatrapati was the supreme sovereign and a team of eight ministers (Ashta Pradhan Mandal) were appointed to oversee the proper enforcement of various policies.
- Shivaji vigorously promoted the use of Marathi and Sanskrit in his court instead of Persian, the existing Royal language.
- He took upon several titles like Chhatrapati (paramount sovereign), Shakakarta (founder of an era), Kshatriya Kulavantas (head of Kshatriyas) and HaindavaDharmodhhaarak (one who uplifts the sanctity of Hinduism).
- His administrative policies were subject-friendly and humane, and he encouraged liberty of women in his rule. He was strictly against caste discrimination and employed people from all caste in his court. He introduced the Ryotwari system eliminating the need for middlemen between farmers and the state and collecting revenues directly from the manufacturers and producers.
- Shivaji introduced the collection of two taxes called the Chauth and Sardeshmukhi.
- He divided his kingdom into four provinces, each headed by a Mamlatdar. Village was the smallest unit of administration and the head was titled as Deshpande, who headed the Village Panchayat.
- Shivaji maintained a strong military force, built several strategic forts to secure his borders and developed a strong naval presence along the Konkan and Goan coasts. His admiral KanhojiAngre is called the 'Father of Indian Navy'.
- Shivaji died at the age of 52 on April 3, 1680, at the Raigad Fort, after suffering from a bout of dysentery.

## Pandit Bhimsen Joshi Jayanti

### News Excerpt

Recently, the PM paid homage to Pandit Bhimsen Joshi, the classical music vocalist, on his centenary birth anniversary.

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### Highlights

- Born on February 4, 1922 at Gadag in Dharwad district of Karnataka.
  - He received the Bharat Ratna in 2008.
  - A brilliant exponent in the field of Hindustani classical music, Pandit Bhimsen Joshi was also known for his presentation of patriotic and a devotional singer.
    - Bhimsen's Hindustani classical music had a unique style as it was influenced by a number of greats including Begum Akhtar, Smt. KesarbaiKerker and Ustad Amir Khan.
  - Though he mainly stuck onto Kirana gharana for most part of his career, he also incorporated various styles and gharanas from each of his inspirations.
    - Kirana Gharana, which got its name from a small town called Kerana in Uttar Pradesh and founded by Ustad Abdul Karim Khan. Famous artistes such as Abdul Wahid Khan, Suresh Babu Mane, Hira Bai Badodekar, Roshanara Begum belong to this gharana.
  - On January 24, 2011, he breathed his last.
- ❖ Hindustani music, one of the two distinct schools of Indian Classical Music, practiced mainly in the north India. The other school of Indian Classical Music is Carnatic music, which is practiced mainly in southern India.
  - ❖ It is generally believed that the music of India was more or less uniform before the 13th century. Later it bifurcated into the two musical systems.
  - ❖ The historical roots of both the music types belong to the Natya Shastra of Bharata.
  - ❖ It exists in four major forms: Dhrupad, Khyal (or Khayal), Tarana, and the semi-classical Thumri.

## Kerala's famous temple art Tholpavakkoothu

### News Excerpt

Recently, a shadow leather puppet in Kerala's famous temple art Tholpavakkoothu has been animated by a robot.

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### Highlights

- The first robotic leather puppet was installed at the Palakkad District Heritage Museum.
- For the first time, the famous shadow leather puppets will tell stories of the epic Ramayana with the help of robots.
- The most difficult part of Tholpavakkoothu is the limb movements of the puppets.
- The Central government honoured Ramachandra Pulavar , a doyen of Tholpavakkoothu, awarding him Padma Shree this year.

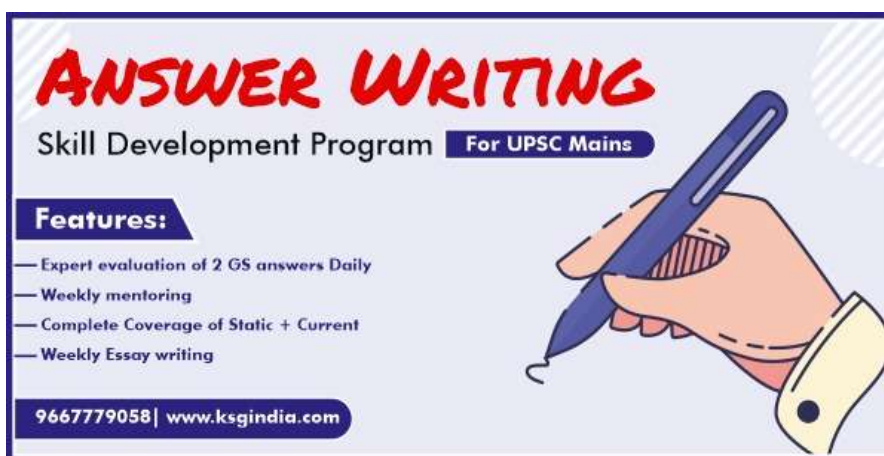
### Tholpavakkoothu

- Tholpavakkoothu or shadow puppetry is a temple art form which is prevalent in the Bhagavathy temples (mother Goddess) in Palakkad district and nearby regions in Kerala.
  - This art is confined largely to Pulavar families from Shoranur region of Palakkad district.
- Tholppava (Thol means leather, Pava means puppet) are moved with the help of strings, and their shadows are depicted on a screen with the help of a row of oil lamps in the background.



- Tholppavas are made of the skin of deer and the puppet forms are made by making small holes in the leather that is then attached vertically to a bamboo stick.
- The story of Tholpavakkoothu performance is from the Indian epic, Ramayana.
- In the olden days it was performed elaborately over a period of forty-one days. The narrative used for the performance is a mixture of prose and poetry called Adalpattu.
- It is also known as Nizhalkkoothu and Olakkoothu.
- The chief puppeteer is known as 'Pulavan'.
- Accompanying instruments include Ezhupara, Chenda and Maddalam. The puppetry is staged on a special structure in temple premises called Koothumadam.

**PEPPER IT WITH**  
Regional Names of  
Shadow Puppetry in  
India

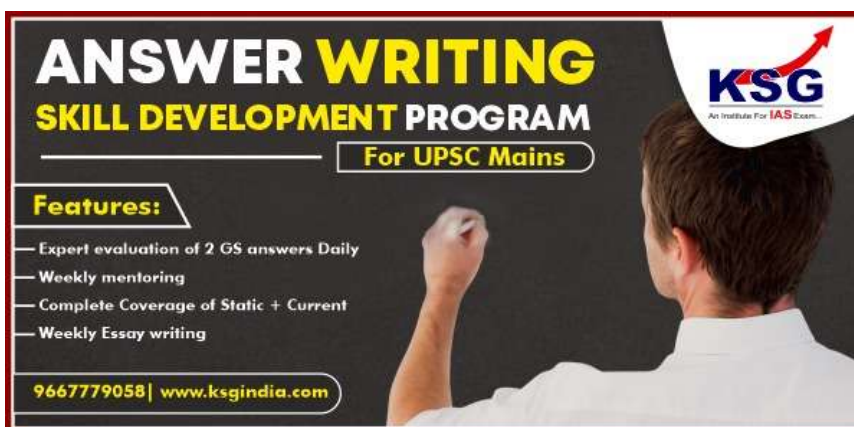


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## Concept Clearing Assignment

1. Do you think that India's self-reliance in defense sector can boost its global standing? Substantiate your views. Also, explain the significance of 'Ease of Doing Business' in the defense sector.
2. What are the various sects of the Buddhism? Explain the significance of Buddhist ideology in the contemporary era.
3. Highlight the legal provisions related to sedition law. Do you think that repetitive misappropriation of sedition laws underlines the need to scrap it altogether? Critically examine. Suggest a Way forward to ensure its legitimate and limited uses?
4. Discuss in brief the evolution of India-Russia bilateral ties since independence. Do you think India-Russia relationship needs recalibration? Substantiate your views.
5. Critically analyse the contribution of the Rights of Persons with Disabilities Act, 2016 in empowering the differently abled population of India. Also, suggest innovative measures to eliminate the miseries of the persons with disabilities.
6. What is National Hydrogen Energy Mission? Also, critically analyse the utility of Hydrogen as fuel to avoid the energy crisis in the upcoming future.
7. What are the powers and responsibilities of the finance commission? Also, mention the key recommendations of the fifteenth finance commission.
8. The flotilla of missions on Mars in recent times represents the spread of planetary exploration in general, and Mars exploration in particular. In this background explain the significance of the red planet for the scientific community all over the globe. Also, throw a light on the recent Mars missions in news.
9. Critically examine the key recommendations of the Parliamentary Standing Committee on the DNA Technology Regulation Bill, 2019. Also, highlight the issues, challenges and opportunities related to it.
10. The unwillingness to decriminalize same-sex marriage makes the LGBT community a new untouchable class. Discuss. Do you think that the individual rights of the LGBT community can be fulfilled without creating any havoc in the delicate balance of personal laws in the country? Substantiate your views.
11. In compliance with India's neighbourhood first policy, Myanmar is often cited as more than an economic opportunity for India. Discuss. What impacts are likely to occur on bilateral ties of India-Myanmar due to the recent military coup?
12. Do you agree that climate change could be fuelling political instability, induced migration, and disuniting social cohesion? What kind of adaptation and mitigation measures need to be undertaken to ensure sustainable human-environment relationship? Substantiate your views.
13. What is Glacial Lake Outburst Floods (GLOFs)? Explain the causes and mitigation strategies related with it?
14. Discuss the socio-economic implications of lack of adequate measures for the road safety. What measures should have to be geared up by Government to achieve minimal road accident fatalities?
15. Explain in brief the contribution of Chhatrapati Shivaji Maharaj in establishing the Maratha Empire in the Western India. Also, put a light on the administrative reforms introduced by him.

### P.T Oriented Questions

1. Consider the following statements regarding the Vigyan Jyoti Programme:
  1. The programme encourages all students from class 10th to 12th to take interest in science and build a career.
  2. This programme promotes STEM learning and inspires students towards STEM careers.Which of the following statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
2. Deity 'Tara' belongs to which of the following?
  - (a) Vajrayana form of Buddhism
  - (b) Hinayana buddhism
  - (c) Digambara sect of jainism
  - (d) None of the above
3. Consider the following statements regarding Jal Jeevan Mission-Urban:
  1. The ministry of Jal Shakti has selected 10 pilot cities to survey for the Jal Jeevan Mission.
  2. The mission aims to create sponge cities to reduce floods and enhance amenity value through an Urban Aquifer Management plan.Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
4. With reference to Road Safety Report by World Bank, consider the following statements:
  1. The report cited that in India due to accidental deaths an economic loss is equivalent to 3.14 percent of GDP each year.
2. As per the report, every low-income household in India reported a decrease in their income if there was a road crash in the family.  
Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
5. Recently, Corruption perception index (CPI) 2020 report has been released; in this context consider the following statements:
  1. The CPI report has revealed that all south Asian countries are showing no improvement in tackling corruption.
  2. India has slipped six places and China has improved its position.Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
6. With reference to India Justice report 2020, consider the following statements:
  1. The report was released by Ministry of Law and Justice.
  2. The report shows that human resource deficits continue to stubbornly ail the justice system.Which of the statements given above is/are correct?
  - (a) 1 only
  - (b) 2 only
  - (c) Both 1 and 2
  - (d) Neither 1 nor 2
7. Budget proposals for this financial year rest on which of the following pillars?
  1. Health and well being
  2. Physical and financial capital

3. Minimum Government, Maximum Governance  
Select the correct answer using the code given below:  
(a) 1 and 2 only  
(b) 2 and 3 only  
(c) 1 and 3 only  
(d) 1, 2 and 3
8. Consider the following statements regarding the 15th Finance Commission:  
1. It recommended that the share of state in the Centre's taxes to be decreased by 1%.  
2. Income distance is the distance of Center's income from the state with the highest income.  
Which of the statements given above is/are correct?  
(a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2
9. Consider the followings statements regarding the Limited liability Partnership (LLP):  
1. It allows for a partnership structure where each partner's liabilities is limited to the amount they put into the business.  
2. LLPs are common in professional business-like law firms, accounting firms, and wealth managers.  
3. In case of failure of partnership in LLPs, creditors can go after the partner's personal assets and income.  
Which of the following statements given above are correct?  
(a) 1 and 2 only (b) 2 and 3 only  
(c) 1 and 3 only (d) 1, 2 and 3
10. Consider the following statements regarding Non-Performing Assets (NPAs):  
1. NPA is a loan or advance for which the principal or interest payment remained overdue for a period of 90 days.
2. Assets which has remained NPA for a period of less than or equal to 12 months are considered as Doubtful assets.  
Which of the statements given above is/are correct?  
(a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2
11. With reference to National Coal Index (NCI), consider the following statements:  
1. This index will be used to calculate the amount of performance security companies need to pay after winning coal blocks.  
2. The NCI is a price index which reflects the change of price level of coal on a particular month relative to the fixed base year.  
Which of the statements given above is/are correct?  
(a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2
12. Recently, the Government has proposed a scheme of Mega Investment Textiles Parks (MITRA), in this context consider the following statements:  
1. It will enable the large investments and enhance employment opportunities.  
2. It will give our domestic manufacturers a level-playing field in the international textiles market.  
Which of statements given above is/are correct?  
(a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2



13. Consider the following statement regarding the Theatre Level Operational Readiness Exercise TROPEX 21:

1. It involves the Indian Navy, the Tri-Services Command at Port Blair, and elements of Indian Army, Indian Air Force and Coast Guard.
2. It is the largest exercise conducted by Indian Navy aimed to validate its concepts of war-fighting across the entire spectrum of warfare.

Which of statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

14. The term 'Helina' and 'Dhruvastra' is related to—

- (a) Early warning Radar system developed by DRDO
- (b) Anti-Tank Guided Missile
- (c) Beyond visual range missile
- (d) Fighter helicopter developed by DRDO

15. Consider the following statements regarding Intensified Mission Indradhanush (IMI) 3.0:

1. The ultimate goal of Mission Indradhanush 3.0 is to ensure full availability of COVID-19 vaccines to children.
2. It aimed to reach the unreached population with all the available vaccines under the Universal Immunisation Programme (UIP).
3. It enabled the immunization system in reaching hard-to-reach and high-risk areas and nomadic population.

Which of the statement given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

16. Consider the following statements regarding the International Commission on Large Dams (ICOLD):

1. It is an UN-based inter-governmental organization founded during the 1960s.
2. It maintains a world register of dams which recorded over 50,000 large dams.
3. India is a member country of ICOLD.

Which of the Statements given above are correct?

- (a) 2 and 3 only
- (b) 1 and 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3

17. Consider the following pairs:

**Type of Characteristics Hydrogen**

- |                   |   |
|-------------------|---|
| 1. Blue Hydrogen  | It is inherently carbon-free              |
| 2. Green Hydrogen | It is produced by the use of electrolysis |
| 3. Grey Hydrogen  | It is produced by using fossil fuels      |

Which of the pairs given above are correctly matched?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

18. Which of the following organization has released India Energy Outlook 2021?

- (a) Organisation for Economic Co-operation and Development
- (b) National Institution for Transforming India
- (c) Bureau of Energy Efficiency
- (d) International Energy Agency

19. Consider the following statements regarding wetlands in India:

1. India has nearly 11% of its land as wetlands which covers an area around 21 million hectares.
2. Recently, India has established a First dedicated Wetland

- Conservation and Management Centre in Chennai.  
Which of the statements given above is/are correct?  
(a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2
20. Which of the following countries share the border with Lake Chad?  
1. Nigeria  
2. Cameroon  
3. Angola  
Select the correct answer using the code given below:  
(a) 1 and 2 only  
(b) 2 and 3 only  
(c) 1 and 3 only  
(d) 1, 2 and 3
21. Consider the following statements regarding mountain ranges:  
1. The Karakoram Range ends on the northern side of the Pangong Tso.  
2. The Kailash Ridge is characterised by rugged, broken terrain with heights varying between 4,000-5,500m.  
Which of the statements given above is/are correct?  
(a) 1 only (b) 2 only  
(c) Both 1 and 2 (d) Neither 1 nor 2
22. Which of the following missions are aimed to study the Mars Planet?  
1. Tianwen-1  
2. Perseverance rover  
3. Hope mission  
4. Cassini-Huygens  
Select the correct answer using the code given below:  
(a) 1, 2 and 3 only  
(b) 2, 3 and 4 only  
(c) 1 and 4 only  
(d) 3 only
23. Consider the following statements regarding the Sun:  
1. Sunspots are small and dark but cooler areas on the solar surface have strong magnetic forces.  
2. The presence of strong magnetic fields around bigger sunspots allows faster rotation of sun.  
Which of the statements given above is/are correct?  
(a) 1 only (b) 2 only  
(c) Both 1 and 2 (d) Neither 1 nor 2
24. Recently, 'Stardust 1.0' was seen in the news. In this context, consider the following statements:  
1. It is the first commercial space launch powered by biofuel.  
2. It was developed and tested by the Jet propulsion laboratory of NASA.  
Which of the statements given above is/are correct?  
(a) 1 only (b) 2 only  
(c) Both 1 and 2 (d) Neither 1 nor 2
25. Which of the following countries are part of the Square Kilometre Array Observatory (SKAO)?  
1. Australia  
2. India  
3. Japan  
4. New Zealand  
Select the correct answer using the code given below:  
(a) 2, 3 and 4 only  
(b) 1, 2 and 4 only  
(c) 1 and 3 only  
(d) 2 and 4 only
26. What is the application of Somatic Cell Nuclear Transfer (SCNT) Technology? (UPSC 2017)  
(a) Production of biolarvicides  
(b) Manufacture of biodegradable plastics  
(c) Reproductive cloning of animals  
(d) Production of organisms free of diseases

27. With reference to the religious practices in India, the "Sthanakvasi" sect belongs to- (UPSC 2018)

- (a) Buddhism (b) Jainism
- (c) Vaishnavism (d) Shaivism

28. Consider the following statements: (UPSC 2019)

1. In the revenue administration of Delhi Sultanate, the in-charge of revenue collection was known as 'Amil'.
2. The Iqta system of Sultans of Delhi was an ancient indigenous institution.
3. The office of 'Mir Bakshi' came into existence during the reign of Khalji Sultans of Delhi.

Which of the statements given above is/are correct?

- (a) 1 only (b) 1 and 2 only
- (c) 3 only (d) 1, 2 and 3

29. With reference to 'Indian Ocean Dipole (IOD)' sometimes mentioned in the news while forecasting Indian monsoon, which of the following statements is/are correct? (UPSC 2017)

1. IOD phenomenon is characterized by a difference in sea surface

temperature between tropical Western Indian Ocean and tropical Eastern Pacific Ocean.

2. An IOD phenomenon can influence an El Nino's impact on the monsoon.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

30. With reference to Swadeshi Movement, consider the following statements: (UPSC 2019)

1. It contributed to the revival of the indigenous artisan crafts and industries.
2. The National Council of Education was established as a part of Swadeshi Movement.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Answers**

- 1. B
- 2. A
- 3. B
- 4. A
- 5. B
- 6. B
- 7. D
- 8. A
- 9. A
- 10. A

- 11. C
- 12. C
- 13. C
- 14. B
- 15. B
- 16. A
- 17. B
- 18. D
- 19. B
- 20. A

- 21. C
- 22. A
- 23. A
- 24. A
- 25. B
- 26. C
- 27. B
- 28. A
- 29. B
- 30. C