

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. Don't wait, it's your golden chance to crack this exam and fulfill your passionate dream.

Team KSG



Contents

POLITY

Reservations For PwDs	6
Role of Governor in the Floor Test	7
Registered Unrecognised Political Parties	8
Demolition and the Rule of Law	10
One Candidate One Constituency	11
Digitisation of Indian Judiciary	
Uniform Civil Code	15
Prison Reforms: Special remission to prisoners	16
Chancellor of the State University	18
Legislative Councils	19
SOCIAL ISSUES, GOVERNMENT SCHEMES, REPORT	
Global Sustainable Development Report, 2022	22
Role of ASHA workers	
SHRESHTA Scheme	27
UNESCO's Recognition	29
NIPUN	30
Amrit Sarovar Mission	
World Mental Health Report: WHO	33
Community Forest Resource	36
'Nanhi Pari' programme	38
Food Safety Index	38
ECONOMY	
Tokenisation of cards	41
Urban Cooperative Banks (UCBs)	42
RBI's Payments Vision 2025 document	45
12th Ministerial Conference of the World Trade Organization	46
Periodic Labour Force Survey	48
Neobanks	49
The Indian patent regime and its clash with the U.S. norms	51
Single Nodal Agency (SNA) Dashboard of PFMS	54



Income of registered informal workers	55
Open Network for Digital Commerce	56
Surety Bonds	58
INTERNATIONAL RELATIONS	
Industry Transition Dialogue	60
I2U2 summit	60
India-Bangladesh relations	61
Australia India Water Security Initiative (AIWASI)	62
West Seti power project	64
UNSC Report on Taliban	65
BRICS 14th Summit	66
FATF Grey List	68
Aegean Islands	69
ENVIRONMENT	
Horticulture Cluster Development Programme	71
Renewables 2022: Global Status Report	72
Warming of the Arctic	74
Biomass co-firing	76
Microplastics in Antarctica Snow	78
Stockholm+50	79
Keibul Lamjao National Park (KLNP)	81
Environmental Performance Index (EPI)	81
SCIENCE & TECHNOLOGY	
Web 5.0	83
AmbiTAG	85
Liquid Nano Urea	85
Critical Information Infrastructure	87
Managing Type 1 diabetes mellitus (T1DM)	90
China's Tiangong Space Station (TSS)	91
Transfer of Ten in-orbit communication satellites to NSIL	93
5G Auctions	94



SECURITY

Prithvi II Missile.	96
Vertical Launch Short Range Surface to Air Missile (VL-SRSA	M) 96
Operation Sankalp	96
India-Indonesia Coordinated Patrol (IND-INDO Corpat)	97
Ex-Sampriti-X	97
Ex Khaan Quest 2022	98
ART AND CULTURE	
Buddha's Relics	99
Bharat Gaurav Scheme	100
Sant Tukaram	101
International Literature Festival-Unmesha	102
Thang-ta	102
MISCELLANEOUS	
Dak Karmayogi Portal	104
International Yoga Day-2022	104
Summer Solstice-2022	105
Startup for Railways	105
Concept Clearing Assignment	106
PT Oriented Ouestions	107



Mis.	GS – IV	GS – III	65 - II	GS – I	S.
	ical issues related to ily society, cation, Corruption	Various measures to boost Indian economy- planning, policies, management.	Indian constitution- Amendments, acts and bills.	Culture-Art Forms, Literature and Architecture from ancient to modern times.	н
	Ethics in public and private administration	Government budgeting and issues related to budget.	Legislative, executive and judicial processes.	Indian history significant events, person alities, issues and the Freedom	2
	Issues	Agriculture, animal husbandry and transport	Constitutional, non- constitutional, judicial, quasi- judicial, administrative and other types of bodies.	Post independence issues, National boundary and disputes	ω
	Related laws and rules	Food security- measures to boost food security and food processing. Issues related to land- land reforms	Federal structure and local bodies. Their powers and functions.	Indian society features, issues, globalization and diversity	4
	Governance/e- Govern ance	Industries and infrastructure-their growth and investment model	Government policies and various governance issues like transparency, accountability and governance	Women - issues and developments	5
	in interna- tional issues	Space and technology, IT space, robotics and computer	Committees and schemes.	Urbanization — problems and remedies	6
	Person alities and their teachings	Disease, biotechnol- ogy and human welfare	Non- government issues, self-help groups and role of civil society	Distribution of industries andresourc es – India and world	7
	Other import ant topics	Innovations, intellectual property, Awards, POI and other import ant aspects of \$&T	Vulnerable sections of our society and social sector issues and initiatives.	Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc	8
		Environment; government initiatives, various judgment, pollution, degradation and conservation efforts	International Relation-India and other countries, various Indian and international agreements, effects of other countries on India and international institutions.		ø
		Disaste r & Disaste r Manag ement			10
		Challenges to internal security, Various Security forces and agencies and their mandate. Cybersecurity; moneylaunde ri-ng and its preventio			11

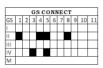


POLITY

Reservations For PwDs

News Excerpt

Government of Haryana has increased the reservation for differently-abled with benchmark disabilities (at least 40% disability of any type recognized under the Right to Disability Act, 2016) or Persons with Disabilities (PwDs) or Divyangjan in promotions from 3% to 4%.



Pre-Connect

- PwD's have poor share
 of representation in
 labour force as most
 PwDs are not
 employed. The only
 exception is state of
 Nagaland where
 majority of PwDs are
 working.
- Reservation at the time of recruitment is not a panacea for PwD's empowerment, they also need equal opportunity in career progression.
- Reservation for differently abled and Ex-Serviceman is termed as Horizontal reservation while for Scheduled Caste and Scheduled Tribe is termed as Vertical reservation.
- Under Article 41 of Constitution of India it is the responsibility of the state to make provisions for securing right to work, education and public assistance in case of disablement.
- Relief of the disabled and unemployable comes under the state list of the seventh schedule.
- Reservation in jobs and promotions for PwDs was provided under Persons with Disabilities (Equal Opportunities, Protection of

Features of Right to Disability Act 2016

Expanded Horizon

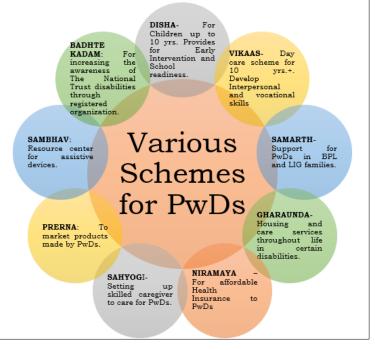
- · Disability is now a evolving and dynamic concept.
- Increase in number of recognized disability now stands @21.
- Mental illness and speech and language disability, and diseases like Parkinson's are now included.

Education

- Child from 6 to 18 yrs. With benchmark disability will have right to free education.
- Inclusive education in both government funded and government recognized institutions.

Grievance Redressal and Funding

- For Grievance Redressal office of Chief Commissioner for Persons with Disabilities and the State Commissioners. They will also monitor implementation of Act.
- National and State Fund will be created to provide financial support to the persons with disabilities.



Rights and Full Participation) Act, 1995.



Programme,

PEPPER IT WITH

Accessible India Campaign, Unique

Disability Identity Project, National

DeenDayal Disabled Rehabilitation

Health

Mental

Scheme.

- Later the act was replaced by the **Rights of Persons with Disabilities Act, 2016.** Under Section 34 of the act reservation. was not only provided but the quantum was increased from 3% to 4% in government jobs and from 3% to 5% in higher education institutes.
- In PwD category, a person is eligible for promotion even if they were not recruited in the category.

Significance of Move

- ➤ It will help in rationalizing representation of PwD's in Group A, B, C, and D cadre.
- > It will increase sensitivity towards the needs of PwD's in professional arena.
- ➤ It will help India fulfilling its commitment towards United National Convention on the Rights of Persons with Disabilities (UNCRPD). India is a signatory of UNCRPD.
- > It will allow people who acquired disabilities during service in career progression.

Conclusion

Though political parties appeal to other marginalised groups, the disability sector has been largely left out. The community still faces routine rights violations. Though the disability rights movement over the past two decades has brought some change, it has been painfully slow. Time has come for the government and society in general to come together to make India accessible.

Role of Governor in the Floor Test

News Excerpt

In recent times, several political crises in multiples states have once again brought the role of Governor's in navigating state from political instability towards political stability. One of the key powers in question is call for a floor test in state assemblies.



Pre-Connect

- Defection was the primary cause behind many political turmoils in India, leading to unethical practices like horse trading of MPs and MLAs and subvert the Electoral mandate.
- To counter this "Aaya Ram Gaya Ram"
 phenomenon, Parliament of India
 enacted Anti-Defection Act which was
 included in Constitution via 52nd
 Amendment Act, 1985 which brought
 Tenth Schedule
- It disqualifies elected members on the grounds of defection to another political party.
- Conditions can be considered as defection
 - o Voluntarily renunciation of membership
 - Violation of Instructions given by political party for conduct in the house without prior permission and not condoned within 15 days of incident.

Court Rulings

- Supreme Court in Shivraj Singh Chouhan & Ors versus Speaker, Madhya Pradesh Legislative Assembly & Ors (2020),
 - It upheld the powers of the Speaker to call for a floor test if there is a prima facie view that the government has lost its majority.
 - o Governor is not denuded of the power to order a floor test if it becomes evident that government majority can now, only be assessed on the basis of a floor test.
 - MLAs can decide whether they should remain member of house when they lack faith in incumbent government but on the floor of the house.
 - It doesn't guarantee any right of access to Political Parties to rebelled MLAs/MPs.



- o Independently Elected members joins the political party.
- Nominated member joins the political party after expiry of 6 months.
- However, it allows group of MP/MLAs to merge with another political party. Earlier 1/3rd member can defect as a group, but after 91st Constitutional Amendment Act, 2003, 2/3rd members are required to form as group.
- Chairman or Speaker of the house decides whether the disqualifications stand under Tenth Schedule or not. This power is under Judicial review.

Constitutional Mandate

- Article 174(2)(b) of the Constitution gives powers to the Governor to dissolve the Assembly on the aid and advice of the cabinet. However, the Governor can apply his mind when the advice comes from a Chief Minister whose majority could be in doubt.
- > **Under Article 175(2)**, the Governor can summon the House and call for a floor test to prove whether the government has the numbers.

What is the Governor's role?

- ✓ Before 1994, Governors were proactive in dismissing state governments and impose President's rule in state. However, in SR Bommai vs Union of India case things changed.
- ✓ In the landmark judgement Supreme Court imposed restrictions on arbitrary dismissal of State governments. It made floor test of the Assembly as the only option to test the majority and not the subjection.

before the end of its five-year term and call for elections.

PEPPER IT WITH

Anti-Defection Law, Symbols of the Political Parties, Role of the Speaker and the Deputy Speaker

- the only option to test the majority and not the subjective opinion of the governor.

 ✓ Further, The Chief Minister of a state can recommends to the Governor to dissolve the legislature
- ✓ Here, the Governor's discretion comes into play. The Governor may choose not to dissolve the legislature if he or she believes that the recommendation is coming from a council of ministers that do not enjoy the confidence of the state legislature.

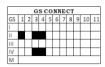
Conclusion

The spectacle of rival political parties whisking away their political flock to safe destinations does little credit to the state of our democratic politics. It is an unfortunate reflection on the confidence which political parties hold in their own constituents and a reflection of what happens in the real world of politics. Political bargaining, or horse-trading, is now an oft repeated usage in legal precedents.

Registered Unrecognised Political Parties

News Excerpt

Election Commission had been writing to the government to grant it power under the Representation of the People Act to de-register a political party on certain grounds.



Pre-Connect

- Political parties are essential institutions of democracy. By competing in elections parties offer citizens a choice in governance, and while in opposition they can hold governments accountable.
- When citizens join political parties, volunteer their time, donate money and vote for their leaders, they are exercising their basic democratic rights. Participation of citizens in political parties offers unique benefits, including opportunities to influence policy choices, choose and engage political leaders, and run for office.
- India is a multi-party democracy and Election Commission facilitates and regulates registration of political parties under section 29A of the Representation of the People Act, 1951. Consequent



- upon registration, a political party gets several entitlements, inter-alia; party can collect donations, which is fully exempted from income tax. In elections, they are entitled for privileges of common symbol, preference over independents on ballot, vehicles, star campaigners etc.
- In the last two decades, the growth in registration of parties has been 300%. Evidence suggests that there is a spurt in registration before general election of Lok Sabha/Vidhan Sabha.
- Registered Unrecognised Political Parties (RUPPs) are the recently registered political groups or those political organisations which have not secured enough percentage of votes in the assembly or general elections to become a state party, or those groups which have not contested any election from the date of its registration as unrecognised parties.
- The Registered Unrecognised Political Parties (RUPPs) don't enjoy all the benefits extended to the recognised parties.

Guidelines to be followed by Registered Unrecognised Political Parties in India

- ✓ Every RUPP so registered is required to comply with certain rules instructions and directions, as conditions of registration and it also gives a categorical undertaking to this effect in its application. Relying on the same ECI grants registration. These, inter alia, include:
 - ✓ Section 29 C of RP Act 1951 requires a RUPP to furnish a contribution report as prescribed in Form 24 A under Rule 85 B of Conduct of Election Rules 1961. Such contributions are
 - exempted from the provisions of Income Tax as an incentive to the parties for strengthening the electoral democracy. Form 24 A requires the signatories (Treasurer/Authorised person) of a party to inter- alia provide details such as:
 - a. Address of the headquarters of the Political Party including any changes;
 - b. Permanent Account Number and Income-tax Ward/Circle where return of the political party is filed;
 - c. Contributions received in excess of Rs.20,000 including particulars of donors;
 - d. In case of payment by cheque/demand draft, name of the bank and branch of the bank;
 - e. in case the contributor is a company, whether the conditions lay down under section 293A of the Companies Act, 1956 (as amended) have been complied with.

While emphasizing upon transparency in election funds, following has been held by Hon'ble Supreme Court in *People's Union for Civil Liberties (PUCL) and Anr. v. Union of India and Anr. (2003):* -

"....Transparency in the context of election means both the sources of finance as well as their utilization as are listed out in an audited statement. *If the candidates are required to list the* sources of their income, this can be checked back by the Income Tax Authorities. The (Law) Commission recommends that the political parties as well as individual candidates be made subject to a proper statutory audit of the amounts they spend. These accounts should be monitored through a system of checking and cross-checking through the income tax returns filed by the candidates, parties and their wellwishers...."

✓ The political parties are mandated to furnish Audited Annual Statements, flowing from EC's transparency guidelines dated 29/08/2014 as amended, inter-alia, requiring the party to adhere to the following:



- A. Section 13A(a) of Income Tax Act 1961 provides that political party shall keep and maintain such books of accounts and other documents as would enable proper deduction of its income there from. Accordingly, it is required that
 - a. The treasurer of the political party or such person as authorized by the party, besides ensuring maintenance of the accounts at all State and lower levels, shall maintain consolidated accounts at the central party Head Quarters as required under the aforesaid provision,
 - b. The accounts so maintained by him/her shall conform to the guidance note on Accounting and Auditing of political parties, issued by the Institute of Chartered Accountants of India (ICA), and
 - c. The Annual Accounts shall be audited and certified by the qualified practicing Chartered Accountants.

PEPPER IT WITH

Pressure Groups, Non-Governmental Organisations, Criteria for the recognisition of a political party

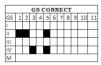
Conclusion

The poll panel's instruction to political parties to file Annual Audited Accounts with the Commission is essential for maintaining transparency in the functioning of political parties, which is an essential ingredient for conduct of free and fair election. The direction to maintain the name and address of the individuals, companies and entities making donations to the political parties is intended to ensure that no funds are received by the political parties from prohibited sources as stipulated in section 29B of the R.P. Act 1951.

Demolition and the Rule of Law

News Excerpt

In recent times several states in India had witnessed razing down of houses of those accused of acting against the law.



Pre-Connect

- Idea of targeting properties of accused gained traction in recent times.
- This has prompted debate in the Supreme court where such extra-legal punitive measures were questioned. The debate in courts have vacillated between the accusation of prejudice on the part of government and government stand that it had done nothing extraordinary.
- It is often accused that provocative statements from constitutional high functionaries of many state governments had created an atmosphere that calls for bulldozer's justice.

Analytica

- > One common thread in all the bulldozer exercise is the accused being arrested on the charge of rioting. However, states already have acts in place to combat such elements of society along with Code of Criminal Procedure and the Indian Penal Code. Therefore, It is believed by critiques that the States is accused of acting with malafide intentions.
- > Such exercise conducted especially after an unfortunate incident impinges the right of a person to be heard first.
- > Prima facie, it is also seen in violation of **Article 300A** of the Constitution under which the state can deprive a person of his or her property only after following due procedure and under the authority of a valid law. However, authorities have denied such allegations and called action of development authorities independent and autonomous in nature.
- Supreme court in **Olga Tellis vs Bombay Municipal** Corporation case held that eviction using unreasonable force and without giving proper chance to explain is unconstitutional. It also violates natural principles of Justice.



It infringes the victim's fundamental rights for equality under **Article 14**, freedoms under **Article 19**, and the right for dignified life under **Article 21** of the Constitution.

Conclusion

Maintenance of law and order is the most crucial part of a state day to day functioning. If anybody tries to create an instability,

PEPPER IT WITH

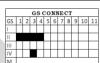
Olga Tellis Judgement, Fundamental Rights and the Constitutional Rights

then Indian states long arm of law is empowered with sufficient resources to brought those people to justice. However, indulging in vigilante form of justice by exploiting loop holes in the same law can lead to catastrophic consequences. Frustration among general public is though palpable can only be addressed by resorting to reforms in judiciary and police system.

One Candidate One Constituency

News Excerpt

The poll panel has recommended barring candidates from contesting more than one seat in both Lok Sabha and Assembly polls.



Pre-Connect

- Contesting from two seats during assembly or parliamentary elections is not uncommon in India. Prominent political leaders have done so.
- The latent motive behind contesting from more than one constituency is two-fold. At times it is because the candidate is not confident and sanguine about his victory and sometimes, it is done to publicize the extent of one's influence.
- The question as to whether a candidate can contest elections from two constituencies has been raised time and again. Though, it is a legitimate game plan and the position is well settled, section 33(7) of the Representation of People Act, 1951 permits a person to contest a general election or a group of by-elections from more than one constituency.
- Concurrently, section 70 of the RPA expounds that if a candidate is elected from more than one seat either in the Parliament or in either house of the state legislature, he must vacate one seat in not less than 10 days, following which by-elections will be conducted in that particular constituency.
- Sec 67 of the RPA, 1951, says that "the returning officer shall report the election result to the appropriate authority and the Election Commission, and the appropriate authority shall cause to be published in the Official Gazette the declarations containing the names of the elected candidates".
- However, Sec 73 of the Act provides that the ECI shall publish in the gazette the names of all elected members in a notification, called 'Due Constitution' notification, where after Lok Sabha shall be deemed to be duly constituted.

Analytica

- > Several by-elections are an outcome of the evacuation of the seat is a burden on the public exchequer. The debate on the extravagant expenditure is gaining ground in the recent times.
- Several PILs were challenging the constitutional validity of section 33(7) of the Representation of People Act, 1951. It is argued that such a provision is invalid and unconstitutional.
- It is always contended that by-elections as a result of relinquishment of seat would be nothing but a financial burden. The architects of the constitution were oblivious that the politicians would mould and manipulate the structure to their advantage.
- The 255th Law Commission report also suggested amendment in the RPA. 1951 in order to put a full stop on the prevailing practice.



- Pertinently, a person who vacates the seat after getting elected also acts in contravention to the 'fundamental principles' of democracy. A candidate is chosen from a constituency so that he or she can serve their constituency during their tenure. It is unjust to permit a candidate to relinquish it immediately after emerging victorious.
- Constitutional experts say that the provision simply allowed misuse of electoral system. By using a more colourful argument, "When bigamy is illegal in India, how can we allow a candidate promising to marry two constituencies when we know that he will divorce one."
- Another idea which is perceived as a possible solution is that in case a candidate wins from both the seats, then instead of conducting by-elections, the candidate securing the second-highest vote should be announced as the winner. This will
 - avoid wastage of hard-earned money of the public and reduce pressure on election machinery. However, these suggestions cannot solve the problem in totality.
- Monetary penalty cannot render an adequate deterrence effect and apart from money, it is a waste of time and
- numerous votes. It is also unjust to other leaders who have to vacate space so that big leaders can get another seat. The whole purpose for which a candidate is trusted and elected by the people stands defeated when the seat is vacated. It is highly unreasonable and
- or her victory. Conclusion The prevailing practice of contesting from two constituencies has been an issue of contention. Prior to 1996, there was no bar on the number of constituencies one can contest from. The provision was then amended and a limit of two seats was set. It is the need of the hour to amend the provision

again. This self-centred practice is coming heavily on the public purse and brings instability in the

unpardonable to betray voters primarily due to the fact that a candidate is not certain about his

Cost of the By-Elections

Commission The Election has requested the Supreme Court to amend section 33 of the RPA, 1951 to restrict politicians to contest elections only from one seat. The commission alternatively suggested that in case the provision is not amended, then there should be an explicit provision making it mandatory for a person, contesting and winning from two seats to bear the cost of by-elections which will be held after he vacates his seat.

PEPPER IT WITH

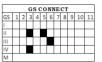
Election Commission, Representation of the People Act, Exit & Opinion polls

Digitisation of Indian Judiciary

News Excerpt

Covid-19 Pandemic has pushed for the Digitisation of Indian judiciary. Courts resorted to e-filing and hearing over video conferencing. This phenomenon needs to be sustained as this will help in reducing the ever-increasing mount of pendency.

electoral system. It leads to wastage of time and is against the spirit of the constitution.



Pre-Connect

- In India, e-governance in the field of administration of justice began in the late 1990s, but it accelerated after the enactment of the Information and Technology Act, 2000.
- As the 21st century began, the focus was on digitising the court's records and establishing ecourts across the country. In the year of 2006, e-courts were launched as a part of the National e-Governance Plan (NEGP).
- Supreme Court has issued the standard operating procedure for the courts to follow in a bid to keep uniformity. Two High Courts were earlier digitising the data but there was no interoperability in that process.



- Under the digitisation initiative that was started in 2005, the first phase saw infrastructure being set up. The next phase saw the setting up of more citizencentric digital processes, like e-filing.
- The move is part of the top court's phase-3 project that aims to adopt technology to create a reliable source of digital records, and enable electronic exchange of data between judicial entities for quicker disposal of cases, removing geographical boundaries in the judiciary.
- The step is in addition to the e-committee's direction to all High Courts, asking them to make it compulsory for government departments to file their cases electronically.
- Digitisation of judicial documents would enable the administrative process to move towards becoming "more environmentally sustainable" as it would minimise paper-based filing, and curtail physical movement of court records from one forum to another.

Need for Digitisation

- ❖ The Covid pandemic has amplified the need to strengthen the digital capabilities in the justice delivery system. Grabbing this unprecedented opportunity for change, judiciary adopted the information and communication technology tools to ensure dispensation of justice in a seamless manner. Digital infrastructure was upgraded under the e-courts project, making it possible for the judiciary to remain in operation even during the pandemic-induced lockdown.
- More than two crore cases were registered between March 2020 and October, 2021 while a little over 1.4 crore were disposed off by subordinate courts through video conferencing during the same period.
- The standardisation of all the aspects of digital preservation across all High Courts and district courts will help in achieving greater interoperability between data repositories and benefit the judiciary in acceleration of overall justice delivery system.
- ❖ Digitisation of court records will not just be an environment-friendly process, but also a cost-effective mechanism for litigants and lawyers. It will lead to an efficient court and case management and ensure the data of litigants remains secured.
- ❖ Digital records that are compatible to the system at each level will curtail such delays, since transfer of data would then be subject to click of a button. Digitisation of records will provide a safe backup to the data that can be retrieved at any point of time.

Challenges: Project scale and operation

- According to the e-committee's estimates, nearly 3,100 crore documents will be digitised over the next five years, including all old and current records. Only up to 6% of legacy documents have been digitised so far.
- > Allahabad and Madhya Pradesh High Courts had started the process. However, there was no uniformity in the way they were proceeding, prompting the panel to formulate an SOP for digitising the data.
- In the absence of uniformity, interoperability of documents between judicial forums becomes difficult. E.g., when an appeal gets admitted for hearing in the High Court or Supreme Court, the physical record is always called for from the lower court. If the documents run into volumes, summoning of records can delay the proceedings.

Analytica

✓ Before the pandemic, virtual hearings were used only in a limited manner, e.g., in criminal cases where it was not possible to produce the accused physically before the court or while extending the remand of the accused. Not every case can be disposed of virtually.



- Cases related to matrimonial issues and domestic violence, bounced cheques, motor accident compensation referred to mediation centres and Lok Adalats could be included in the list of cases fit for disposal through the virtual hearing.
- The hearing of matrimonial through videocases conferencing was approved by the Supreme Court in the Krishna matter of Veni Nagam v Harish Nagam (2017).however. direction was short-lived and a coordinate bench of the Supreme Court in the case of Santhini v Vijaya Venkatesh (2018) referred the matter for reconsideration before larger bench.
- Recently, the Supreme Court Anjali Brahmawar Chauhan v Navin Chauhan allowed the family court, Gautam Buddha Nagar, to conduct the trial of a matrimonial case through videoconferencing.
- In 2018, the Supreme Court
- allowed the live-streaming of cases of constitutional and
 - national importance on the basis of the judgment in Swapnil Tripathi. The livestreaming of court proceedings is a step towards ensuring transparency and openness. Gujarat HC in July 2021 became the first court in the country to livestream its proceedings.
- The legal and technical impediments in the process of livestreaming were ably done away under the leadership of Justice Vikram Nath, the then Chief Justice of Gujarat HC. Its example was followed by other HCs like Karnataka, Odisha, Madhya Pradesh and Patna.
- ✓ Internet connectivity issues and the need for a well-equipped space where lawyers can conduct their cases are some of the major problems requiring attention. Political will and the support of judges and lawyers are also necessary.
- Judges, court staff and lawyers are not well-versed with digital technology and its benefits. The need of the hour is for them to be made aware of these and receive adequate training.
- ✓ Virtual hearings cannot be a substitute for physical court hearings in all cases. However, in appropriate cases and certain categories of cases as identified by the court administration in consultation with the members of the Bar, virtual hearing should be made mandatory.

Conclusion

In the second phase of the e-courts project, the ecommittee had introduced the system for digital filings. However, even then the preferred mode is physical filing of cases. If this goes on then in a few years again judiciary may be staring at a huge number of documents for digitisation. This would frustrate the objective of digitisation of court records. Therefore, the two procedures, digitisation and e-filing need to be carried out simultaneously.

e-filing

- ❖ To ensure digitisation does not become obsolete, judiciary is mulling at the option of gradually moving to make e-filing a preferred mode for filing cases. Along with digitisation of court records, there is an urgent need for adoption of e-filing by all the stakeholders of the judicial system.
- ❖ Judiciary has made e-filing compulsory for all government departments, both Centre and states. High courts have also been given a choice to consider making e-filing compulsory in some categories of matters like revenue, tax, arbitration, commercial disputes and any other category.
- ❖ For private litigants, judiciary is likely to incentivise efiling, such as giving preference for early hearing to those cases that are filed digitally and also bear the expenses of preparing physical copies, in case the judge hearing the case desires a hard copy of the petition.
- ❖ Judiciary is working on the privacy aspect and has constituted a high-powered committee to suggest measures to make sure that the data is not compromised.

PEPPER IT WITH

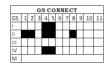
Artificial Intelligence (AI) Indian Judiciary, e-Filing, Project, National Courts e-Governance Plan, IT Act 2000



Uniform Civil Code

News Excerpt

Government of Uttarakhand will go ahead with the implementation of Uniform Civil Code (UCC) and had urged other states to follow the same path.



Pre-Connect

- The idea of UCC germinated during the colonial era, in 1835 British government called for codification of Indian laws relating to crimes, evidence and contracts. They also emphasized on keeping laws of Hindus and Muslims to be kept outside the purview of codification.
- Later, British formed BN Rau committee in 1941 to codify Hindu Law. This was later culminated into Hindu Succession Act, 1956 which would cover Hindus, Buddhists. Jains and Sikhs. Sperate personal laws for Muslims, Christians and Parsis persisted.
- The UCC calls for formulation of one law to be made applicable to all religious communities in civil matters such as marriage, divorce, inheritance and adoption.

Why does it matter?

- The codification of personal laws has historically generated protests. The Hindu Code Bill, one of the foremost pieces of social legislation, had triggered enormous opposition.
- The debate on the UCC is centred on the argument to replace individual personal customs and practices of marriage, divorce, adoption and successions with a common code.
- ❖ Those in favour of one code argue that it will end discrimination in religions. Detractors contend that it will rob the nation of its religious diversity and violate the fundamental right to practice religion enshrined in Article 25 of the Constitution.
- ❖ In fact, they hold that a state action to introduce the UCC is against the quintessence of democracy. The secular state is, after all, an enabler of rights rather than an inhibitor in sensitive matters of religion and personal laws.
- One of the reasons behind the government's ambivalence is the potential fallout of a move on tribal communities. In Assam, tribals have their own personal laws and the government wouldn't like to disturb the equation.
- The issue of UCC has seen a renewed push in the Supreme Court as well, especially after the top court indicated that the government should explore the UCC as a means to secure gender justice, equality and dignity of women.
- The court's view is based on several petitions claiming that personal laws governing the followers of certain faiths discriminate against women.

Uniform Civil Code (UCC)

- Article 44 of the Directive Principles in the Constitution says the "State shall endeavour to provide for its citizens a uniform civil code (UCC) throughout the territory of India."
- The objective of this endeavour should be to address the discrimination against vulnerable groups and harmonise diverse cultural practices.
- The stand taken by B.R. Ambedkar in the Constituent Assembly debates has survived the years. Dr. Ambedkar had said a UCC is desirable but for the moment should remain voluntary.

How did the Uniform Civil Code come about?

✓ The Law Commission of India notes that the tracts of the Constituent Assembly debates reveal a lack of consensus on what a potential uniform civil code would entail. While many thought the UCC would coexist alongside the personal law systems, others thought that it was to replace the personal law.



There were yet others who believed that the UCC would deny the freedom of religion. It was this uncertainty that led it to be included in the Directive Principles of State Policy rather than the chapter on Fundamental Rights in the Constitution.

What next?

- Legal experts say that the Supreme Court missed an opportunity to decide on the issue in 2017 when it outlawed triple talaq without addressing the core issue: whether personal law practices should prevail over the fundamental rights of life, dignity and non-discrimination.
- The Constitution Bench's judgment was the product of an October 2015 decision of a two-judge Bench of the court to take suo motu cognisance of the discriminatory practices against Muslim women. This Bench pointed out that it had been 30 years since the court, in the Shah Bano case, urged the government to frame a common code to "help in the cause of national integration."

PEPPER IT WITH

Directive Principles of the State Policy, Freedom of Religion in part III of the Constitution

The Constitution Bench's judgment came about a year after the Law Commission, in a novel move in October 2016, published a questionnaire to test the waters on the UCC. It wanted to see whether the nation was ready for it. The questions included "what measures should be taken to sensitise society to a common code or codification of personal law," and would the UCC ensure "gender equality."

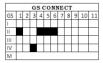
Conclusion

The UCC would not only protect the vulnerable sections, including women and religious minorities, but "promote nationalistic fervour through unity" as well as simplify the complex personal laws. In the Jose Paulo Coutinho judgment of the Supreme Court in 2019, this wondered why the nation had still not endeavoured to secure a common civil code for its citizens. The Supreme Court has even hailed Goa as a "shining example" where "the uniform civil code is applicable to all, regardless of religion except while protecting certain limited rights".

Prison Reforms: Special remission to prisoners

News Excerpt

Union Home Ministry had issued a set of guidelines to the States and the Union Territories on the grant of special remission to prisoners to commemorate the 75th year of Independence.



Pre-Connect

- Foundation of prison system in India found its origin in Macaulay's Minute of 1835.
- Prison Act 1861 and 1894 were enacted to regulate Prisons in India.
- Government of India Act 1935 transferred the subject matter of Prisons from Central list to State List.
- Post- Independence prisons were kept under State List i.e., List II of Seventh Schedule.
- Though it is a part of State list Ministry of Home Affairs provides regular guidance and advice to States and UTs on various issues concerning prisons and prison inmates.
- The Committee on Jail Reforms under Justice Mulla was set up by the Government of India in 1980 to review the laws, rules, regulations for protecting society and reforming offenders.

Analytica

Prison reforms in India are a much-debated subject matter and have been the point of discourse for many Committees appointed by the Government of India. However, despite many suggestions made on multiple occasions, the ground-level situation with respect to Prison reforms remains gloomy and stagnant.



Central the arguments to promote prison reforms is a human rights argument - the premise on which many UN standards and norms have been developed. However, this argument often insufficient to encourage prison reform programmes countries scarce human and financial resources. The detrimental impact of imprisonment, not only on individuals



but on families and communities, and economic factors also need to be taken into account when considering the need for prison reforms.

- A sentence of imprisonment constitutes only a deprivation of the basic right to liberty. It does not entail the restriction of other human rights, with the exception of those which are naturally restricted by the very fact of being in prison. Prison reform is necessary to ensure that this principle is respected, the human rights of prisoners protected and their prospects for social reintegration increased, in compliance with relevant international standards and norms.
- ➤ Imprisonment disproportionately affects individuals and families living in poverty. When an income generating member of the family is imprisoned the rest of the family must adjust to this loss of income.
- > Prisons have very serious health implications. Health conditions of the prisoners deteriorate in prisons which are overcrowded, where nutrition is poor, sanitation inadequate and access to fresh air and exercise often unavailable.
- > Imprisonment disrupts relationships and weakens social cohesion, since the maintenance of such cohesion is based on long-term relationships.

Conclusion

Beginning with the Mulla Committee, many important Committees such as the Malimath Committee, The Justice Krishna Iyer Committee and most recently, the Justice Roy Committee (2018) have been set up to review the situation of prisons in India and suggest reforms. However, the implementation of the reforms has been lax and the necessary political will to bring a change is

invisible. It is imperative governments realize the importance of every human life by valuing and cherishing the potential of jail inmates as members of our society who can contribute in the future, given proper correctional and reformative treatment.

The policy worldwide is tending towards the open jail systems and rehabilitation of Prisoners. India must take

PEPPER IT WITH

Criminal Justice System in India, Recommendations of the Justice Roy Committee

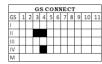
concrete steps to fill up the policy and legal lacunae and approach the problem with as much a humanitarian angel as an objective relevance for the state. Finally, every human life is valuable and deserves the dignity owing to it. Thus, violation of human rights cannot be condoned even as we face practical challenges in protecting the same.



Chancellor of the State University

News Excerpt

Legislative Assemble of the West Bengal has recently passed West Bengal University Laws (Amendment) Bill that seeks to replace the Governor with the CM as the Chancellor of State-run universities.



Pre-Connect

Chancellors.

- The foundation of appointing governors as Chancellor dates back to Woods Dispatch of 1854. It is considered as Magna Carta of English Education in India.
- It laid to the foundation of Calcutta, Madras and Bombay universities modelled on the lines of London University with post of chancellor, vice-chancellor and the senate.
- Governor General of Bengal was made chancellor of Calcutta university while Governors of Bombay and Madras held Chancellor position at their respective universities.
- After the independence this vestigial provision of making Governor as Chancellor of university continued through the act passed by various state assemblies.

What powers do Governors enjoy as Chancellors?

- The appointment of Vice-Chancellors in state government-run universities is among the responsibilities of Governors as
- Chancellors in most states have the power to annul decisions of the decision-making bodies of universities such as the Executive Council, and to make appointments to these bodies.
- > Governors also enjoy the power to preside over the convocation of universities.
- In some states, however, Governors have little or no say in appointing VCs despite holding the post of Chancellor. In Telangana and Gujarat, Governors have no option but to appoint VCs from among the names approved by the state governments.
- The Gujarat University Act, 1949 states that "the Vice-Chancellor shall be appointed by the State Government from amongst three persons recommended by a (searchcum-selection) committee".
- ➤ The Telangana Universities Act, 1991 states that the search committee shall

What about Central Universities?

- ❖ The Central Universities Act, 2009, lies down that the President of India shall be the Visitor of a Central University.
- ❖ With their role limited to presiding over convocations. Chancellors in central universities are titular heads, who are appointed by the President in his capacity as Visitor. The VCs are also appointed by the Visitor from panels of names picked by search and selection committees formed by the Union government.
- ❖ The Act adds that the President, as Visitor, shall have the right to authorise inspections of academic and nonacademic aspects of the universities and also to institute inquiries.

"submit a panel of three persons to the Government in alphabetical order and the Government shall appoint the Vice-Chancellor from out of the said panel".

What do the University Grants Commission norms suggest?

- Firstly, education comes under the Concurrent List, which contains subjects on which both the Centre and the states can legislate. However, Entry 66 of the Union List "coordination and determination of standards in institutions for higher education or research and scientific and technical institutions", gives the Centre substantial authority over higher education.
- ✓ The UGC plays that standard-setting role, even in the case of appointments, in the case of universities and colleges.

PEPPER IT WITH

Centre-State Administrative, Legislative and Financial Relations



According to the UGC (Minimum Qualifications for Appointment of Teachers and other Academic Staff in Universities and Colleges and other Measures for the Maintenance of Standards in Higher Education) Regulations, 2018, the "visitor/chancellor", which is mostly the Governor in states, shall appoint the VC out of the panel of names recommended by the search-cum-selection committees.

✓ Higher educational institutions, particularly those which receive funds from the UGC, are mandated to follow its regulations. These are followed without any hitch in the case of central universities. However, in the case of state universities, such a top-down approach by central government bodies is resisted by the states.

Analytica

- The role of Governor as chancellor has time and again become debatable especially in reference with appointment of Vice-Chancellors.
- Many State governments have shown their reservation on the choice of governor. Their grievances lie in the matter of the fact that deserving candidates from state were sidelined by candidate appointed from other states.
- States often cite **Article 163 (1)** of the constitution which makes it clear that Governor should act on the aid and advice of the council of ministers in discharge of his functions. This means whatever discretion conferred on his office is limited to the extent that constitution contemplates.
- Even the Punchhi Commission recommended the removal of governor from the post of Chancellor of Universities.
- However, in *Hardwari Lal vs GD Tapase* case Punjab and Haryana High court, held that the governor has an independent existence and the office held by him is statutory in nature as distinct from the constitutional office of the governor.
- In **Bhuri Nath vs State of J&K**, Supreme Court affirmed that when governors are entrusted with powers derived from statutes in official capacity, they are not to act on the aid and advice of the council of ministers making a distinction between the two types of offices.
- Kothari Committee (1964-1966) and the Knowledge commission (2006-2009) both have cautioned against the erosion of such autonomy.

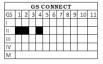
Conclusion

In any political dynamics it is difficult to say that governor as a chancellor will remain apolitical. In any Parliamentary democracy, accountability can be pragmatically questioned from the elected representatives and not from the titular heads. May be the time has come to do away with colonial legacy. However, appointment of CMs as Chancellor can unleash an era of politically motivated educational institutions which can face instability in both administrative and academic fora. Better option is always finding the middle path, for which one can look for Telangana or Gujarat model.

Legislative Councils

News Excerpt

Recently, Elections to the Karnataka Legislative Council's graduate and teacher constituencies were conducted. In this election only graduates and teachers can vote.



Pre-Connect

- Constitution of India provides for a bicameral system at both the center and state level. At the level of state houses are divided into Legislative Assembly or Vidhan Sabha and Legislative Council or Vidhan Parishad.
- *Under Article 169* Legislative Council can be formed —if the Legislative Assembly of the State passes a resolution to that effect by a *Special majority* (the total membership of the Assembly



- and by a majority of not less than two-thirds of the members of the Assembly present and voting) Parliament can then pass a law to this effect.
- Under *Article 171* of the Constitution, the Legislative Council of a state shall not have more than one-third of the total number of MLAs of the state, and not less than 40 members.
- The tenure of the members of the council is six years, and a third of the members of the House retire after every two years
- Currently, six states have Legislative Councils (Andhra Pradesh, Bihar, Karnataka, Maharashtra, Telangana, and U.P). Andhra Pradesh's Legislative Council, set up in 1958, was abolished in 1985, and then reconstituted in 2007. Proposals to create Councils in Rajasthan and Assam are pending in Parliament.

Voters in graduate and teacher constituencies of Legislative councils

- Any university graduate can register as a voter in these elections. The Election Commission prepares a separate voting list from the voters list.
- According to **Section 27 of the Representation of the People Act 1950**, only those who have been graduates for at least three years or possess a certificate that the state government and the Election Commission recognise as equivalent to a degree are qualified to be enrolled in the voter rolls.

Composition of the Legislative Council

- ❖ The members of the Council are either nominated by the Governor of the state or are indirectly elected.
- One-third of the members of this House are elected by the Legislative Assembly.
- One-third members are elected by the local bodies like a municipality or other local authorities.
- One-twelfth of the members are elected by graduates.
- One-twelfth of the members are elected by teachers.
- ❖ About one-sixth of the members are nominated by the Governor.
- The legislative Council elects its chairman, who plays the role of presiding officer and Deputy Chairman from amongst its members.
- Eligibility criteria to become an MLC are Indian citizen who is at least 30 years of age; a person cannot simultaneously be a Member of Parliament and State legislature.
- > Similarly, everyone who is ordinarily a resident in a teachers' constituency and has at least three years of teaching experience in any educational institution recognised by the state government is entitled to vote in the election.

Why are graduates and teachers given representation?

- ✓ Founding fathers were of opinion that some members must be elected by only educated people.
- ✓ This would lead to clean and honest politics transcending caste, community and religious barriers and money power.

What are the constituencies of the Legislative Council for graduates and teachers?

- These constituencies exist only in states that have a legislature with two Houses, the Assembly and the Council, which is similar to the Rajya Sabha.
- *Under Article 171 (3)* of the Constitution, as close as possible to one-twelfth of MLCs are to be elected by an electorate consisting solely of graduates and another one-twelfth by an electorate consisting of teachers.

Role and Responsibilities of Legislative councils

MLCs are expected to help the state government make laws and regulations based on their knowledge and experience.

PEPPER IT WITH

Composition of the Legislative Assembly, Money Bills and Financial Bills



- MLCs can ask questions of ministers and initiate debates and can introduce ordinary bills. However, it cannot introduce or vote on money bills.
- Later Chairman and Deputy Chairman of Councils enjoys the status of Cabinet Ministers in the state.
- It ensures it act as a check on hasty actions by the popularly elected House
- It ensures that individuals who might not be cut out for the rough-and-tumble of direct elections too are able to contribute to the legislative process.
- There are certain criticisms which Legislative council faces such as
 - o It can be used to park leaders who have not been able to win an election.
 - It can be used to delay progressive legislations.
 - It creates a burden on state finances.

Legislative Council (LC) vs Rajya Sabha (RS)

- LCs and RS carries several similarities which are
 - o LCs and RS members have same term and retirement procedure.
 - o They both are void of "Power of Purse" i.e., they cannot introduce or vote on money bill.
 - o They both provide for checks and balances in ordinary legislation and act as revisionary house.
 - They both provides for adequate representation to section who are left behind due to first past the post-election system
- ❖ However, RS differs from LC on several grounds
 - RS institutionalize the principle of federalism, while LC provides for larger representation within states.
 - o RS offers a degree of continuity while LC can be abolished by Legislative Assemblies passing resolution to that effect with special majority.
 - RS carries special power which are not available to LCs such as
 - Under Article 312 Creation of additional All-India Services.
 - Under Article 249 Transfer subject from state to Union list.
 - Under Article 352 Endorse emergency for a limited period when Lok Sabha remains dissolved

Conclusion

Second House universality is not necessary for every state of India. It should be available in states which have huge population and diversity, to give larger representation to different sections of the society. A second house is prudent provided it allow for more debate and sharing of work between the Houses. Efforts should be taken to enable it to retain its significant role in Indian democracy.

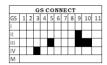


SOCIAL ISSUES, GOVERNMENT SCHEMES, REPORT

Global Sustainable Development Report, 2022

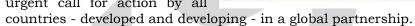
News Excerpt

Recently, India's rank in the Global Sustainable Development Report (GSDR), 2022 has slipped for the third consecutive year.



Pre-connect

- The GSDR is a United Nations publication and it is considered as the only comprehensive, global report on sustainable development.
- It brings together a broad range of existing scientific assessments and reviews global progress and future sustainable development pathways in an integrated way, taking into account the perspectives of scientific communities across the globe.
- The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future.
- At its heart are the 17
 Sustainable Development
 Goals (SDGs), which are an
 urgent call for action by all
 countries developed and devel





• They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.

India's Performance in global Sustainable Development Report, 2022

- > The country continues to face major challenges in achieving 11 of the 17 SDGs, which has pushed down its global ranking on SDG preparedness.
- > The progress in around 10 of these goals is similar to those in 2021. These include SDG 2 on ending hunger, SDG 3 on good health and well-being and SDG 6 on clean water and sanitation.
- As per the report, ensuring decent work (SDG 8) has become more challenging.
- ➤ India is on track to achieving SDG 13 on climate action, the report mentioned. But another report presented a grim picture.
- ➤ India's performance on climate action (SDG) 13 has slipped from 2019-2020. In 2020, the country's overall national score on SDG 13 was 54 (out of 100) a significant dip from 60 in 2019.
- > This decline in India's overall performance is primarily due to eight states Bihar, Telangana, Rajasthan, Uttar Pradesh, Karnataka, Andhra Pradesh, Punjab and Jharkhand whose scores have dipped under SDG 13 in the two years.

Performance of the World

- ✓ The 2022 SDG Index ranks Finland, Denmark, and Sweden first, second, and third, and all top ten performers are European countries. None of them, however, are on track to achieve the SDGs by 2030, given major challenges on several Goals.
- ✓ The region that made the most progress on the SDGs since their adoption is East and South Asia, with Bangladesh and Cambodia topping the ranks in terms of progress achieved.



- The report also notes that, halfway to 2030, countries vary greatly in terms of SDG integration in budgets, policies, and programmes. Among the Group of 20 (G20), the US, Brazil, and the Russian Federation show the least support for the Goals.
- ✓ Nordic countries, on the other hand, as well as Argentina, Germany, Japan, and Mexico exhibit relatively high levels of support for the 2030 Agenda.

Analytica

How India can adopt the UN Sustainable Development Goal?

An inclusive strategy

Planning and policy for social development in the country should reflect on and be designed around the voices of the primary stakeholders men, women, or children whom a social policy or programme being addressing. Making development efforts participatory and inclusive is indispensable aspect for sustainable the development.

Fund allocation through co-financing

In the latest Union Budget, the Government of India has cut back on spending for the social sector. As per available statistics,

INDIA'S CHALLENGES TO ACHIEVING THE SDGS SDG 1 - No Poverty:

- ❖ Coordination between Central Government and State Governments is necessary, tailoring central plans to state-level conditions and strengths.
- ❖ There is great imbalance in poverty levels between states and between urban and rural areas.
- * Keeping infrastructure, like housing and sanitation, and employment up with levels of urbanisation is difficult due to financial limitations and the sheer rate of urbanisation.

SDG 2 - Zero Hunger:

- Supply chain management and transport infrastructure deficiencies mean that food supplies often do not reach the consumer market.
- ❖ At the production stage, climate change poses a huge challenge. Adapting to climate change through new techniques and technology is essential. For small farmers in particular, access to and affording technologies and other adaptive measures are restricted.

SDG 3 - Good health and well-being

- ❖ **Affordability:** Private healthcare can be expensive and varies in quality and costs of services in India. While, public healthcare though much cheaper is unreliable. A balance between affordable healthcare and suitable quality is needed; technology can play a key role here.
- ❖ Accessibility particularly in rural areas, healthcare is lacking. State discrepancies, as is the case for most of the SDGs, is also of note.
- ❖ **Awareness** preventive care, from diet to lifestyle, are often underappreciated. In this way, education can play a vital role in improving health outcomes and reducing pressure on healthcare services.

SDG 5 - Gender Equality

- ❖ Female labour force participation in India is declining and currently stands at 17.5 per cent. The ratio is even worse in high level positions where women can really bring about significant changes to gender norms.
- ❖ Inequalities continue to exist in women's access to and ownership of land. In rural India, where 75 per cent of rural women workers are engaged in agriculture, women's operational landholding is only 14 percent.

SDG 9: Industry, Innovation and Infrastructure

- ❖ Falling growth rate and a rising fiscal deficit has somewhat restricted the Government's spending power, while unemployment and low consumption rates are further problems.
- ❖ India's spending on R&D as a percentage of GDP has been stagnanted at 0.6 to 0.7 percent in the last two decades, far less than advanced countries.

India currently has only 5 % of the funds required to implement the SDGs.



While increasing Government spending in sectors like health, education, sanitation, and nutrition is a direct solution to close this funding gap, the Government of India should promote and incentivize funding from corporate, business, and other for-profit entities as a crucial source for funding the SDGs.

Implementation through collaboration

The pressing need for India to effectively execute the new agenda is to revitalize a partnership between key stakeholders. This involves the participation of the public sector/Government, corporate entities who are skill-ful in managing and multiplying resources, non-governmental organizations, social enterprises, and other development actors who are acquainted with implementing, evaluating and scaling up social development projects.

Credible M&E systems

- → The National Institution for Transforming India NITI Aayog is the national body primarily responsible for implementing the SDGs in India. It already has apprehensions about its ability to track and gather data for comprehensively evaluating the accomplishment of SDG targets.
- Lack of credible data will be a major roadblock for India in achieving the global goals. A strategy to address this concern could be a complete decentralization of the data collection process. The Government could tap regional and local partnerships and build stakeholder capacities to

PEPPER IT WITH

Global SDG, G20 Groups, International Spillover Index, OECD-DAC, NITI Aayog

partnerships and build stakeholder capacities to gather and track data.

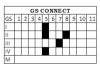
Way forward

Achieving the SDGs in a country as diverse as India will definitely be a Herculean task, but not unachievable. We need to clearly identify priorities, have locally relevant and people-centric development policies, and build strong partnerships. The government also needs to have a focused plan for tracking and evaluating impact and scaling up successful interventions. The SDGs are a direction and a vision for India to ensure prosperity and growth—both social and economic.

Role of ASHA workers

News Excerpt

Recently, ASHA workers, India's frontline rural healthcare workers, won the World Health Organisation's (WHO) 2022 **Global Leaders Award**. The honour recognises contributions to advancing global health, leadership, and commitment to regional health issues.



Pre-connect

- India launched the ASHA programme in 2005-06 as part of the National Rural Health Mission. Initially rolled out in rural areas, with the launch of the National Urban Health Mission in 2013, it was extended to urban settings as well.
- Each of these women-only volunteers work with a population of nearly 1,000 people in rural and 2,000 people in urban areas, with flexibility for local adjustments.
- The core of the ASHA programme has been an intention to build the capacity of community members in taking care of

The other awardees of **Global Leaders Award** are Paul Farmer, co-founder of the NGO Partners in Health, Ahmed Hankir, a British-Lebanese psychiatrist, Ludmila Sofia Oliveira Varela, a youth sports advocate, and Yōhei Sasakawa, WHO's Goodwill Ambassador for Leprosy Elimination. Dr. Tedros who picke the awardees himself, said that the award recognises those who have made an outstanding contribution to protecting and promoting health around the world, at a time when the world is facing an unprecedented convergence of inequity, conflict, food insecurity, climate crisis and a pandemic.



their own health and being partners in health services.

Who are ASHA Workers?

- Accredited Social Health Activist Workers, or ASHA workers, are female community health workers trained to function as a bridge between the community and the public health system.
- ASHA workers are chosen through a process that involves community groups, self-help groups, Anganwadi Institutions, block nodal officer, district nodal officer, the village health committee and the general body of the village.
- ➤ Women selected to be ASHA workers undergo a series of training programmes that enables them to fulfil their roles as the leader of community participation in community health programmes at village level.
- ASHA workers are responsible for promoting nutrition, basic sanitation and hygiene practices, healthy living and working conditions, awareness of existing health services, and the need for timely utilisation of health and family welfare services within their communities.
- > They are also provided with a drug kit perform primary healthcare functions - ASHA workers are the first responders in situations where deprived sections of the population find difficult healthcare it to access services.
- Encouraging women to give birth under safe conditions in hospitals and medical centres is another important responsibility shouldered by ASHA workers.
- Members of the local village community can access basic essential medical provisions like oral rehydration solution (ORS), iron-folic acid tablets, chloroquine, disposable delivery kits, oral pills and condoms from ASHA workers.

ASHA workers and Covid-19

ASHA workers have helped in spreading awareness at the grassroots level during the COVID-19 pandemic. They are tasked with informing their local communities about safety protocols, tracking positive cases, and carrying out the vaccination drive.

What are some of the difficulties that ASHA workers have faced during the pandemic?

How are ASHA workers selected and what is the salary of ASHA workers?

- Married, widowed or divorced women from the village community who possess basic literacy skills are eligible to be trained as ASHA workers. In most cases, women from the village itself are selected as ASHA workers who operate within the local community.
- According to the guidelines laid down by the National Health Mission, these women are preferably between 25 and 45 years of age and preference is given to candidates who have qualified up to tenth standard. The education criteria is relaxed only if no qualified person is available.
- ❖ On an average, an ASHA worker earns around ₹6,000-10,000 per month, including monthly honorarium from the Central and State governments, and incentives.
- They receive performance-based incentives for promoting India's universal immunisation programme, referral and escort services for the government's Reproductive and Child Health (RCH) programme, and construction of household toilets.

✓ At the beginning of the COVID-19 pandemic, ASHA workers faced several attacks in different parts of the country during their door-to-door visits for surveillance. ASHA workers were responsible for finding symptomatic patients and people with international or domestic travel history, and executing other tasks related to containment of the spread of the virus. They performed these tasks for no additional payment.



✓ Non-payment of dues led to multiple protests by ASHA workers across the country. ASHA workers from Haryana, Delhi and Punjab protested near the Parliament in March 2022, alongside Anganwadi and mid-day meal workers, to raise incentives.

Analytica

Challenges faced by ASHA programme

- Their terms of service and conditions of work are poor. Their remuneration is low and its payment is irregular. They are not entitled to amenities like maternity leave and social security.
- Gloves, masks and rest room facilities are often not available in many work locations. Irregular
 working hours create problems in many families and many of them have to face harassment
 from doctors and other health staff.
- Among the A-A-A, ASHAs are the only ones who do not have a fixed salary; they do not have opportunity for career progression. (A-A-A team → Anganwadi workers (AWW), Auxiliary Nurse Midwife (ANM) & Accredited Social Health Activist Workers ASHA)
- Though performance-based incentives are supplemented by a fixed amount in a few Indian States, the total payment continues to remain low and often delayed.

What need to be done?

The global recognition for ASHAs should be used as an opportunity to review the programme afresh, from a solution perspective.

- First, Indian States need to develop mechanisms for higher remuneration for ASHAs. The performance-based incentives should not be interpreted that ASHAs no matter how much and how hard they work need to be paid the lowest of all health functionaries. If they work more, the system should allow them to be paid more than even regular government staff.
- Leavenues for career progression for ASHAs to move to other cadres such as ANM, public health nurse and community health officers are opened.
- Third, extending the benefits of social sector services including health insurance (for ASHAs and their families) should be considered. The possibility of ASHAs automatically being entitled and having access to a broad range of social welfare schemes needs to be institutionalised.
- Fourth, while the ASHA programme has benefitted from many internal and regular reviews by the Government, an independent and external review of the programme needs to be given urgent and priority consideration.
- Fifth, there are arguments for the regularisation of many temporary posts in the National Health Mission and making ASHAs permanent government employees. Considering the extensive shortage of staff in the workforce at all levels, and more so in the primary health-care system in India, and an ongoing need for functions being undertaken by ASHAs, it is a policy option that is worth serious consideration.

Conclusion

The WHO award for ASHA volunteers is a proud moment and also a recognition of every health

functionary working for the poor and the underserved in India. It is an acknowledgement of the role and the relevance of people-centric primary health-care services. It is a reminder and an opportunity to further strengthen the ASHA programme for a stronger and community-oriented primary health-care system, which will prepare India for future epidemics and pandemics as well.

PEPPER IT WITH

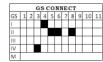
National Rural Health Mission, National Urban Health Mission, Anganwadi workers (AWW), WHO's Global Leaders



SHRESHTA Scheme

News Excerpt

Recently, Ministry of social Justice and empowerment launched the Scheme "SHRESHTA"-Scheme for Residential Education for Students in High school in Targeted Areas.



Pre-connect

- The Ministry of Social Justice and Empowerment have launched SHRESHTA scheme for residential education for Scheduled Caste students in High School in targeted areas.
- Through this scheme, scholarships will be provided to the beneficiaries that will cover all the educational expenses of meritorious students from class 9th to 11th. Only students belonging to scheduled caste will be able to take benefit of this scheme.
- The government is going to roll out the scheme from the academic year 2022-23.
- In order to take advantage of this scheme, students are required to give an entrance examination which is known as NETS or the National entrance test for SHRESHTA.
- It is basically a national-level test that is conducted by the National Testing Agency (NTA) in a computer-based mode.

Objective of the Scheme

- > To enhance the reach of the development initiative of the government.
- > To fill the gap in service-deprived Scheduled Castes (SCs) dominant areas in the sector of education by collaborating with voluntary organizations.
- To provide an environment for socio-economic upliftment and overall development of the Scheduled Castes (SCs).
- To provide access to high-quality education to bright Scheduled Caste (SC) students so that they can explore future opportunities.

Features Of SHRESHTA Scheme

- ✓ All those students who qualify NETs exam will be shortlisted for admission to CBSE affiliated schools.
- ✓ Through this scheme scholarship will be directly disbursed to the schools who are giving admission to the shortlisted students.
- ✓ This scholarship will cover school fees and hostel fees.
- ✓ This scheme is applicable only for the residential schools which are affiliated with CBSE upto class 12th, are in operation for five years or more with 75% pass percentage or more in class 10th and 12th in the last three years.
- ✓ The interested residential schools are required to submit their online consent by 25th March 2022.

PEPPER IT WITH

National Testing Agency (NTA), Babu Jagjivan Ram Chhatrawas Yojana (BJRCY), Post Matric scholarship schemes for SC, Single National Scholarship Scheme

Analytica

Constitutional mechanism for upliftment of SC

- The deep concern of the framers of the Constitution for the upliftment of the Scheduled Castes and Scheduled Tribes and Other Backward Classes is reflected in the elaborate constitutional mechanism set-up for their uplift.
- Article 17 abolishes Untouchability.
- Article 46 requires the State 'to promote with special care the educational and economic interests of the weaker sections of the people, and, in particular, of the Scheduled Castes and the Scheduled Tribes, and to protect them from social injustice and all forms of exploitation.



- Article 335 provides that the claims of the members of the Scheduled Castes and the Scheduled Tribes shall be taken into consideration, consistently with the maintenance of efficiency of administration, in the making of appointments to services and posts in connection with the affairs of the Union or of a State.
- Article 15(4) refers to the special provisions for their advancement.
- Article 16(4A) speaks of "reservation in matters of promotion to any class or classes of posts in the services under the State in favour of SCs/STs, which are not adequately represented in the services under the State'.
- Article 338 provides for a National Commission for the Scheduled Castes and Scheduled Tribes
 with duties to investigate and monitor all matters relating to safeguards provided for them, to
 inquire into specific complaints and to participate and advise on the planning process of their
 socio-economic development etc.
- Article 330 and Article 332 of the Constitution respectively provide for reservation of seats in favour of the Scheduled Castes and the Scheduled Tribes in the House of the People and in the legislative assemblies of the States. Under Part IX relating to the Panchayats and Part IXA of the Constitution relating to the Municipalities, reservation for Scheduled Castes and Scheduled Tribes in local bodies has been envisaged and provided.

Initiatives taken for SC development

Educational Empowerment

Various scholarships are provided to the students belonging to the Scheduled Castes (SCs) to ensure that education is not denied due to the poor financial condition of their families. These Scholarships are provided at both pre-matric and post-matric levels. Scholarships are also provided to SC students for obtaining higher education in India and abroad, including premier educational institutions. The Scholarships can broadly be classified into the following three types:

- ♣ **Pre-Matric Scholarships**: The objective of the pre-matric Scheme is to support the parents of SC children for educating their wards, so that the incidence of drop outs at this stage is minimized.
- ▶ Pre-Matric Scholarship to the Children of those engaged in occupations involving cleaning and prone to health hazards: This is also a centrally sponsored scheme, which is implemented by the State Governments and Union Territory Administrations, which receive 100% central assistance from the Government of India for the total expenditure under the scheme, over and above their respective Committed Liability.
- ▶ Post Matric Scholarship for Scheduled Caste Students (PMS-SC): The Scheme is the single largest intervention by Government of India for educational empowerment of scheduled caste students. This is a centrally sponsored scheme. 100% central assistance is released to State Governments/UTs for expenditure incurred by them under the scheme over and above their respective committed liability.

Other Scheme

- o **Babu Jagjivan Ram Chhatrawas Yojna:** The primary objective of the Scheme is to attract implementing agencies for undertaking hostel construction programme with a view to provide hostel facilities to SC boys and girls studying in middle schools, higher secondary schools, colleges and universities. The Scheme provides central assistance to State Governments/ UT Administrations, Central & State Universities/ Institutions for fresh construction of hostel buildings and for expansion of the existing hostel facilities.
- Upgradation of Merit of SC Students: The objective of the Scheme is to upgrade the merit of Scheduled Caste students studying in Class IX to XII by providing them with facilities for education in residential /non-residential schools. Central assistance is released to the State Governments/UT Administrations for arranging remedial and special coaching for Scheduled Caste students. While remedial coaching aims at removing deficiencies in school

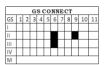


- subjects, special coaching is provided with a view to prepare students for competitive examinations for entry into professional courses like Engineering and Medical.
- o **Dr. Ambedkar Foundation:** Dr. Ambedkar Foundation was set up on 24th March 1992, as a registered body, under the Registration of Societies Act, 1860, under the aegis of the Ministry of Welfare, Government of India. The primary object of setting up of the Foundation is to promote Dr. Ambedkar's ideology and philosophy and also to administer some of the schemes which emanated from the Centenary Celebration Committee's recommendations.

UNESCO's Recognition

News Excerpt

Use of ICT under a comprehensive initiative called PM eVIDYA by the Department of School education, Ministry of Education, particularly during the COVID-19 pandemic wins UNESCO's recognition.



Pre-connect

The PM eVIDYA has been initiated as part of Atma Nirbhar Bharat Abhiyaan by the Ministry of Education that unifies all efforts related to digital/online/on-air education to enable multi-mode access for imparting education by using technology to minimise learning losses.

Central Institute of Educational Technology (CIET), a constituent unit of National Council of Educational Research and Training (NCERT) under Department of School Education and Literacy (DOSEL), Ministry of Education (MoE), Government of India has been awarded with the UNESCO's King Hamad Bin Isa Al-Khalifa Prize for the Use of ICT in Education for the year 2021.

About the UNESCO's recognition

- This award "recognizes innovative approaches in leveraging new technologies to expand educational and lifelong learning opportunities for all, in line with the 2030 Agenda for Sustainable Development and its Goal 4 on Education.
- ❖ Established in 2005 with the support of the Kingdom of Bahrain, the Prize rewards individuals and organizations that are implementing outstanding projects and promoting the creative use of technologies to enhance learning, teaching and overall educational performance in the digital age.
- ❖ An international Jury selects two best projects annually. Each prizewinner receives US\$ 25,000, a medal and a diploma during a ceremony at UNESCO Headquarters in Paris.

Objective of PM eVIDYA Program

- The main objective of the PM eVIDYA program is to provide quality education to all the students of the country. Education is one of the most affected sectors due to the lockdown. So the Government of India has launched this program in order to provide online education to all the students of the country.
- The government is going to take all the essential steps to ensure that the education of students does not suffer due to the nationwide lockdown. Now the students of the country are not required to be physically present in order to get an education as they will get an education from the comfort of their home. This will save a lot of time and money and will also bring transparency to the system.

Benefits Of PM eVIDYA Program

- > Digital/online/on-air access to education is ensured through the PM eVIDYA program
- > This program is going to benefit more than 25 crore school-going children



- ➤ For all those students who do not have access to the internet, swayam Prabha TV channel will be launched to provide education
- ➤ 12 more similar channels will also be launched under this scheme
- Diksha platform will also be launched which will involve econtent and QR code energized books for all the classes
- This program will also be called as one Nation one digital platform
- ➤ TV channel called one class one channel will also be launched for students who are studying in class 1st to 12th
- For visually and hearing impaired students the government will also do a radio podcast
- All the important steps will be taken by the government so that
- education of students does not suffer due to the nationwide lockdown
- > Through this program, students will get an education from the comfort of this their home
- > This program will be one-stop solution for all the learning needs of students
- > Online coaching for the competitive exams will also be provided under this scheme

Features Of Diksha Portal

- ✓ The teachers and students can access the digital infrastructure after scanning the QR code which is provided on the books.
- ✓ The portal can be accessed in various Indian languages and English
- ✓ The portal will also provide suggestions regarding the courses as per the skill set of users.
- ✓ Diksha portal requires a user to choose the class whose study material has to be accessed.

What is PM eVidya Programme? "To provide enhanced learning opportunities to 3.7 crore students in higher education and expand e-learning by liberalizing open, distance, and online education regulatory framework, top 100 universities will start online courses. Online components in conventional Universities and ODL programmes will also be raised from 20% to 40%.

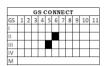
PEPPER IT WITH

Swayam portal, New Education policy, Atma Nirbhar Bharat Abhiyaan, NISHTHA, Samagra Shiksha and SDG-4

NIPUN

News Excerpt

Recently, Ministry of Housing & Urban Affairs and Petroleum & Natural Gas, Government of India, launched an innovative project for skill training of construction workers called 'NIPUN' i.e. National Initiative for Promoting Upskilling of Nirman workers.



About the NIPUN initiative

The project NIPUN is an initiative of the Ministry of Housing & Urban Affairs (MoHUA) under its flagship scheme of the **Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM)** to train over 1 lakh construction workers, through fresh skilling and upskilling programmes and provides them with work opportunities in foreign countries also.

How project is being implemented



- The project implementation is divided into three parts training through Recognition of Prior Learning (RPL) at construction sites, training through Fresh Skilling by Plumbing and Infrastructure SSC and International Placement through industries/ builders/ contractors.
- Onsite skill training will be provided to approximately 80,000 construction workers through industry associations under the RPL certification, co-branded with MoHUA, while about 14,000 candidates will receive fresh skilling through plumbing and infrastructure Sector Skill Council (SSC) in trades having promising placement potentials.
- The courses are aligned with National Skills Qualifications Framework (NSQF) and will be imparted at accredited and affiliated training centres. Under NIPUN, it is also envisaged that NSDC will place approximately 12,000 people in foreign countries such as the Kingdom of Saudi Arabia, UAE and other GCC countries.

Benefits of NIPUN

- ➤ Project NIPUN will also facilitate and support convergence with related line ministries. Meanwhile, NSDC will be responsible for the overall execution of training, monitoring and candidate tracking.
- ➤ It will provide trainees with 'Kaushal Bima', a three-year accidental insurance with coverage of INR 2 lakhs, digital skills such as cashless transactions and the BHIM app, orientation about entrepreneurship, and EPF and BOCW facilities.
- > The National Skill Development Corporation (NSDC), the nodal agency under the Ministry of Skill Development & Entrepreneurship (MSDE), Government of India, will be the Implementating Partner for the project NIPUN.
- > NIPUN Project will enable the construction workers to seek better job opportunities, increase their wages and even pursue overseas placements an indication of a new eco-system
- > Through suitable skilling initiatives such as NIPUN, India can create a future labour force for the construction industry which will propel innovation and large-scale development in the country.

Analytica

Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM)

- ✓ Deen Dayal Antyodaya Yojana (DAY) aims to uplift the urban poor folks by enhancing sustainable livelihood opportunities through skill development.
- ✓ It was launched under the Ministry of Housing and Urban Poverty Alleviation. Government of India has provisioned Rs.500 crore for the scheme.
- ✓ The scheme is integration of the National Urban Livelihoods Mission (NULM) and National Rural Livelihoods Mission (NRLM).
- ✓ Under the scheme urban areas extends the coverage to all the 4041 statutory cities and towns, there by covering almost the entire urban population. Currently, all the urban poverty alleviating programmes covered only 790 towns and cities.

Main Highlights Of The Scheme

- **Employment through Skill Training and Placement** An expenditure of Rs.15, 000 per person is allowed on training of urban poor which is Rs.18, 000 in North-East and J&K. Moreover, Training urban poor to meet the enormous demand from urban citizens by imparting market-oriented skills through City Livelihood Centers.
- **Social Mobilization and Institution Development** It will be done through formation of Self-Help Groups (SHG) for training members and hand holding, an initial support of 10, 000 is given for each group. Assistance of Rs.50, 000 is provided to Registered Area Level Federations.
- **Subsidy to urban poor** An interest subsidy of 5% 7% for setting up individual microenterprises with a loan of up to 2 lakh and for group enterprises with a loan limit of up to Rs.10 lakhs.



- Shelters for urban homeless Cost of construction of shelters for urban homeless is fully funded under the Scheme.
- **Other means** Development of vendor markets and also the promotion of skills for the vendors through setting up infrastructure and special projects for the rag pickers and differently abled etc.

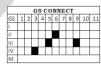
Way Forward

- ♣ Emphasizing on boosting the skill sets in the construction industry to be adopted on war footing but so far we have not been able to achieve what should have been done. The construction industry has been investing in skilling but it has not spread horizontally across the industry.
- Therefore, the initiative taken by Ministry of Housing and Urban Affairs in this regard is really praiseworthy and should expand to cover larger number.
- The spirit of entrepreneurship has been encouraged and supported by giving urban workers access to self-employment and skilled wage employment opportunities.
- This initiative will enable Nirman workers to be more proficient and skilled while making them to adopt future trends in the construction industry by increasing their capabilities and diversifying their skill sets.

Amrit Sarovar Mission

News Excerpt

Recently, Union government has asked the Ministry of Railways and the National Highways Authority of India (NHAI) to use the soil/silt excavated from ponds/tanks in all districts across the country under the Amrit Sarovar mission for their infrastructure projects.



Pre-connect

- With a view to conserve water for the future, the Prime Minister of India launched a new Mission on Amrit Sarovar on 24th April 2022.
- The Mission is aimed at **developing and rejuvenating 75 water bodies in each district** of the country as a part of celebration of Azadi

country as a part of celebration of Azadi ka Amrit Mahotsav.

• At least 50,000 water bodies are expected to be rejuvenated across the country during the nationwide programme that would culminate on August 15, 2023. The Centre announced that the national flag would be hoisted at all the Amrit Sarovar sites on that day.

This Mission has been launched with a whole of Government Approach in which 6 Ministries/Department namely-

- Department of Rural Development.
- Department of land resources.
- Department of Drinking Water and Sanitation.
- Department of Water resources.
- Ministry of Panchayati Raj.
- Ministry of Forest, Environment and Climate changes.

Azadi ka Amrit Mahotsav

- Azadi Ka Amrit Mahotsav is an initiative of the Government of India to celebrate and commemorate 75 years of independence and the glorious history of it's people, culture and achievements.
- ❖ This Mahotsav is dedicated to the people of India who have not only been instrumental in bringing India thus far in its evolutionary journey but also hold within them the power and potential to enable Prime Minister Narendra Modi's vision of activating India 2.0, fuelled by the spirit of Aatmanirbhar Bharat.
- ❖ The official journey of Azadi ka Amrit Mahotsav commenced on 12th March 2021 which started a 75-week countdown to our 75th anniversary of independence and will end post a year on 15th August 2023.



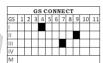
More about the mission

- ✓ Bhaskaracharya National Institute for Space Application and Geo-informatics (BISAG-N) has been engaged as a Technical partner for the Mission.
- ✓ The Mission works through the States and Districts, through refocusing of various schemes such as Mahatma Gandhi NREGS, XV Finance Commission Grants, PMKSY sub schemes such as Watershed Development Component, Har Khet Ko Pani besides States' own schemes.
- ✓ Local freedom fighters, their family members, Martyr's family members, Padma Awardee and citizens of the local area wherein an Amrit Sarovar is to be constructed, will be engaged at all stages.

World Mental Health Report: WHO

News Excerpt

Recently, WHO highlights urgent need to transform mental health and mental health care in World Mental Health Report.



Pre-connect

Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood.

Key Highlight of the Report

- In 2019, nearly a billion people including 14% of the world's adolescents were living with a mental disorder. Suicide accounted for more than 1 in 100 deaths and 58% of suicides occurred before age 50.
- Mental disorders are the leading cause of disability, causing 1 in 6 years lived with disability. People with severe mental health conditions die on average 10 to 20 years earlier than the general population, mostly due to preventable physical diseases.
- Childhood sexual abuse and bullying victimization are major causes of depression. Social and economic inequalities, public health emergencies, war, and the climate crisis are among the global, structural threats to mental health.

Mental illness is an amalgamation of biological, social, psychological, hereditary, and environmental stressors. The social determinants of health predispose individuals and populations to poor physical and mental health, increased risk for many physical and mental illnesses, and poorer outcomes of such illnesses, when they occur.

- Depression and anxiety went up by more than 25% in the first year of the pandemic alone.
- Stigma, discrimination and human rights violations against people with mental health conditions are widespread in communities and care systems everywhere; 20 countries still criminalize attempted suicide.
- Across countries, it is the poorest and most disadvantaged in society who are at greatest risk of mental ill-health and who are also the least likely to receive adequate services.
- Even before the COVID-19 pandemic, just a small fraction of people in need had access to effective, affordable and quality mental health care. For example, 71% of those with psychosis worldwide do not receive mental health services.
- While 70% of people with psychosis are reported to be treated in high-income countries, only 12% of people with psychosis receive mental health care in low-income countries.



• For depression, the gaps in service coverage are wide across all countries: even in high-income countries, only one third of people with depression receive formal mental health care and minimally-adequate treatment for depression is estimated to range from 23% in high-income countries to 3% in low- and lower-middle-income countries.

Analytica

Mental health and India

- A study by the India State-Level Disease Burden Initiative showed that the disease burden in India due to mental disorders increased from 2.5% in 1990 to 4.7% in 2017 in terms of DALYs1 (disability-adjusted life years), and was the leading contributor to YLDs (years lived with disability) contributing to 14.5% of all YLDs in the country (India State-Level Disease Burden Initiative, 2017).
- In India, having a mental health disorder is perceived with a sense of judgement and there is stigma associated with those having mental health issues.
- Mental disorders are also considered as being a consequence of a lack of self-discipline and willpower. The stigma associated with mental health as well as lack of access, affordability, and awareness lead to significant gaps in treatment.
- According to the World Health Organisation (WHO), India's mental health workforce is severely understaffed. There is a massive shortage of psychiatrists and psychologists compared to the number of patients suffering from mental health issues.
- According to the international organisation's data, **there are only three psychiatrists and psychologists for every 1,00,000 people.** It has predicted that owing to the pandemic and its influential factors, the number of patients who have any mental disorders would touch 20 per cent in the country. Roughly 56 million Indians suffer from depression, and 38 million suffer from some anxiety disorder.

What India must do to solve its mental health crisis?

- ✓ The first and foremost reason behind mental health crisis is the lack of awareness and sensitivity about the issue.
- ✓ There is a big stigma around people suffering from any kind of mental health issues. These issues aggravate the scale of the problem and need immediate redressal.
- Mental health situation in India demands active policy interventions and resource allocation by the government. To reduce the stigma around mental health, we need measure to train and sensitize the community/society. This can happen only when we have persistent nationwide effort to educate the society about mental diseases.
- ✓ When it comes to providing the right care to patients with mental illness, we

WHO's Comprehensive mental health action plan 2013–2030

In May 2013, WHO's Mental Health Action Plan 2013-2020 was adopted at the 66th World Health Assembly which was extended until 2030 by the 72nd World Health Assembly in May 2019 with modifications of some of the objectives and goal targets to ensure its alignment with the 2030 Agenda for Sustainable Development.

Objective

- To strengthen effective leadership and governance for mental health
- To provide comprehensive, integrated and responsive mental health and social care services in community-based settings.
- To implement strategies for promotion and prevention in mental health.
- ❖ To strengthen information systems, evidence and research for mental health

need mental healthcare intervention to the patients, we need innovative models to deepen the penetration of services and staff. One such model is accredited social health activist (ASHA) by the ministry of health and family welfare, Government of India.



- ✓ While early steps in this direction have been taken by the Government, the problem requires to be dealt on war footing.
- ✓ We need a constant stream of funds for educating and creating awareness about mental health and chronic issues around it.
- The need of the hour is to provoke masses learn about to health mental through campaigns Swach Mansikta Abhiyan. This will help them address mental issues in a timely and effective manner and live a stress-free life. The campaign will also encourage people to about their talk

WHO's response

In 2019, WHO launched the WHO Special Initiative for Mental Health (2019-2023): Universal Health Coverage for Mental Health to ensure access to quality and affordable care for mental health conditions in 12 priority countries to 100 million more people. WHO's mental health activities cover normative activities and

WHO's mental health activities cover normative activities and country support activities.

WHO has helped extend mental health care in more than 110 countries and is active in the following areas: integration in general health care (through the Mental Health Gap Action Programme, mhGAP) and in disease or topic-specific programmes such as those for HIV, tuberculosis and gender-based violence; suicide prevention; workforce development for mental health; promotion of the quality of care and the rights of people receiving care (Quality Rights); mental health policy and legislation; mental health and psychosocial support in humanitarian emergencies; development and testing of interventions innovative psychological including interventions; mental health in the workplace; mental health economics; the mental health of children and adolescents; and mental health promotion.

mental well-being and reach out to a therapist or psychiatrist, in case they need to do so.

Government Initiatives

- The government of India launched the National Mental Health Programme (NMHP) in 1982 and the Mental Health Care Act in 2017. The National Mental Health Programme focused mainly on increasing the reach of minimum mental health services for the poor. This encourages social development in general healthcare.
- After a gap of more than 20 years, the Mental Health Care Act mandated affordable mental health care, the right to make decisions and informed consent, the right to live in a community and the right to confidentiality. This Act more importantly decriminalized suicide.
- The Mental Health Care Act is a step in the right direction with the aim of bringing mental healthcare to those who cannot afford it. Yet, almost 14% of the population still suffers from mental health disorders. While stigma and social stereotypes play a major role in the aggravation of these numbers, the nation's budget invests very little into mental health. India as a developing

country, spends only 0.05% of its subtotal health care budget on mental health.

 Union Budget 2022-2023 took the consideration the issue of mental health, and announced the National Tele-Mental Health Programme in India, for 24*7 free

PEPPER IT WITH

Swach Mansikta Abhiyan, Manodarpan, Kiran Helpline, The National Mental Health Survey, Mental Healthcare Act, 1987, State Mental Health Authorities

tele counselling services. While the parliamentary announcement is a welcome change, there is a need to invest more in mental health needs across India.

Conclusion

Long delayed conversations and measures to address the challenge of mental health access and care, have now slowly made their way into the mainstream. As this important issue gains attention, there is a need for a multi-stakeholder engagement to tackle the various challenges, from all fronts.

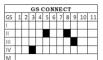


Careful mapping and research needs to be undertaken to produce quality data, that is essential to understand the size of the problem. This in turn should be utilised to implement a comprehensive approach, supported by heightened political commitment, scientific understanding and a citizen driven movement.

Community Forest Resource

News Excerpt

Recently, The Chhattisgarh government recognised, for the first time, the community forest resource (CFR) rights of a village located inside a national park. Chhattisgarh is only the second state to have recognised CFR rights inside a national park. The CFR rights of Gudiyapadar hamlet, which comprises of 403 hamlet.



national park. The CFR rights of Gudiyapadar hamlet, which comprises of 403 hectares of forest area and consists of four reserved forest compartments inside the Kanger Ghati National Park.

Pre-connect

What is a community forest resource?

- The community forest resource area is the common forest land that has been traditionally protected and conserved for sustainable use by a particular community.
- The community uses it to access resources available within the traditional and customary boundary of the village; and for seasonal use of landscape in case of pastoralist communities.
- Each CFR area has a customary boundary with identifiable landmarks recognised by the community and its neighbouring villages.
- It may include forest of any category – revenue forest, classified & unclassified forest, deemed forest, DLC land, reserve forest, protected forest, sanctuary and national parks etc.

What are Community Forest Resource rights?

> The Community Forest Resource rights under Section 3(1)(i) of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (commonly referred to as the Forest

Kanger Valley National Park

- * Kanger Ghati National Park (also called Kanger Valley National Park) was declared a national park in 1982 by the Government of India. Near Jagdalpur in the Bastar region of Chhattisgarh, it is one of India's densest national parks, and is known for its biodiversity, landscape, waterfalls, and subterranean geomorphologic limestone caves, and as the home of the **Bastar hill myna**, the state bird of Chhattisgarh.
 - It covers an approximately consisting mainly of hilly terrain. It derives its name from the Kanger River, which flows throughout it.
- The national park has remarkable geological diversity.
- ❖ The national park has mainly Cuddapah group of rock formation and at some places Vindhyan group of rock formation, shales are the common rock formation of Cuddapah group, which are horizontally bedded, at many places calcareous, the other rock formation is slate.
- Poor and rocky soil is found on the hill tops and slopes. Recent deposits are alluvial soils, high and low level laterites, and ferruginous conglomerates.
- ❖ The park is Valley of Kanger River. The river flows from NW to SE direction centrally through deep gorges. Both sides of the valley are very steep and are associated with hill ranges. The entire park area is hilly.

Kanger River

Kanger River is among one of very few perennial rivers of Bastar and herein lies the importance of the river and the park. Kanger River is a lifeline and hills are its recharging reservoir; the whole national park is the catchment of Godavari River.



- Rights Act or the FRA) provide for recognition of the right to "protect, regenerate or conserve or manage" the community forest resource.
- These rights allow the community to formulate rules for forest use by itself and others and thereby discharge its responsibilities under Section 5 of the FRA.
- ➤ CFR rights, along with Community Rights (CRs) under Sections 3(1)(b) and 3(1)(c), which include nistar rights and rights over non-timber forest products, ensure sustainable livelihoods of the community.
- These rights give the authority to the Gram Sabha to adopt local traditional practices of forest conservation and management within the community forest resource boundary.

Why is the recognition of CFR rights important?

- ✓ Aimed at undoing the "historic injustice" meted out to forest-dependent communities due to curtailment of their customary rights over forests, the FRA came into force in 2008.
- ✓ It is important as it recognises the community's right to use, manage and conserve forest resources, and to legally hold forest land that these communities have used for cultivation and residence.
- ✓ It also underlines the integral role that forest dwellers play in sustainability of forests and in conservation of biodiversity.
- ✓ It is of greater significance inside protected forests like national parks, sanctuaries and tiger reserves as traditional dwellers then become a part of management of the protected forests using their traditional wisdom.
- ✓ But while CFR rights are an important empowerment tool, getting a consensus amongst various villages about their traditional boundaries often proves a challenge.

Analytica

Forest Right Act

- The Forest Rights Act (FRA), 2006 recognizes the rights of the forest dwelling tribal communities and other traditional forest dwellers to forest resources, on which these communities were dependent for a variety of needs, including livelihood, habitation and other socio-cultural needs.
- The forest management policies, including the Acts, Rules and Forest Policies of Participatory Forest Management policies in both colonial and post-colonial India, did not, till the enactment of this Act, recognize the symbiotic relationship of the STs with the forests, reflected in their dependence on the forest as well as in their traditional wisdom regarding conservation of the forests.

PEPPER IT WITH

Simlipal National Park, FDST, OTFD, DLC land

Objective:

- To undo the historical injustice occurred to the forest dwelling communities
- ♣ To ensure land tenure, livelihood and food security of the forest dwelling Scheduled Tribes and other traditional forest dwellers
- → To strengthen the conservation regime of the forests by including the responsibilities and authority on Forest Rights holders for sustainable use, conservation of biodiversity and maintenance of ecological balance.

Conclusion:

- With the recognition of the rights, the Gram Sabha can have a say on access allowed in the forest that falls within their traditional boundaries. This empowers the Gram Sabha to protect the wild life, forest and biodiversity and ensure that adjoining catchments areas, water resources and other ecological sensitive areas are adequately protected.
- The direction is a step towards leaving no one behind and exploring the economic and social rights of the indigenous or tribal people. They need to be protected to save the biodiversity.

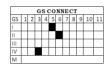


- The recognition by government also recognizes the struggle of the community. This would also sensitize people towards the existence and process of community forests resource rights in urban areas while also ensuring the protection of their culture and traditions with the nature, forest, land and water.
- o This also preserves the symbiotic relationship between tribal and forests and hands over the community grazing and harvesting rights in the nearby forest.

'Nanhi Pari' programme

News Excerpt

Recently, Hipza is one of the first beneficiaries of the 'Nanhi Pari' programme launched by the Northwest Delhi district administration.



About the Programme

- The programme aims to complete essential services such as provision of a birth certificate, Aadhaar card registration, and opening a bank account for girls delivered in government hospitals in the district before mother and baby are discharged.
- Additionally, it also aims to get registration for schemes for girl children and mothers such as the Sukanya Samriddhi Account scheme, the Ladli scheme, and Pradhan Mantri Matru Vandana Yojana done at the hospital itself.

Other Initiatives

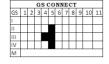
- Sukanya Samriddhi Yojana
- Balika Samriddhi Yojana
- Beti Bachao Beti Padhao
- ❖ Ladli Scheme
- The administration has partnered with Punjab

 National Bank to ensure an easy process to open a bank account for the child where transfers under the schemes can be made.
- Apart from ensuring that schemes reach target beneficiaries and protecting the interests of girl children, the programme also aims to promote institutional deliveries.
- The basic aim of most of these schemes is to protect the birth of the girl child, and to facilitate a safe and secure environment and education for her.
- The schemes involved are all existing schemes, but this ensures that enrolment for many of these is done under one roof.
- Since this programme starts from the hospital, people will know that with a hospital delivery, they get such and such benefits.
- It will motivate and promote institutional delivery; that is our main target. That will reduce our maternal mortality rate and infant mortality rate.
- The government's Sample Registration System (SRS) has reported that the country's Infant Mortality Rate (IMR) was 20 in 2020, meaning that out of 1,000 babies born in the country, 20 die within 12 months of their birth.
- India's maternal mortality ratio (MMR) has improved to 103 in 2017-19, from 113 in 2016-18. This is according to the special bulletin on MMR released by the Registrar General of India March 14, 2022.

Food Safety Index

News Excerpt

Recently, the Food Safety and Standards Authority of India (FSSAI) released the State Food Safety Index (SFSI) 2021-22.



Pre-connect



Developed by the FSSAI, the index aims to measure the performance of states and Union Territories on selected "parameters" of food safety. According to the FSSAI, the index is aimed at encouraging

states and UTs to "improve their performance and work towards establishing a proper food safety ecosystem in their jurisdiction".

The SFSI is released annually for a financial year. For instance, the latest SFSI, released on World Food safety Day, June 7, is for the fiscal 2021-22. This is the fourth edition of the SFSI since its inception in 2018-19.

Performance of state and UTs this year

- In the category of the 20 large states, Tamil Nadu with an overall score of 82 out of 100 has performed the best and been ranked 1st on SFSI 2021-22, while Andhra Pradesh with an overall score of 26 has been ranked at the bottom—17th place (some states share a common rank).
- Following Tamil Nadu in the rankings of the larger states are Gujarat (rank 2nd with a score 77.5), Maharashtra (3rd with 70), Himachal Pradesh (4th with 65.5) and West Bengal and Madhya Pradesh (sharing 5th with a score of 58.5).
- Bihar (rank 16th, score 30), Telangana (rank 15th, score 34.5), Assam (rank 14th, score 35) and Chhattisgarh and Haryana (rank 13th, score 38) join Andhra Pradesh in the bottom 5 among the large states on the SFSI for the large states.

RAN	(STATE/UT	SCORE
LARG	E STATES	
1	Tamil Nadu	82
2	Gujarat	77.5
3	Maharashtra	70
15	Telangana	34.5
16	Bihar	30
17	Andhra	26
SMA	LLSTATES	
1	Goa	56
2	Manipur	44
7	Mizoram	22.5
8	Arunachal	21
UNIC	ONTERRITORIES	
1	J&K	68.5
2	Delhi	66
7	Dadra & NH & Daman & Diu	27.5
8	Lakshadweep	16

- Among the eight small states, Goa with a score of 56 has been ranked at the top, while Arunachal Pradesh (rank 8th and score 21) is at the bottom.
- Among the eight Union Territories, Jammu and Kashmir with a score of 68.5 has been ranked 1st and Lakshadweep (score 16) as

1st and Lakshadweep (score 16) as the bottom. Delhi with a score of 66 has been ranked at 2nd place.

Analytica

Which are these food safety parameters?

The SFSI takes into account the performance of the states on five key parameters, each of which is assigned a different weightage in the assessment.

➤ HUMAN RESOURCES & INSTITUTIONAL DATA: This carries a weightage of 20% and

The World Food Safety Day in India

- ❖ On the occasion of World Food Safety Day, the Union Minister launched the logo for 'Ayurveda Aahar'. Ayurveda Aahar's logo is meant to create a unique identity of 'Ayurveda Aahar' and aims to facilitate its easy identification. The logo contains the initials of Ayurveda and Ahara with 5 leaves symbolizing five elements of nature.
- -Ayurveda Aahar refers to food prepared following the recipes or ingredients and/or processes as per methods described in the books of Ayurveda listed under 'Schedule A' of the regulations.
- measures the "availability of human resources like number of Food Safety Officers, Designated Officers facility of adjudications and appellate tribunals, functioning of State/District level Steering Committees, pendency of cases and their monitoring and participation in Central Advisory Committee meetings of the Food Authority".
- ➤ **COMPLIANCE:** This carries the highest weightage, 30%. "This is the most important parameter and measures overall coverage of food businesses in licensing & registration commensurate with size and population of the State/UTs, special drives and camps organized, yearly increase, promptness and effectiveness in issue of state licenses/



registrations,". "Promptness" in attending to consumer grievances, and availability of a help desk and web portals, too, come under this parameter.

- ➤ FOOD TESTING—INFRASTRUCTURE AND SURVEILLANCE: Weighted at 20%, this measures the "availability of adequate testing infrastructure with trained manpower in the States/ UTs for testing food samples". "The States/ UTs with NABL accredited labs and adequate manpower in the labs score more in this parameter." It takes into account the "availability and effective utilization" of Mobile Food Testing Labs and registration and utilization of InFoLNet (Indian Food Laboratories Network).
- > **TRAINING & CAPACITY BUILDING:** This parameter carries the lowest weightage, at 10%. It measures states' performance on training and capacity building of regulatory staff.
- ➤ **CONSUMER EMPOWERMENT:** This carries a weightage of 20%. It evaluates the states and UTs on their performance on various consumer empowering initiatives of FSSAI, such as participation in Food Fortification, Eat Right Campus, BHOG (Blissful Hygienic Offering to God), Hygiene Rating of Restaurants, Clean Street Food Hubs, etc.

Besides, the states' initiatives for creating consumer awareness are also considered under this parameter.

How is the states and UTs assessed?

- ✓ The states and Union Territories are not assessed and ranked together. They are segregated into three categories large states, small states and UTs— and assessed separately within their respective categories, based on their performance on the selected food safety parameters.
- ✓ The FSSAI stated that the assessment and evaluation of each category are done by separate teams comprising of outside experts for food testing and food & nutrition professionals in addition to FSSAI officials.
- ✓ These expert teams examine details received from the states and UTs. They also interact with the states/UTs through video-conferencing for verification and confirmation of data.

What are some of the important initiatives for food safety in India?

Eat Right India Movement: It aims to transform the country's food system in order to ensure safe, healthy and sustainable food for all Indians. It is aligned to the National Health Policy 2017 with its focus on preventive and promotive

healthcare and flagship programmes like Ayushman Bharat, POSHAN Abhiyaan, Anemia Mukt Bharat and Swachh Bharat Mission.

• **Eat Right Station Certification:** awarded by FSSAI to railway stations that set benchmarks (as per the Food Safety and Standards Act, 2006) in providing safe and wholesome food to passengers.

PEPPER IT WITH

Food Safety and Standard Act, 2006, Food Safety and Standards Rule, 2011, FSSAI, Eat Smart Cities Challenge, Ayurveda Aahar, National Health Policy 2017, Ayushman Bharat, POSHAN Abhiyaan, Anemia Mukt Bharat

- The Eat Right Research Awards and Grants: for high-quality research in the area of food safety and nutrition in India has also been launched.
- Effort to engage industries on the issue of plastic in food packaging: food businesses signed a pledge on becoming "Plastic Waste Neutral". The aim can be achieved by collecting, processing and recycling of 100% post-consumer plastic waste from across the sources.

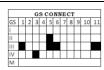


ECONOMY

Tokenisation of cards

News Excerpt

The Reserve Bank of India (RBI) extended the timeline for tokenisation of debit and credit cards by three months till September 30, 2022 to avoid disruption and inconvenience to cardholders.



Pre-Connect

- Under tokenisation services, a unique alternate code is generated to facilitate transactions through cards. It is the process of substituting a 16-digit customer card number with a non-sensitive equivalent value, referred to as a token.
- This essentially means that a customer's card information will no longer be available on any Merchant, Payment Gateway, or 3rd party that helps in the processing of digital transactions today.
- With card tokenisation, consumers no longer need to fear saving their card details. Cardholders will have to give an explicit consent that will be collected for tokenisation.

The need for tokenization

- > Digital is currently one of the most convenient and favoured platforms for availing services and making purchases. Because of our increased frequency of making online transactions, most of us have been saving our payment information on merchant sites, which means that our payment partners have access to sensitive financial information that should otherwise be highly personal.
- As a textbook definition, tokenization implies the substitution of existing card details with a unique code known as a token. The implementation of the tokenisation request is then carried out through the Additional Factor of Authentication (AFA) by the cardholder. This algorithmically generated token protects sensitive information and prevents card frauds as it allows you to make payments without exposing your bank details.

Benefits of tokenization

Largely designed to counter online frauds and curb digital payment breaches, tokenization comes with a slew of benefits. Some of them are:

- Enhanced safety and security: Tokens generated on vour Mastercard will be unique to a single card at a specific merchant and this will take up the overall security of making cardbased transactions. eliminates the risk of storing card details online ensures the uncompromised convenience of storing your token details on the merchant site.
- o **Quicker checkouts**: Your tokenized Mastercard will

Linking credit cards to UPI

- * RBI has proposed to allow the linking of credit cards (starting with Rupay credit cards) on the UPI platform.
- This could be a boost for credit penetration into digital payments which has been declining owing to the popularity of UPI and could potentially pave the way for improved monetization of mobile/UPI payments for payment cos.
- ❖ While merchant adoption will need to be watched, this move (when extended beyond Rupay) can sharply improve the acceptance network for credit cards (both virtual and physical) given UPI-QR code penetration (50%) vs PoS device penetration (<5%).



also allow you the convenience of quick checkouts as you won't need to punch in your card number for each purchase. Save you card once and you'll have the ease of transaction at all times.

- No more 'False Declines': Many times legitimate online payments using your valid cards are declined on the grounds of the transaction looking like a fraud. With tokenization, this becomes a thing of the past as the usage of tokens for payments confirms security of the highest order.
- **Easy card management**: With tokenization, you can also keep track of all your cards and the merchants they have been tokenized with.
- o **No need for a physical card**: With tokenization, you can store a virtual version of your card on your smartphone for the days you forget to carry your wallet.
- o **Added benefits**: Tokenization on your Mastercard also comes with cashback benefits when you secure it on platforms like Amazon, PayTM, Swiggy, Flipkart and PhonePe among others.

Problem with tokenisation

- ✓ The online card transactions are already secure enough since customers need to authenticate transactions through CVV, OTP and other means, therefore imposing new security layer may increase the compliance cost.
- ✓ Online merchants have also been complaining about the time given by the RBI to comply with its orders, which they believe is too little. This, they argue, will affect their business as customers whose card details are purged may refuse to go through the hassle of having to enter their card details each time they make a purchase.
- ✓ Customers may also decide not to tokenise their cards and simply opt to switch to cash or other forms of online payment that involve less hassle. The RBI may thus inadvertently push customers away from using cards as a mode of payment.

Analytica

It is hard to judge whether the RBI's tokenization policy is right unless we can find a way to weigh the costs and benefits of the policy against the costs and benefits of its alternatives. This, however, is only possible when there are multiple private regulatory bodies competing for business by offering different policies. Competition between regulatory regimes would then lead

PEPPER IT WITH

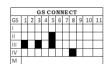
UPI, NPCI, RuPay, SWIFT, Fast-tag

to an equilibrium that properly balances the risks of card data storage (such as fraud) against the benefits (such as ease of making repeat payments).

Urban Cooperative Banks (UCBs)

News Excerpt

Minister for Home and Cooperation asked the Urban Cooperative Banks (UCBs) to undertake institutional reforms.



Pre-Connect

Cooperative banks:

- It is an institution established on a cooperative basis to deal with the ordinary banking business. Like other banks, cooperative banks are founded by collecting funds through shares, accepting deposits, and granting loans.
- They are Cooperative credit societies where members from a community group together to extend loans to each other, at favorable terms. In a UCB, borrowers can even double up as shareholders.



- Unlike commercial banks, UCBs are only partly regulated by the RBI. Their banking
 operations are regulated by the RBI, which lays down their capital adequacy, risk control
 and lending norms. However, their management and resolution in the case of distress is
 regulated by the Registrar of Co-operative Societies either under the State or Central
 government.
- They are broadly divided into urban and rural cooperative banks.

Urban Cooperative Banks in India

- ➤ The term Urban Co-operative Banks (UCBs), though not formally defined, refers to primary cooperative banks located in urban and semi-urban areas. These banks, till 1996, were allowed to lend money only for non-agricultural purposes.
- > This distinction does not hold today. These banks were traditionally centred around communities, localities work place groups. They essentially lent to small borrowers and businesses. Today, their scope of operations has widened considerably.
- > The origins of the urban cooperative banking movement in India can be traced to the close of nineteenth century when, inspired by the success of the experiments related to the cooperative movement in Britain and the cooperative credit movement in Germany such societies were set up in India.
- They are registered and governed by the respective states' cooperative societies acts, as well as the Banking Regulation Act of 1949, and thus are subject to dual regulatory control.
- They have certain rights and obligations because they are covered by the RBI Act, 1934 (2nd Schedule) rights to obtain refinance and loans from the RBI and obligations such as maintaining cash reserves, submitting returns to the RBI, and so on.
- Primary UCBs with deposits of more than Rs. 50 crore are also permitted to operate in more than one state, subject to certain conditions.

Problems with UCBs

- ✓ According to Trends and Progress of Banking in India report published by the Reserve Bank of India (RBI), urban commercial banks have witnessed a decline in deposits from 6.1 per cent in 2018, 10 to 2.5 per cent in 2010, 20
 - cent in 2018-19 to 3.5 per cent in 2019-20. In terms of loans and advances too, there has been a sharp decline from 8 per cent in 2018-19 to 0.8 per cent in 2019-20.
- ✓ UCBs account only 3.25 per cent of the total bank deposits and 2.69 per cent of the total advances in the country.
- ✓ According to RBI, despite a crucial role played by the sector, its share in total agricultural lending diminished considerably over the years, from as high as 64 per cent in 1992-93 to just 11.3 per cent in 2019-20.
- ❖ The Shivalik Mercantile Co-operative Bank Limited is the first Urban Cooperative Bank (UCB) to be granted 'inprinciple' permission by the Reserve Bank of India to convert into a Small Finance Bank (SFB).
- The move comes after the RBI announced in September 2018 a scheme for voluntary conversion of UCBs to SFBs.
- ✓ For years, such banks have escaped scrutiny despite failures and frauds due to dual regulation by state registrar of societies and the Reserve Bank of India (RBI).
- ✓ The RBI's regulatory and supervisory powers were limited in many ways which impacted its ability to take prompt actions in case of irregularities.
- ✓ The cooperative banks have been brought under the supervision of RBI after Parliament approved amendments to the Banking Regulation Act. Consequently, 1,482 urban cooperative and 58 multi-state cooperative banks were brought under the direct supervision of the RBI.



- ✓ In recent years, Urban Cooperative banks (UCBs) have witnessed a sharper decline in terms of both loans and deposits. Since 2017-18, the deposit deceleration in UCBs was starker than in SCBs, pointing to the difficulties faced by UCBs in raising resources.
- ✓ The UCBs have always had higher level of non-performing assets (NPAs) than the SCBs. However, in 2019-20 the asset quality of both SUCBs and NSUCBs started to deteriorate with the later recording a significant rise in GNPA ratio. This rise in NPAs can be attributed to stagnant growth in loans and advances and a weak balance sheet.

Analytica

Cooperative societies are based on the principles of cooperation, - mutual help, democratic decision making and open membership. Cooperatives represented a new and alternative approach to organisaton as against proprietary firms, partnership firms and joint stock companies which represent the dominant form of commercial organisation.

PEPPER IT WITH

Rural Cooperative banks, NBFC, Small finance bank, India Post Payments Bank, Primary Agricultural Credit Society, PMC bank fraud

- The strength of UCBs is their personal touch and the loyalty of customers, which helps bankers to understand their requirements. Currently, UCBs are managing with whatever infrastructure they have.
- The way forward is to create a better technology infrastructure for UCBs.

Way Forward

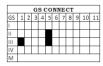
- RBI governor Shaktikanta Das announced the setting up of the expert committee to provide a medium-term road map to strengthen the sector, enable faster rehabilitation/resolution of UCBs, as well as to examine other critical aspects related to these entities.
- The panel recommended setting up umbrella organisation with a minimum capital of Rs 300 crore, a four-tier regulatory structure for UCBs, and regulations along the lines of small finance banks and universal banks, depending on the level of capital.
- The panel observed that the present level of technology adoption in UCBs, particularly the medium and smaller UCBs, is low and does not reflect the fast-changing banking technology landscape.
- The committee highlighted that smaller UCBs found it difficult to attract talent, resulting in poorer quality of human resources in relation to their peers in the banking industry. It added that a majority of UCBs tended to recruit staff through a non-standardised process, resulting in lower skill levels.
- Boards of UCBs do not fundamentally understand the importance of technology adoption and hiring skilled talent, which leads to poor governance standards and high levels of bad loans. The boards of such banks need to include domain experts and professionals.
- The expert committee highlighted how credit unions globally have focused on building retail franchises and small and medium finance businesses.
- Every cooperative bank must identify its core competency and focus primarily on building a strong retail business franchise. This can be done only by adopting the best underwriting practices, backed by emerging technologies, and servicing customers on a real-time basis.



RBI's Payments Vision 2025 document

News Excerpt

The Reserve Bank of India (RBI) came out with "Payments Vision 2025" with an objective to provide every user with safe, secure, fast, convenient, accessible and affordable e-payment options.



Pre-Connect

- The Reserve Bank of India's Payments Vision 2025 document will aid in driving digitisation at the last mile and it shows the regulator's intent and the road map to enhance the outreach for digital payments.
- It builds on the initiatives of Payments Vision 2019-21. The Payments Vision 2025 document is presented across the five anchor goalposts of Integrity, Inclusion, Innovation, Institutionalisation and Internationalisation.
- In a 30-page document titled Payments Vision 2025, the Reserve Bank of India said it is aiming to triple the total digital payment transactions by 2025. UPI is going to be the main driver of this growth.
- The central bank, which released the document, expects the Unified Payments Interface (UPI) to register growth of 50% and more than 3x increase in the number of digital payment transactions by 2025.
- Over 26 crore digital payment transactions are processed daily by payment systems, of which UPI system itself processes more than two-

Payments Vision 2025

- Core Theme E-Payments for Everyone, Everywhere, Everytime (4 Es)
- Vision Provide every user with Safe, Secure, Fast, Convenient, Accessible, and Affordable epayment options (6 Attributes)

thirds. Also, there has been an increase in unique users of mobile banking and internet banking by 99% and 18%, respectively, between March 2019 and September 2021.

Goalposts of Payments Vision 2025

- ➤ The RBI has proposed goalposts based on five themes: integrity, inclusion, innovation, institutionalisation, and internationalisation.
- There are 10 initiatives that the RBI wants to bring in the coming years. They are as follows:
 - o Restrict the volume of cheque-based payments at less than 0.25% of the total retail payments
 - o Increase digital payment transactions by more than 3x (times)
 - UPI to register average annualised growth of 50% and IMPS / NEFT at 20%
 - o Increase of payment transaction turnover vis-a-vis GDP to 8
 - o Increase in debit card transactions at Point-of-Sale by 20%
 - o Debit card usage to surpass credit cards in terms of value
 - o Increase in PPI transactions by 150%
 - o Card acceptance infrastructure to increase to 250 lakh
 - o Increase of registered customer base for mobile based transactions by 50% CAGR
 - o Reduction in Cash in Circulation (CIC) as a percentage of GDP
 - o The document also includes:
 - o Regulations for BigTechs and fintechs in payments
 - o Guidelines on payments along with "Buy Now Pay Later" (BNPL) services
 - o Introducing central bank digital currency (CBDC)



 Linking credit cards as well as credit components of banking products with the Unified Payments Interface (UPI).

Significance

- ✓ The RBI's Payments Vision 2025 will be significant in shaping India's payment ecosystem, propelling a safer, more secured, and seamless payment infrastructure. It is progressive and has an outlook to establish India as a powerhouse of payments globally.
- ✓ The document will aid in driving digitisation at the last mile and it shows the regulator's intent and the road map to enhance the outreach for digital payments.

Analytica

- 'Payments Vision 2025' has been prepared after considering the inputs from various stakeholders and guidance from the Board for Regulation and Supervision of Payment and Settlement Systems of the RBI.
- The fact that the RBI has come up with a three year plan on how to holistically grow digital payments, speaks volumes about its bullishness on India's digital payments landscape.
- This is the right time for businesses to ride on this bandwagon of digital payments. Every business, whether online or offline, should start accepting digital payments, if they are not already.
- While UPI has been at the forefront of the digital payment ecosystem driving online payments through an easy interface, cash usage continues to dominate the economy. Leveraging on their appeal as a non-cash alternative, RBI's stance to develop a conducive framework for the long-term growth of PPIs will aid in driving digitisation

PEPPER IT WITH

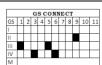
Payments Vision 2019-21, Buy Now, Pay Later (BNPL), central bank digital currency, CTS, RTGS, NEFT

growth of PPIs will aid in driving digitisation at the last mile.

12th Ministerial Conference of the World Trade Organization

News Excerpt

Recently, 12th WTO Ministerial Conference 2022 concluded in Geneva where a number of deals relating to many issues including waiver of COVID 19 vaccines, food security, was signed.



Pre-Connect

- The World Trade Organization is the only international organization that deals with the rules of trade between countries. Founded in 1995, the WTO is run by its 164 members, and according to its rules, all decisions are taken through consensus and any member can exercise a veto.
- The Ministerial Conference (MC) is the WTO's top decision-making body and usually meets every two years. All members of the WTO are involved in the MC and they can take decisions on all matters covered under any multilateral trade agreements.

Key takeaways from the meeting

- > Curtailing harmful fishing subsidies The WTO passed a multilateral agreement that would curb 'harmful' subsidies on illegal, unreported and unregulated fishing for the next four years, to better protect global fish stocks. Since 2001, member states have been negotiating the banning of subsidies that promote overfishing.
- ➤ WTO members have for the first time, concluded an agreement with environmental sustainability at its heart.



- India and other developing countries were able to win some concessions in this agreement. They successfully lobbied to remove a section of the proposal that would threaten some subsidies which would assist small-scale artisanal fishing.
- ➤ **Global Food Security** Members agreed to a binding decision to exempt food purchased by the UN's World Food Programme (WFP) for humanitarian purposes, from any export restrictions.
- ➤ In light of the global food shortages and rising prices caused by the war between Ukraine and Russia, the group's members issued a declaration on the importance of trade in global food security and that they would avoid bans on food exports. However, countries would be allowed to restrict food supplies to ensure domestic food security needs.
- India's key demand to allow it to export food from its public stockholdings to other countries will reportedly be discussed in the next Ministerial Conference in 2023.
- E-commerce transactions WTO members had first agreed to not impose custom duties on electronic transmissions in 1998.
 - when the internet was still relatively new. The moratorium has been periodically extended since then.
- All members agreed to continue the long standing moratorium on custom duties on e-commerce transmissions until the subsequent Ministerial Conference or until March 31, 2024, depending on whichever comes first.
- ➤ Covid-19 vaccine production WTO members agreed to temporarily waive intellectual property patents on Covid-19 vaccines without the consent of the patent holder for 5 years, so that they can more easily manufacture them domestically.
- The current agreement is a watered down version of the original proposal made by India and South Africa in 2020. They had wanted broader intellectual property waivers on vaccines, treatments and tests.

United Arab Emirates suspend re-export of wheat and flour from grain originating in India

- The United Arab Emirates' decision, to "suspend" re-export of wheat and flour from grain originating in India is basically an assurance that whatever it imports will be used only for domestic consumption.
- ❖ India doesn't want its wheat exported to Dubai or Abu Dhabi to go out to other countries, whether as grain or flour. It would want that wheat to be consumed locally, including the migrant Indian workers in UAE.
- This will, in turn, allow India to provide an exception to its wheat export ban and ship out some quantities to the Gulf federation. India announced that it was banning wheat exports in a bid to check high prices amid concerns of wheat output being hit by the scorching heat wave.

PEPPER IT WITH

WTO reforms, WTO dispute settlement mechanism, Doha agenda, Anti dumping duty, GATT

Conclusion

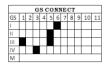
India has been able to secure a favourable outcome at the WTO after many years, despite a strong global campaign against Indian farmers and fishermen.



Periodic Labour Force Survey

News Excerpt

The annual report of the Periodic Labour Force Survey for July 2020 to June 2021 showed that the unemployment rate, as per usual status (reference period of last 365 days preceding the survey), eased to 4.2 per cent from 4.8 per cent in 2019-20.



Pre-Connect

India's ministry of statistics and programme implementation released the annual report of the Periodic Labour Force Survey (PLFS) for the reference period July 2020 to June 2021. The PLFS is an annual survey conducted by the NSO.

The objective of PLFS are-

- To estimate the key employment and unemployment indicators (viz. Worker Population Ratio, Labour Force Participation Rate, Unemployment Rate) in the short time interval of three months for the urban areas only in the CWS.
- To estimate employment and unemployment indicators in both usual Status and CWS in both rural and urban areas annually.
- This is the fourth report in the PLFS data series and offers information on both employment and unemployment for rural as well as urban areas.

Key Findings of the report

- **Unemployment rate** The annual report of the Periodic Labour Force Survey for July 2020 to June 2021 showed that the unemployment rate, as per usual status (reference period of last 365 days preceding the survey), eased to 4.2 per cent from 4.8 per cent in 2019-20.
- The rural areas recorded an unemployment rate of 3.3% and urban areas recorded an unemployment rate of 6.7%.
- **Labour Force Participation Rate (LFPR)** The percentage of persons in the labour force that is working or seeking work or available for work in the population was 41.6% during 2020-21. It was 40.1% in the previous year.
- Worker Population Ratio (WPR) increased from 38.2% of the previous year to 39.8%.
- **Migration due to employment** only 4.4% of migration happened due to employment, which is a drastic reduction from the 10% in 2011.
- **Rise of agricultural share, unpaid work** While the overall employment situation showed improvement, the rise was seen in low-quality, unpaid work.
- Employment in the unpaid self-employed category continued to show an increase in 2020-21 by rising to 17.3 per cent from 15.9 per cent in 2019-20 and 13.3 per cent in 2018-19. Rural unpaid employment also showed increase to 21.3 per cent in 2020-21 from 20.0 per cent in the previous year, while that for urban areas increased to 6.3 per cent from 5.7 per cent.

Analytica

- > These estimates suggest a sharp recovery in employment creation in our economy, with an accompanying decline in unemployment. But any such interpretation could be misleading, given the complexity of interpreting employment estimates.
- More so in periods of severe distress, such as the current phase of the economy. Not only did our economy suffer a sharp slowdown after 2016-17, with growth slumping from 8.3% that fiscal year to 3.7% in 2019-20, the two years after 2019-20 have been years of disruption in economic activity due to the pandemic, with our economy yet to fully recover from it. So much so that per capita income of Indians was lower in 2021-22 than in 2018-



- 19. Data on rural wages from India's labour bureau also shows a decline in real wages of casual workers during the same period.
- In an economy with a significant share of poor and vulnerable people, unemployment is a
 - luxury that very few can afford. The natural choice for them is to get into the labour force at whatever cost. This is more of a survival strategy than a natural increase in gainful employment. But a large proportion of such employment is likely to be in the informal sector, with precarious work conditions. Recent data confirms this trend, with the proportion of India's working population

PEPPER IT WITH

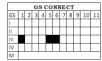
Current Weekly Status (CWS) Approach, Worker Population Ratio, WPI, CPI, Poverty line, disguised unemployment, frictional unemployment

- employed in the informal non-farm sector having increased steadily from 68.2% in 2017-18 to 71.4% in 2020-21.
- Reversing these trends would require an enabling policy framework to enhance employment quality as well as an economic revival that creates gainful and decent jobs for new entrants to the country's workforce and for those who are engaged in the informal sector.

Neobanks

News Excerpt

Neobanks bridge the gap between the services that traditional banks offer and the evolving expectations of customers in the digital age. They are changing the face of fintech and could one day eclipse traditional banks.



Pre-Connect

- Neobanks are financial institutions that give customers a cheaper alternative to traditional banks. You could think of them as digital banks without any physical branches, offering services that traditional banks don't, and doing so efficiently. They leverage technology and artificial intelligence to offer personalised services to customers while minimising operating costs.
- In India, these firms don't have a bank licence of their own but rely on bank partners to offer licensed services. That's because the Reserve Bank of India (RBI) doesn't allow banks to be 100% digital yet. The RBI remains unwavering in prioritising banks' physical presence, and has spoken about the need for digital banking service providers to have some physical presence as well.
- Neobanks provide products that come under the regulatory framework of the three financial regulators — the Reserve Bank of India, the Securities & Exchange Board of India, and the Insurance and Regulatory Development Authority of India. While there is no specific restriction on operations of neobanks, they are not directly subjected to compliances under RBI's licensing regime.
- NITI Aayog's 2021 proposal to set up full-stack digital banks lays down the roadmap for a
 licensing and regulatory mechanism for neobanks, so direly needed. Initially, the RBI too
 conceptualised in its Report by Working Group on Digital Lending to enlist such neobanks
 in a regulatory sandbox.

Neobanks vs traditional banks

> Traditional banks have many advantages over neobanks, such as funding and -- most importantly -- customers' trust. However, legacy systems are weighing them down and they find it difficult to adapt to the growing needs of a tech-savvy generation.



- While neobanks don't have the funds or customer base to overthrow traditional banks, thev have something special in their arsenal -innovation. Thev launch can features and develop partnerships to serve their customers much more quickly than traditional banks.
- > Venture capital and private equity investors have been keeping a keen eye on the market opportunities for such banks and are taking an increasing interest in them. India's
- The poster boy of neobanks is 'Nubank' that initially offered credit cards in Brazil.
- It did not have a banking licence until 2017, much like the present Indian players.
- Once it acquired the licence, it became a fullstack digital bank offering a plethora of services. It is established that neobanks are a viable business model providing core banking services rather than collaborating with regulated entities.

research firm. As of 2020, India had a smartphone penetration rate of 54%, which is estimated to increase

neobank startups raised more than \$230 million in 2020, according to a report by a fintech

to 96% by 2040. Even though 80% of the population has access to at least one bank account, financial inclusion levels are yet to improve, according to a September 2021 PwC report.

Challenges for neobanks

- The size of the global neobanking market is expected to hit \$333.4 billion by 2026, at a compound annual growth rate (CAGR) of 47.1%. But like all financial institutions, neobanks have their pros and cons. The key to their success lies in fulfilling the needs of a segment of the market, and adopting the right technology, business strategy and work culture.
- But none of these are as crucial as building trust. Neobanks are at a disadvantage here when compared to traditional banks. Hence, models such as freemium subscriptions and memberships are common in neobanking in India, as they allow customers to experience the service before paying for it.

Pros of Neobanks

- Low costs: Fewer regulations and the absence of credit risk allows neobanks to keep their costs low. Products are typically inexpensive, with no monthly maintenance fees.
- Convenience: These banks offer customers the majority (if not all) of banking services through an app.
- Speed: Neobanks allow customers to set up accounts quickly and process requests speedily. Those that offer loans may skip the usual time-consuming application processes in favour of innovative strategies for evaluating your credit.

Cons of neobanks

- Regulatory hurdles: Since the RBI doesn't yet recognise neobanks as such, officially customers may not have any legal recourse or a defined process in case of an issue.
- ♣ Impersonal: Since neobanks don't have a physical branch, customers don't have access to in-person assistance.
- Limited services: Neobanks generally offer fewer services than traditional banks.

Analytica

The increasing traction of neobanks and their interaction with financial entities warrant that the extant regime be revisited. The Indian framework needs to fulfil the needs of regulated entities to perform services like settlements and fund management while fintech and neobanking

PEPPER IT WITH

2022 DBU guidelines, Differential bank, Bad band, Fintech



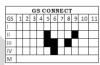
partners handle the technological interface and user experience.

- > The UK had a head start in neobanking owing to the early introduction of uniform banking guidelines across Europe. The US offers separate fintech licences. It is regulatorily permissible in Canada. Many Asian economies like Singapore, China, Malaysia, Hong Kong, etc., have also adopted digital banking licensing regimes and internet-only bank guidelines.
- > The present situation of legal ambiguity and room for speculation decrease the confidence of retail consumers who account for a major chunk of the Indian market. It also deprives the country of tapping into vast opportunities tech-backed neobanks may have to offer. The 2022 DBU guidelines seem to have furthered the uncertainty, leaving neobanking and fintech as a grey area. It is imperative that the law acts as an enabler and not a disruptor.

The Indian patent regime and its clash with the U.S. norms

News Excerpt

The U.S. Trade Representative (USTR) said in a report released last month that India was one of the most challenging major economies as far as IP protection and enforcement is concerned. It has decided to retain India on its Priority Watch List along with six other countries- Argentina, Chile, China, Indonesia, Russia and Venezuela.



Pre-Connect

- A patent is an exclusive set of rights granted for an invention, which may be a product or process that provides a new way of doing something or offers a new technical solution to a problem.
- Indian patents are governed by the Indian Patent Act of 1970. Under the act, patents are granted if the invention fulfils the following criteria:
 - o It should be novel
 - o It should have inventive step/s or it must be non-obvious
 - o It should be capable of Industrial application
 - o It should not attract the provisions of sections 3 and 4 of the Patents Act 1970
- India has gradually aligned itself with international regimes pertaining to intellectual property rights. It became a party to the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement following its membership to the World Trade Organization on January 1, 1995. Following this, it amended its internal patent laws to comply with TRIPS, most notably in 2005, when it introduced pharmaceutical product patents into the legislation.
- India is also a signatory to several IPR related conventions, including the Berne Convention, which governs copyright, the Budapest Treaty, the Paris Convention for the Protection of Industrial Property, and the Patent Cooperation Treaty (PCT), all of which govern various patent-related matters.
- An interesting point is that the original Indian Patents Act did not grant patent protection
 to pharmaceutical products to ensure that medicines were available to the masses at a low
 price. Patent protection of pharmaceuticals were re-introduced after the 2005 amendment
 to comply with TRIPS.

The challenges raised by USTR

- ➤ Recently, U.S. released its yearly Special 301 report, its annual review highlighting the state of intellectual property rights protection in different countries which are U.S. trading partners around the world.
- In its India section, the report highlighted a range of issues in domains ranging from copyright and piracy to trademark counterfeiting and trade secrets, saying that India



"remained one of the world's most challenging major economies with respect to protection and enforcement of IP."

The Indian stance on narrow patentability

- ✓ The USTR had also released a similar report in 2021, addressing much of the same concerns.
- These, and general issues regarding IPR were extensively tackled by the Parliamentary Standing Committee which undertook a 'Review of the Intellectual Property Rights Regime in India,'.
- One of the main points of contention between India and the U.S. has been Article 3(d) of the Indian Patent Act. This point is also brought up as an area of concern in both USTR reports mentioned here.
- Section 3 deals with what does not qualify as an invention under the Act, and Section 3(d) in particular excludes "the mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance or the mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant" from being eligible for protection under patent law. Section 3(d) prevents what is known as "evergreening" of patents.
- This was addressed by the Parliamentary Standing Committee as well, which pointed out that the section "acts as a safeguard against frivolous inventions in accordance with the flexibility provided in the TRIPS agreement".
- According to the Committee's report, Section 3(d) allows for "generic competition by patenting only novel and genuine inventions."
- The Committee also referred to the seminal judgement in the case Novartis vs. Union of India, which upheld the validity of section 3(d). In this case, pharmaceutical company Novartis filed a patent for the final form of cancer drug Gleevec, which was challenged in the Supreme Court.

TRIPS, the Doha Declaration and public health exemptions

- The Doha Declaration on the TRIPS Agreement and Public Health was adopted on November 14, 2021, by the WTO member This declaration states. recognises the "gravity of public health problems affecting developing and least developed nations" and stresses the need for TRIPS to be part of the wider national and international action to address these problems.
- TRIPS agreement points out that the agreement "can and should all."
- be interpreted and implemented in a manner supportive of WTO members' right to protect public health and, in particular, to promote access to medicines for
- **CIPAM**: Cell for IPR Promotion and Management (CIPAM) has been created as a professional body under the aegis of DIPPT to take forward the implementation of the National IPR Policy 2016, with the slogan - "Creative India; Innovative India".
- ❖ CIPAM is working towards creating public awareness about IPRs in the country, promoting the filing of IPRs through facilitation, providing inventors with a platform to commercialize their IP assets and coordinating the implementation of the National IPR Policy in collaboration Government Ministries/Departments and other stakeholders.
- These flexibilities include the right to grant compulsory licenses and the grounds for such licenses, the right to determine what "constitutes a national emergency or other circumstances of extreme urgency,



- including public health crises" and the right to establish its own regime for the exhaustion of intellectual property rights.
- Compulsory licenses can be invoked by a state in public interest, allowing companies apart from the patent owner to produce a patented product without consent.
- The United Nations Secretary-General's High-Level Panel on Access to Medicines Report, 2016 also referred to the Novartis judgement which validated India's stand on Section 3(d). The report recommends that member countries of WTO make full use of the policy space available in the TRIPS agreement by adopting and applying rigorous definitions of invention and patentability that curtail 'evergreening' and ensure that patents are only awarded when genuine innovation has occurred.

Issues pertaining to courts

- The USTR report too highlighted issues relating to judicial delays. The 2015 Commercial Courts Act offered an opportunity to reduce these delays and increase expertise but only a limited number of courts have benefited under the Act, per the report. Jurisdictional challenges are reducing the courts' effectiveness, according to rights holders, and courts are also suffering due to inadequate resources and training.
- ♣ Moreover, the abolishing of the Intellectual Property Appellate Board (IPAB), resulting in the redirection of courts has "created uncertainty around adjudication of IP cases and copyright royalty rate setting," says the report.
- The Standing Committee too has expressed that the abolition of IPAB under Tribunals Reforms (Rationalisation and Conditions of Service) Ordinance, 2021 should be reconsidered in wake of its pivotal role in the adjudication of IPR appeals and cases.
- It recommends that rather than being abolished it should be empowered and strengthened with more structural autonomy, infrastructural, and administrative reforms, while also ensuring that the required officials and staff are appointed in a timely way.

Positive steps

in 2019.

- > The report highlighted some positive steps taken by India in the recent past, such as our accession to the World Intellectual Property Organization (WIPO) Performances and Phonograms Treaty and WIPO Copyright Treaty, collectively known as the WIPO Internet Treaties, in 2018 and the Nice Agreement
- > There have also been some positive developments in the court system, as per the report. After IPAB was abolished, the Delhi High Court created an IP division in July 2021. Further, the Cell for Intellectual

TRIPS, U.S. Priority Watch List for IPR, WIPO Internet Treaties, NICE agreement 2019, iprism

PEPPER IT WITH

- Property Rights Promotion and Management (CIPAM) has been promoting IP awareness across India.
- > In terms of collaborating with India, the United States Patent and Trademark Office (USPTO) and Department for the Promotion of Industry and Internal Trade (DPIIT) are in the process of sketching out a biennial work plan to further a Memorandum of Understanding (MOU) signed in December 2020 relating to IP technical cooperation mechanisms.

Analytica

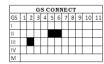
- o India must not compromise on the patentability criteria under Section 3(d) since as a sovereign country it has the flexibility to stipulate limitations on grants of patents in consistence with its prevailing socio-economic conditions.
- o India should resolve its differences with the U.S. regarding the disqualification of incremental inventions through bilateral dialogue.



Single Nodal Agency (SNA) Dashboard of PFMS

News Excerpt

Union Minister for Finance & Corporate Affairs launched the Single Nodal Agency (SNA) Dashboard of PFMS (Public Financial Management System). The Training Modules of the Department of Expenditure were also launched as part of the Mission Karmayogi.



Pre-Connect

- The SNA Dashboard is a major reform initiated in 2021 with regards to the manner in which funds for Centrally Sponsored Schemes (CSS) are released, disbursed and monitored. This revised procedure, now referred to as the SNA model, requires each State to identify and designate a SNA for every scheme. All funds for that State in a particular scheme are now credited in this bank account, and all expenses by all other Implementing Agencies involved are effected from this account.
- The SNA model, therefore, ensures that allocation of funds to States for the CSS are made in a timely manner and after meeting various stipulations. Effective implementation of this Model has brought about greater efficiency in CSS fund utilization, tracking of funds, pragmatic and just-in-time release of funds to the States; ultimately all contributing to better Cash Management of the Government.
- The Dashboard depicts releases made to different States by Ministries, further releases made by State Treasuries to the SNA accounts, expenditure reported by the agencies, interest paid by banks to SNA accounts etc. in intelligible, informative and visually appealing graphics.

ABOUT MISSION KARMAYOGI

- Mission Karmayogi was launched in 2020 by Union Cabinet. Mission Karmayogi National Programme for Civil Services Capacity Building (NPCSCB) is meant to reform Indian bureaucracy and prepare civil servants for the future. The programme aims "comprehensive reform of the capacity building apparatus at individual, institutional and process levels for efficient public service delivery".
- > The mission aims to prepare civil service officers for the future by making them more "creative, constructive, imaginative, innovative, proactive, professional, progressive, energetic, enabling, transparent and technology-enabled.'
- ➤ What is the need for Mission Karmayogi?
- It is often said that Indian bureaucrats are a major reason why India is not progressing at the speed it could have. It is also said that the recruitment and post-recruitment ecosystem of civil servants is outdated and for a like India, it needs a major upgrade. To address these concerns, the government brought these programme.

PFMS

- ✓ The Public Financial Management System (PFMS) is a web-based online software application developed and implemented by the Controller General of Accounts (CGA), Department of Expenditure, Ministry of Finance, Government of India.
- ✓ PFMS started during 2009 with the objective of tracking funds released under all Plan schemes of Government of India, and real time reporting of expenditure at all levels of Programme implementation. Subsequently, the scope was enlarged to cover direct payment to beneficiaries under all Schemes. Gradually, it has been envisaged that digitization of accounts shall be achieved through PFMS.
- ✓ The primary objective of PFMS is to facilitate a sound Public Financial Management System for the Government of India by establishing an efficient fund flow system as well as a payment cum accounting network.



✓ At present, the ambit of PFMS coverage includes Central Sector and Centrally Sponsored Schemes as well as other expenditures including the Finance Commission Grants. PFMS is integrated with the core banking system in the country.

Analytica

- Implementation of SNA has been a milestone in public finance by effectively leveraging technology in the last 75 years. It brings in transparency in federal system of accounting and it deserves recognition.
- Complete visibility of money reaching the end beneficiary is the primary achievement of SNA. It cab reduce the float of funds and

PEPPER IT WITH

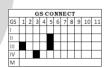
Centrally Sponsored Schemes, Azadi ka Amrit Mahotsav, Controller General of Accounts, Core banking system

of SNA. It cab reduce the float of funds and thus, interest costs are saved, and these steps are helpful in containing the fiscal deficit in challenging times like now.

Income of registered informal workers

News Excerpt

According to the latest data over 94 percent of 27.69 crores, informal sector workers registered on the e-Shram portal have a monthly income of Rs 10,000. or below and over 74 percent of the enrolled workforce belongs to SC, ST, and other backward classes (OBC).



Pre Connect

- **eSHRAM portal** Ministry of Labour & Employment has developed eSHRAM portal for creating a National Database of Unorganized Workers (NDUW), which will be seeded with Aadhaar. The workers are issued with an e-Shram card containing a 12-digit unique number.
- It will have details of name, occupation, address, occupation type, educational qualification, skill types and family details etc. for optimum realization of their employability and extend the benefits of the social security schemes to them. It is the first-ever national database of unorganised workers including migrant workers, construction workers, gig and platform workers, etc.
- The aim of the portal is to boost the last-mile delivery of the welfare schemes for over 38 crore unorganised workers in the country.

Scenario of Informal Sector Workers in India

- ➤ **Social Category Analysis**: Over 94 percent of 27.69 crores, informal sector workers registered on the e-Shram portal have a monthly income of Rs 10,000 or below and over 74 percent of the enrolled workforce belongs to scheduled castes(SC), scheduled tribes (SC) and other backward classes (OBC).
- ➤ The data showed that 94.11 percent of the registered informal workers have a monthly income of Rs 10,000 or below, while 4.36 percent have a monthly income between Rs 10,001 and Rs 15,000.
- ➤ **Age-wise analysis** 72% of the register workers on the portal are age from 18 years to 40 years, while 22.12% are age from 40 years to 50 years.
- ➤ The proportion of the register workers age above 50 years is 13.23%, while 2.93% of workers are aged between 16 and 18 years.
- > **Gender analysis** 52.81 percent of register workers are female and 47.19 percent are male.
- ➤ **Occupation-wise** agriculture is at the top with 52.11 percent of enrolments done by those related to the farm sector were following by domestic and household workers at 9.93 percent and constructions workers at 9.13 percent.



- > Top-5 states in terms of registrations Uttar Pradesh, Bihar, West Bengal, Madhya Pradesh, and Odisha.
- > The lack of frequent and up-to-date economic indicators makes it hard to track India's large informal sector, which employs around 80 per cent of the labour force and produces about 50 per cent of GDP.
- Informal sector workers suffered far more from the national lockdown in 2020 than their formal sector counterparts. With an inadequate safety net, there were painful accounts of displaced informal workers trying to get back to their rural homes.
- ➤ Of the 384 million employed in the informal sector, half work in agriculture, living mostly in rural India, and the other half are in non-agricultural sectors. Of those, about half live in rural India and the remaining in urban areas.

Issues surrounding India's informal sector

- ✓ The informal segment of the economy is responsible for maintaining India's unequal status quo; in fact it is accountable for exacerbating the pervasive divide in the standards of living amongst the population. Figures published by Credit Suisse in 2018 state that the richest 10% Indians own around 80% of the country's wealth while the less-privileged 60% own less than 5%.
- ✓ Since unorganised firms operate outside of the jurisdiction of corporate law, workers in their employ are assured of neither job-security nor social protection. Owing to the nation's mammoth population, an oversupply of menial labour is paving the way for easy exploitation on the part of unconscionable entrepreneurs.
- ✓ The expendable nature of the unorganised labour force causes wages to remain at minimal levels, sometimes lower than the legal minimum. Also, the prices of products and services produced by these workers usually do not rise in sync with the rate of inflation, further adding to their despair.
- ✓ No Social Security Net: There are no social security measures to provide risks coverage and ensure maintenance of basic living standards at times of crises such as unemployment or health issues.

 PEPPER IT WITH

Way forward

Formalisation can be a double-edged sword. While traditionally associated with efficiency gains, if it comes at the cost of putting small informal firms out of business and the disruption in the information.

PM SVANidhi: Micro Credit Scheme for Street Vendors, PM Garib Kalyan Ann Yojana (PMGKAY), Pradhan Mantri Kisan Samman Nidhi, MUDRA

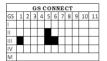
business, and the disruption in the informal sector, it can weigh on demand in subsequent periods.

- What is, perhaps, needed now is protection for informal sector workers via social welfare schemes so that the disruption they are facing does not lead to a permanent fall in demand. There is a case for remaining generous with programmes such as the rural MGNREGA scheme for longer.
- Bringing the informal sector to the forefront of policy decisions can lead to a significant payoff for the entire economy for years to come.

Open Network for Digital Commerce

News Excerpt

Commerce and industry minister talked about the massive role to be played by ONDC in democratise e-commerce.





Pre-connect

- Open Network for Digital Commerce (ONDC) is a network based on open protocol and will
 enable local commerce across segments, such as mobility, grocery, food order and delivery,
 hotel booking and travel, among others, to be discovered and engaged by any networkenabled application.
- The platform aims to create new opportunities, curb digital monopolies and by supporting micro, small and medium enterprises and small traders and help them get on online platforms. It is an initiative of the Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry.
- Presently, ONDC is in its pilot stage and the government has set up a nine-member advisory council, on measures needed to design and accelerate the adoption of ONDC.
- ONDC has been rolled out in 5 cities Delhi NCR, Bengaluru, Bhopal, Shillong, and Coimbatore.
- The operations are presently focused on retail and restaurants and facilitating real-time transactions. The open network will later-on extend to other categories like travel and mobility.
- Based on the pilot exercise and after the network stabilizes, ONDC will be expanded to 100 cities and towns across India by October 2022. The goal is to accommodate 30 million sellers and 10 million merchants online.

Features of ONDC

- > ONDC, a UPI of e-commerce, seeks to democratise digital or electronic commerce, moving it
 - from a platform-centric model to an open-network. Through ONDC, merchants will be able to save their data to build credit history and reach consumers.
- The proposed government-backed platform aims to create a level playing field for e-commerce behemoths such as Amazon, Flipkart, and offline traders who have been crying foul at the unfair trade practices of these e-tailers. The platform will also be compliant with the Information Technology Act, 2000 and designed for compliance with the emerging Personal Data Protection Bill.
- ➤ In this system, ONDC plans to enable sellers and buyers to be digitally visible and transact through an open network, regardless of what platform or application they use. It will also

Open-Source Software

- Open source software is software with source code that anyone can inspect, modify, and enhance.
- ❖ "Source code" is the part of software that most computer users don't ever see; it's the code computer programmers can manipulate to change how a piece of software—a "program" or "application"—works. Programmers who have access to a computer program's source code can improve that program by adding features to it or fixing parts that don't always work correctly.
- ❖ For example, while the operating system of Apple's iPhones (iOS) is closed source, Google's Android operating system is open-source, and therefore it is possible by smartphone manufacturers to modify it for their hardware.
- empower merchants and consumers by breaking silos to form a single network to drive innovation and scale, transforming all businesses from retail goods, food to mobility.
- > The new framework aims at promoting open networks developed on open-sourced methodology, using open specifications and open network protocols independent of any specific platform.



Significance

- ✓ The e-commerce market in India is expected to touch \$5.5 billion in market size by 2025, up from \$700 million now. ONDC has the potential to break barriers and empower customers. The present e-commerce platforms are restrictive and favour products of the platform developers' choice. Through ONDC, MSMEs and start-ups can harness opportunities provided by digital advancement, in connecting with their customers.
- ✓ Open Network for Digital Commerce (ONDC) will enable customers to engage with sellers of their choice seamlessly.
- ✓ It is expected to digitise the entire value chain, standardise operations, promote inclusion of suppliers, derive efficiencies in logistics and enhance value for consumers.

PEPPER IT WITH

E-Commerce, Consumer Protection (e-commerce) Rules 2020, Quality Council of India.

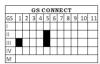
Analytica

- ONDC provides a technological platform to fulfil India's aspirations to become a middle-income economy that is digitally savvy and wired. It offers a vital global template for the harnessing of technology for and as a public good at population scale in an inclusive and equitable way.
- It aims to create a level playing field for e-commerce behemoths such as Amazon, Flipkart, and offline traders who have been crying foul at the unfair trade practices of these e-tailers.

Surety Bonds

News excerpt

In a bid to break the deadlock over the launch of Surety Bonds, the Ministry for Road Transport & Highways (MORTH) has asked insurance regulator IRDAI to develop a model product on Surety Bonds in consultation with general insurers.



Pre-Connect

- A surety bond can be defined in its simplest form as a written agreement to guarantee compliance, payment, or performance of an act. Surety is a unique type of insurance because it involves a three-party agreement. The three parties in a surety agreement are:
- Principal the party that purchases the bond and undertakes an obligation to perform an act as promised.
- Surety the insurance company or surety company that guarantees the obligation will be performed. If the principal fails to perform the act as promised, the surety is contractually liable for losses sustained.
- Obligee the party who requires, and often receives the benefit of— the surety bond. For most surety bonds, the obligee is a local, state or federal government organization.
- The Budget 2022-23, allowed the use of surety insurance bonds as a substitute for bank guarantees in case of government procurement and also for gold imports.
- Following this, Insurance Regulatory and Development Authority of India (IRDAI) released final guidelines to ensure orderly development of surety insurance business in India. The IRDAI (Surety Insurance Contracts) Guidelines, 2022 will came into effect from 1st April, 2022.

What is the benefit to a contractor, infra player?

By issuing the surety bond, the contractor does not have to furnish a hefty bank guarantee. The bank guarantee blocks a huge amount. Surety bonds create a level playing field, empower the small and medium contracts to bid for a project at par with a large contractor with financial muscle.



Benefits of surety bonds

- The big challenge for new players is that often they find it difficult to get bank guarantees and that's where the role of Surety Bonds comes in. The government has planned investment worth Rs 7 trillion for infrastructure projects to be spent over the next 2-3 years.
- > To reduce indirect cost for suppliers and workcontractors, the use of surety bonds as a substitute for bank guarantee will be made acceptable in government procurements.
- > The large liquidity and funding requirements of the infrastructure sector can be addressed with surety bonds. It will create a level-playing field for large, mid and small contractors.
- Customers may have concerns about working with an unfamiliar business, especially in an industry that may be targeted by

Types of surety bonds

- Advance Payment Bond: It is a promise by the Surety provider to pay the outstanding balance of the advance payment in case the contractor fails to complete the contract as per specifications or fails to adhere to the scope of the contract.
- ❖ Bid Bond: It provides financial protection to an obligee if a bidder is awarded a contract under the bid documents, but fails to sign the contract and provide any required performance and payment bonds.
- Contract Bond: It provides assurance to the public entity, developers, subcontractors and suppliers that the contractor will fulfil its contractual obligation when undertaking the project. Contract bonds may include: Bid Bonds, Performance Bonds, Advance Payment Bonds and Retention Money.
- Customs and Court Bond: This is a type of guarantee where the obligee is a public office such as tax office, customs administration or the court, and it guarantees the payment of a public receivable incurred from opening a court case, clearing goods from customs or losses due to incorrect customs procedures.
- ❖ Performance Bond: It provides assurance that the obligee will be protected if the principal or contractor fails to perform the bonded contract. If the obligee declares the principal or contractor as being in default and terminates the contract, it can call on the Surety to meet the Surety's obligations under the bond.

fraudsters. The bonding process boosts consumer confidence in your business because customers know you can be held accountable for your performance and they won't risk losing a large sum of money if you fail to provide the services or products promised.

Analytica

- ✓ Given the Surety Bond is an entirely new line of business, insurance companies would need clarity on various aspects such as pricing, the recourse available against defaulting contractors, reinsurance options and global best practice.
- ✓ There is no clarity on pricing, the recourse available against defaulting contractors, and reinsurance options.
- ✓ So, the regulatory bodies should facilitate changes to laws such as the Indian Contract Act and the IBC and bring surety bonds on par with bank guarantees regarding recourse available to issuers. This will help the industry approach surety solutions with

PEPPER IT WITH

IRDAI (Surety Insurance Contracts) Guidelines, 2022, I&B Code, REIT and InVIT

- much more confidence, but it will be even more a viable proposition for all stakeholders.
- ✓ A huge market is available for Surety Bonds in the country and now, the onus is on the insurance fraternity to come out with products quickly.

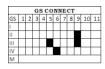


INTERNATIONAL RELATIONS

Industry Transition Dialogue

News Excerpt

India and Sweden hosted the Industry Transition Dialogue in Stockholm, as a part of their joint initiative i.e. Leadership for Industry Transition (Lead IT). This high level dialogue has contributed to the UN Conference 'Stockholm+50' and set the agenda for COP27 (Climate Change).



Paris agreement, World Economic

India-Nordic

Forum,

Baltic Sea

Pre-Connect

- Leadership Group for Industry Transition (LeadIT): The Leadership Group for Industry Transition (LeadIT) gathers countries and companies that are committed to action to achieve the Paris Agreement. It was launched by the governments of Sweden and India at the UN Climate Action Summit in September 2019 and is supported by the World Economic Forum. LeadIT members subscribe to the notion that energy-intensive industry can and must progress on low-carbon pathways, aiming to achieve net-zero carbon emissions by 2050.
- The Management Board is made up of representatives from Sweden, India, and the World Economic Forum. A Technical and Expert Committee, made up of LeadIT member representatives, advises the Board. The total membership of LeadIT is 37 including countries and companies together. Japan and South Africa, the latest members of the initiative. Secretariat: It is hosted by Stockholm Environment Institute (SEI), Sweden.

Function

- LeadIT provides an arena for public-private collaboration, and for sectoral and cross-sectoral learning, for example-when it comes to innovation opportunities and new technologies.

 PEPPER IT WITH
- ➤ LeadIT enables collaboration between political and industry decision makers by convening high level dialogues to catalyze leadership.
- LeadIT carries out analysis to improve the collective understanding of the opportunities and challenges in industry transitions. It looks at global examples of industry transitions, as well as at key policy and industry levers to facilitate and manage transitions.
- ➤ LeadIT also supports governments and industries to co-produce stakeholder-led pathways to low carbon industry transformation. It provides actionable measures on innovation and finance and gives a platform for sharing know-how.

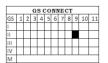
Analytica

During the event, India chaired the roundtable dialogues on Priorities for implementation 2022-23. The need for speed and scale in climate action was echoed by all the speakers. The countries and companies shared their initiatives, success stories and plans for future. Some very specific and valuable insights were shared by the participants. It was felt that the domestic actions if implemented and communicated well can be valuable inspiration at the international level. The efforts and exchanges through such platforms have the potential to lead the world in right direction.

I2U2 summit

News Excerpt

The new I2U2 grouping of India, Israel, the UAE and the US will hold its first virtual summit next month as part of the US administration's efforts to re-energise and revitalise American alliances across the world.



Summit,



Pre-Connect

- I2U2 is an entirely new grouping of partners that includes the United States, Israel, India, and the UAE. In the grouping's name, '12' stands for India and Israel, whereas 'U2' stands for USA and the UAE.
- The aim is to harness unique American capabilities to enable partners to work more closely together, which is essential to a more secure, prosperous and stable Middle East region over the long term. The summit will discuss food security, biotechnology, and several other issues.

Abraham Accord

On September 15, 2020, former U.S. President Donald Trump hosted Israeli Prime Minister Benjamin Netanyahu and foreign ministers of the United Arab Emirates and Bahrain for the signing of the historic Abraham Accords. According to the deal, the United Arab Emirates formally recognized the state of Israel, while the latter halted its plans to annex parts of the occupied West Bank of Palestine.

PEPPER IT WITH

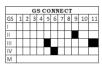
QUAD, AUKUS, Build Back Better Initiative, Iran nuclear deal

The Abraham Accords is the first Arab-Israeli peace deal in 26 years. Israel inaugurated its first diplomatic mission in Abu Dhabi and direct flights, business and tourism picked up between the two countries in 2021. However, not all Arab States have been on board with the geopolitical shifts the Accords have pushed through. Despite a lot of effort from Israel, under Benjamin Netanyahu, Saudi Arabia has maintained a distance from this arrangement.

India-Bangladesh relations

News Excerpt

Passenger train services between India and Bangladesh resumed after an over two-year gap owing to the pandemic with the flagging off of Bandhan Express from Kolkata station to Khulna.



Pre-Connect

Trains between India and Bangladesh

- o Bandhan Express from Kolkata station to Khulna
- Maitree Express between Kolkata and Dhaka
- Mitali Express between New Jalpaiguri and Dhaka

India Bangladesh Relation

- India-Bangladesh relations today are deeper than any other strategic partnership. It is a role model for relations between two neighboring countries. The spirit of friendship, understanding and mutual respect engendered during the liberation of Bangladesh continues to permeate different aspects of this relationship.
- India was the first country to recognize Bangladesh as a separate and independent state and established diplomatic relations with the country immediately after its independence in December 1971.
- **Defence ties:** India and Bangladesh share 4096.7 km. of border, which is the longest land boundary that India shares with any of its neighbours. Defence cooperation between India and Bangladesh has seen significant progress in the last few years. This push is illustrated in the exchange of visits between leaders of the two nations, as well as the conduct of training programmes, joint exercises, and humanitarian assistance and disaster relief (HADR).

eg- Exercise MILAN (Navy) and Exercise Sampriti (Army).



- **Economic Ties:** Bangladesh is India's biggest trade partner in South Asia and India is the second biggest trade partner of Bangladesh. Bilateral trade between India and Bangladesh has grown steadily over the last decade and the exports of Bangladesh have tripled over the last decade to cross \$1 bn in 2018-19. In the FY 2019-20, India's exports to Bangladesh were \$8.2 bn and imports were \$1.26 bn.
 - o In order to promote cooperation on bilateral trade, an India-Bangladesh CEO's Forum was launched in December 2020 to provide policy level inputs in various areas of trade and investment and also to facilitate exchanges among the business communities of both the countries. The first meeting of the India-Bangladesh Textile Industry Forum was held in February 2020 to enhance linkages and collaboration in the textile sector.
- Cooperation in the power sector has become one of the hallmarks of India-Bangladesh relations. Bangladesh is currently importing 1160 MW of power from India. The Joint Working Group (JWG)/Joint Steering Committee (JSC) on power provides an institutional framework to promote bilateral cooperation in cross border trade of electricity.
- **Cultural Cooperation:** The year 2021 was historic in India-Bangladesh relations as both countries commemorated the fiftieth anniversary of the Liberation War and the establishment of diplomatic relations between India and Bangladesh. The Indira Gandhi Cultural Centre (IGCC) in Dhaka plays an important role in celebration of common cultural links between the two countries. Its training programs including Yoga, Kathak, Manipuri dance, Hindi language, Hindustani classical music and the cultural programs of renowned artists of India and Bangladesh contribute in promotion of people to people contacts.
- Cooperation to tackle the challenge of COVID-19 pandemic: As part of bilateral assistance, the Government of India has extended three tranches of medical assistance including 30,000 surgical masks, 15,000 head covers, 50,000 surgical latex gloves, 100,000

Hydroxychloroquine medicine tablets and RT-PCR test kits capable of running 30,000 tests in March- April 2020 to Bangladesh to assist in its efforts to fight against the COVID pandemic.

PEPPER IT WITH

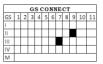
BIMSTEC, SAARC, Feni river, Teesta river, Bangladesh-Bhutan-India-Nepal (BBIN) initiative

- The Government of India has also been conducting various online training modules to train the health professionals of Bangladesh on treatment and care of COVID patients.
- In January 2021, the Government of India gifted 2 million Covishield (Oxford-AstraZeneca vaccines) to Bangladesh to assist in its efforts to fight against the pandemic. The Government of Bangladesh, BEXIMCO Pharmaceuticals Limited of Bangladesh and the Serum Institute of India (SII) have signed a trilateral MOU to procure 3 crore doses of COVID-19 vaccine from the SII.

Australia India Water Security Initiative (AIWASI)

News Excerpt

The Union Cabinet has approved a MoU (Memorandum of Understanding) between India and Australia on Technical Cooperation for Australia –India water Security initiative (AIWASI).



Pre-Connect

 Australia-India Water Security Initiative was developed under the framework of the Australia-India Comprehensive Strategic Partnership, to fulfil both countries' commitment to increase water security cooperation.



The initiative was launched at the 4th World Water Summit in New Delhi in 2020, with the Australian Government announcing its contribution of \$10 million to support cooperation between Australia and India on urban water security.

The initiative focuses on two specific outcomes:

WATER SECURITY: Bv 2025. disadvantaged communities will obtain benefits from improved water security in line with the WSC approach

COLLABORATIVE GOVERNANCE: Kev agencies and communities adopt collaborative water governance arrangements

It is designed with Water Sensitive City (WSC) Vision and Gender Disability and Social Inclusion (GEDSI) principles at its very core. It aims to work towards a resilient water sensitive city vision based on the holistic management of integrated water cycles. It also aims to improve access to safe water and sanitation services in cities/regions experiencing significant water-related challenges.

SAWASI

The South Asia Water Security Initiative (SAWASI) program focuses on improving access to safe water and sanitation in urban areas in the South Asia region. The Department of Foreign Affairs and Trade (DFAT), Australia, has supported SAWASI with a commitment of 20 million Australian Dollars. SAWASI aims at strengthening South Asian city-level water governance by (a) supporting governments to provide urban water services and (b) improving water security disadvantaged for communities in India and Pakistan.

Vision and Mission

- Prioritize SDG 6.1 Inform and guide to prioritize SDG 6.1 for disadvantaged, vulnerable communities and the larger city to achieve universal, equitable access to Water, Sanitation and Hygiene (WASH), leaving no one behind.
- Improve water security in disadvantaged communities

 - climate change-driven shocks. through WSUD Demonstration projects to create livable, healthy and resilient spaces against climate change and disaster risks.

ownership rights over water systems.

distances to water sources

Water Sensitive Cities (WSC) Vision

❖ The Water Sensitive City (WSC) approach is identified

to address social exclusion dimensions such as water

scarcity, unequal distribution and rationing, unequal

It also addresses poor water quality and the absence

of sewage collection and treatment systems, large

(disadvantaged) communities especially in the face of

- Implement participatory approach Design and implement WSUD solutions involving local communities via participatory and place-based approach for community resilience building, stewardship, equitable dissemination of benefits for all, operation and maintenance.
- **Empower Communities** Increase participation and empower vulnerable communities in city level decision-making on urban water management.
- > Transition to a water resilient city by understanding, adopting, advocating and championing of integrated and inclusive WASH and healthy space service delivery projects and participatory engagement of disadvantaged and vulnerable communities

Water Security in India

- Water is the most essential requirement of life. Guaranteed accessibility of consumable water is vital for human development.
- India is home to 18% of the worldwide human population and 15% of the worldwide animal population. However, it has just 2% of the landmass and 4% of worldwide freshwater assets.

PEPPER IT WITH

etc in urban

Jal Jeevan Mission, Water footprint, Virtual water, Jal Shakti ministry

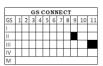


According to estimates; in 1951, per capita, yearly freshwater accessibility was 5,177 cubic meters which dropped down to 1,545 cubic meters in 2011. It is assessed that in 2019, it is around 1,368 cubic meters which are probably going to additionally go down to 1,293 cubic meters in 2025.

West Seti power project

News Excerpt

The Government of Nepal has decided to hand over the contract of the 750megawatt West Seti Hydropower Project and 308-megawatt SR6 Storage Hydroelectric Project to National Hydro Power Company Limited, India.



West Seti Dam

Karnali River

Kathmand

Seti River

NEPAL

Pre-Connect

- proposed 750-megawatt Hydropower Project, which is to be built on the Seti river in far-western Nepal, which has remained on the drawing board for the last six decades.
- The project will be a storage scheme generating power round the year. The power will be supplied to India, either for domestic consumption or for the trade through its national grid.

India-Nepal Energy Cooperation

completed in 2016.

- Nepal is rich in power sources with around 6,000 rivers and an estimated potential for 83,000 MW. India is viewed as a feasible power market for Nepal.
- India and Nepal have a Power Exchange Agreement since 1971 for meeting the power requirements in the border areas of the two countries, taking advantage of each other's transmission infrastructure.

Nainital

Bareilly

INDIA

- For enhanced transmission of electricity, the first high-capacity 400 kV Muzaffarpur (India) -**Dhalkebar (Nepal)** cross-border power transmission line, with GoI LoC funding of US\$ 13.2 million for Nepal portion of the line, was
- India is currently supplying a total of about 600 MW of power to Nepal.
- An Agreement on 'Electric Power Trade, Cross-border Transmission Interconnection and Grid Connectivity' between India and

Nepal was signed on 21 October 2014. The Agreement is aimed at facilitating and further strengthening cross-border electricity transmission, grid connectivity and power trade between Nepal and India.

The Agreement provides a framework for power trade between the two countries, import by Nepal from India until it becomes power surplus and subsequent import by Indian entities from Nepal, on mutually acceptable terms and conditions.

Two mechanisms, Joint Working Group (JWG) and Joint Steering Committee (JSC) envisaged under the Agreement have been Nepal's Constitution has a provision under which any treaty or agreement with another country on natural resources will require Parliament's ratification by at least a twothirds majority.

PEPPER IT WITH

900-MW Arun project, Mahakali treaty, India-Nepal border dispute, India-Nepal Treaty of Peace and Friendship of 1950



established. Joint Technical Team (JTT) was formed for preparation of a long-term integrated transmission plan covering projects up to 2035.

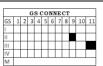
Way Forward

The only problem between the two countries has been India's inability to deliver projects on time. An ambitious Mahakali treaty was signed back in 1996, to produce 6,480 MW, but India has still not been able to come out with the Detailed project Report. Major reasons for stalling of these projects was a lack of consensus over power purchase agreement with India. India must start executing its projects timely, as promised during the Indian PM's visit to Nepal in 2014.

UNSC Report on Taliban

News Excerpt

A UN report has claimed that the relationship between the Taliban in Afghanistan and Al Qaeda remains close, with the latter "renewing its pledge of allegiance to Mawlawi Hibatullah Akhundzada", the supreme leader of the Taliban.



Pre-Connect

The American mission in Afghanistan came to a tragic and chaotic end. The U.S. military departed the country in August 2021, ending a 20-year occupation and leaving Afghanistan in the Taliban's hands. The collapse of the Afghan government, after the United States spent billions to support it and the Afghan security forces, was a crushing and violent coda to the U.S. military mission in America's longest war.

Why did the United States invade Afghanistan?

- Weeks after Al Qaeda attacked the United States on Sept. 11, President George W. Bush announced that American forces had launched attacks against the terrorist group and Taliban targets in Afghanistan.
- US launched Operation Enduring Freedom, a lengthy campaign unlike any other ever seen.
- American forces did not pursue them, and Pakistan ultimately evolved into a safe haven for Taliban who fighters, subsequent years crossed border to the attack American and Afghan forces. Inside Afghanistan, American troops quickly the Taliban toppled government and crushed its fighting forces.

Withdrawal

➤ In February 2020, the Trump administration signed an agreement with the Taliban that called for all American forces to leave Afghanistan by May 1, 2021, though Mr. Biden later extend that deadline. In return, the Taliban pledged to cut ties with

UNSC

- ❖ The Security Council was established by the UN Charter in 1945. It is one of the six principal organs of the United Nations. The council is headquartered at New York.
- ❖ The Security Council consists of ten elected members, and five permanent members--China, the United States, France, the United Kingdom, and the Russian Federation.
- ❖ India, for the eighth time, has entered the UNSC as a nonpermanent member last year (2021) and will stay on the council for two years i.e 2021-22.
- ❖ The Security Council has primary responsibility for the maintenance of international peace and security.
- ❖ It has 15 Members, and each Member has one vote. Under the Charter of the United Nations, all Member States are obligated to comply with Council decisions.
- The Security Council takes the lead in determining the existence of a threat to the peace or act of aggression. It calls upon the parties to a dispute to settle it by peaceful means and recommends methods of adjustment or terms of settlement.
- ❖ In some cases, the Security Council can resort to imposing sanctions or even authorize the use of force to maintain or restore international peace and security.



terrorist groups like Al Qaeda and the Islamic State affiliate in Afghanistan, reduce violence and negotiate with the American-backed Afghan government.

- > But the agreement included no mechanisms to enforce the Taliban commitments. And the exclusion of the Afghan government from the deal strained its relations with the United States.
- After the deal was signed, the Taliban stopped attacking American troops and refrained from major bombings in Afghan cities. The United States reduced air support for government forces.
- > The primary objectives of the 2020 deal were for Afghan leaders and the Taliban to negotiate a political road map for a new government and constitution, reduce violence and ultimately forge a lasting cease-fire.
- ➤ But the government accused the Taliban of assassinating Afghan government officials and security force members, civil society leaders, journalists and human rights workers including several women shot in broad daylight.

UNSC report

The report by the UN Security Council's Analytical Support and Sanctions Monitoring Team assessed the presence of the Al Qaeda and Islamic State (IS) terror groups in Afghanistan. Report suggest that Al Qaeda has a safe haven under the Taliban and increased freedom of action.

The report estimated that an approximate presence of "180 to 400 fighters affiliated with Al Qaeda" from "Bangladesh, India, Myanmar and Pakistan" are settled in Afghanistan's "Ghazni, Helmand,

Kandahar, Nimruz, Paktika and Zabul provinces" The report notes that the Taliban, despite not being recognized as the legitimate government, are nevertheless bound by existing treaties guaranteeing the civil, political, economic, social and cultural rights of all persons in Afghanistan.

PEPPER IT WITH

Salma dam, Doha peace process, Gwadar port, Shahtoot dam, US Afghan policy

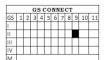
Analytica

- ✓ The US's exit from Afghanistan has triggered Taliban emergence, geopolitical flux and thus, instability in the region.
- ✓ An independent, sovereign, democratic, pluralistic and inclusive Afghanistan is crucial for peace and stability in the region.
- ✓ The Taliban will be the agents of their own destruction if they do not take care of the needs of all of the people.
- ✓ The enemy of the Taliban is famine, drought, and lack of security. Unhappiness is about to give way to anger, and if just one percent of the people start fighting, there will be no more Taliban.

BRICS 14th Summit

News Excerpt

BRICS countries, consisting of China, Russia, India, Brazil and South Africa, expressed their concern over the humanitarian situation in and around Ukraine.



Pre-Connect

- Prime Minister of India participated in the 14th BRICS Summit, convened under the Chairship of President Xi Jinping of China, in a virtual format. The theme of the 14th BRICS Summit: Foster High-quality BRICS Partnership, Usher in a New Era for Global Development.
- The leaders held discussions including in fields of Counter-Terrorism, Trade, Health, Traditional Medicine, Environment, Science, Technology & Innovation, Agriculture, Technical and Vocational Education & Training, and also key issues in the global context, including the reform of the multilateral system, COVID-19 pandemic, global economic recovery, amongst others.
- India called for strengthening of the BRICS Identity and proposed establishment of Online Database for BRICS documents, BRICS Railways Research Network, and strengthening



between cooperation MSMEs. India will be organizing **BRICS** Startup event this vear to strengthen connection between Startups in BRICS countries.

• India also noted that as BRICS members we should understand security concerns of each other and provide mutual support in designation of terrorists and this sensitive issue should not be politicized. At the conclusion of the Summit,

Xi pushes for security alliance within BRICS

- Noting that today's world is marked by the "dark clouds of Cold War mentality", Chinese President Xi Jinping said some countries have tried to expand military alliances and create blocs in certain regions by forcing other countries into "picking sides".
- ❖ The Chinese president called for a larger security alliance within BRICS, underlining that Beijing would like to work with the grouping to operationalise the Global Security Initiative (GSI).
- ❖ Proposed by China in May this year, the GSI aims to be an Asian security framework that replaces "confrontation, alliance and a zero-sum approach with dialogue, partnership and win-win results".

BRICS Leaders adopted the 'Beijing Declaration'.

On Ukraine Crisis

- ➤ BRICS members Brazil, Russia, India, China and South Africa endorsed talks between Moscow and Kyiv amid the ongoing war, while voicing concerns about the worsening humanitarian situation in Ukraine.
- ➤ The statement was part of the formal declaration 'Beijing Declaration' released after the 14th BRICS Summit, held virtually.
- ➤ Russian President Vladimir Putin attending his first forum with the heads of major economies since launching the Ukraine invasion said settling conflicts, among other issues, can only be done through joint efforts.

BRICS

- The leaders of BRIC (Brazil, Russia, India, and China) countries met for the first time in St. Petersburg, Russia, on the margins of G8 Outreach Summit in July 2006.
- Shortly afterwards, in September 2006, the group was formalised as BRIC during the 1st BRIC Foreign Ministers' Meeting, which met on the sidelines of the General Debate of the UN Assembly in New York City.
- ✓ After a series of high level meetings, the 1st BRIC summit was held in Yekaterinburg, Russia on 16 June 2009.
- ✓ BRIC group was renamed as BRICS (Brazil, Russia, India, China, South Africa) after South Africa was accepted as a full member at the BRIC Foreign Ministers' meeting in New York in September 2010. Accordingly, South Africa attended the 3rd BRICS Summit in Sanya, China on 14 April 2011.

PEPPER IT WITH

Digital Economy Working Group, Contingent Reserve Arrangement, New Development Bank, IMF

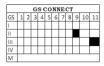
- ✓ BRICS does not exist in form of organization, but it is an annual summit between the supreme leaders of five nations. The Chairmanship of the forum is rotated annually among the members, in accordance with the acronym B-R-I-C-S.
- ✓ BRICS is an important grouping bringing together the major emerging economies from the world, comprising 41% of the world population, having 24% of the world GDP and over 16% share in the world trade.
- ✓ BRICS countries have been the main engines of global economic growth over the years. Over a period of time, BRICS countries have come together to deliberate on important issues under the three pillars of political and security, economic and financial and cultural and people to people exchanges.



FATF Grey List

News Excerpt

The Financial Action Task Force (FATF) is not immediately removing Pakistan from its "grey list" and will conduct an onsite visit to ascertain if steps taken by the country to curb terror financing and money laundering are "sustainable and irreversible".



Pre-Connect

What is the FATF?

- The FATF is an inter-governmental body that sets international standards seeking to prevent international financial crimes that aid terrorism. It is a policymaking body that works to generate political will in national jurisdictions for legislative and regulatory reforms in these areas.
- The FATF was established in July 1989 by a G-7 Summit in Paris, initially to examine and develop measures to combat money laundering. After the 9/11 attacks, the FATF in October 2001 expanded its mandate to incorporate efforts to combat terrorist financing, and in April 2012, it added efforts to counter the financing of proliferation of weapons of mass destruction.
- The FATF currently comprises 37 member jurisdictions and two regional organisations (European Commission and Gulf Cooperation Council), representing most major financial centres in all parts of the globe.
- The FATF has developed the FATF Recommendations, or FATF Standards, which ensure a coordinated global response to prevent organised crime, corruption and terrorism.
- Over 200 jurisdictions around the world have committed to the FATF Recommendations through the global network of nine FATF-Style Regional Bodies (FSRBs) and FATF memberships.
- India has been a member of the FATF since 2010. It is also a member of its regional partners, the Asia Pacific Group (APG) and the Eurasian Group (EAG). Pakistan has argued unsuccessfully that India is biased and motivated against it.

What is the grey list, and why is Pakistan on it?

- > Grey listing means FATF has placed a country under increased monitoring to check its progress on measures against money laundering and terrorism financing. The "grey list" is also known as the "increased monitoring list".
- As of March 2022, there are 23 countries on the FATF's increased monitoring list officially referred to as "jurisdictions with strategic deficiencies" that include, apart from Pakistan, Syria, Turkey, Myanmar, Philippines, South Sudan, Uganda, and Yemen.
- In essence, in the assessment of the FATF, all these countries have failed to prevent international money laundering and terrorist financing, and are, therefore, on a global watchlist.
- > To be pulled out of the grey list, a country has to fulfill the tasks recommended by the FATF, for instance, confiscating properties of individuals associated with terrorist groups. If the FATF is satisfied with the progress, it removes the country from the list.
- ➤ The FATF most recently took Zimbabwe, and before that Botswana and Mauritius, off the grey list. In the case of Pakistan, it first entered the list in 2008, left it, and then was on it from 2012 to 2015. Since 2018, it has not left the list.

How does grey-listing impact a country?

✓ Pakistan's grey-listing by the FATF from 2008 to 2019 may have resulted in a cumulative GDP loss of USD 38 billion.



- This is because, although being added to the grey list does not imply any economic sanctions (unlike the black list), it signals to the global financial and banking system about increased risks in transactions with the country in question, according to The Economist Intelligence Unit.
- Also, given that major financial institutions like the IMF and World Bank are affiliated with FATF as observers, a grey-listed country "faces complications in accessing international lending instruments,". One instance is of a USD 6 billion IMF loan contract from July 2019 that emphasized the need for Pakistan to comply with the FATF's action.

What is the road ahead for Pakistan?

- After the plenary session of June 2021, FATF had said Pakistan needed to "investigate and prosecute" senior leaders and commanders of UN-designated terror groups, including Jaish-e-Mohammed chief Masood Azhar, Lashkar-e-Taiba founder Hafiz Saeed, and its 'operational commander' Zakiur Rehman Lakhvi. The FATF gave Pakistan until October 2021 to meet the remaining conditions of compliance.
- At the end of the October plenary, however, the president of the task force announced that the country would remain on the grey list until it had addressed all issues flagged by the June 2018 action plan, as well as the one drawn up by the FATF's regional partner, the Asia Pacific Group (APG), in 2019.

PEPPER IT WITH

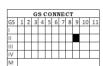
Black list of FATF, G7, G8, G20, OECD GCC

- Pakistan's progress was appreciated in March this year by the global body, which noted that it had "completed 26 of the 27 action items in its 2018 action plan". The FATF encouraged Pakistan to address the one remaining item by continuing terror financing investigations and prosecutions of senior leaders and commanders of UN-designated terrorist groups.
- While the potential FATF de-listing does improve Pakistan's perception as a country to lend to, adopting monetary and fiscal prudence would enable Pakistan to avoid the need for frequent financial bailout packages.

Aegean Islands

News Excerpt

Turkey warns Greece to demilitarise Aegean islands.



Pre-Connect

- The Aegean Islands refer to the hundreds of islands and islets found in the Aegean Sea. These islands and islets are often classified into seven groups, based on their location in the Aegean Sea.
- The main reason behind the sorting of the islands into groups is for administration purposes. The seven groups of islands are as follows:
 - The North Aegean
 - West Aegean
 - Sporades
 - Cyclades
 - Saronic and Dodecanese Islands
 - Crete



About the Issue

- ✓ Turkey says Greece has been building a military presence in violation of treaties that guarantee the unarmed status of the Aegean islands.
- ✓ It argues that the islands were ceded to Greece on the condition of remained demilitarised.
- ✓ Greece and Turkey are NATO allies, but the neighbouring countries have a history of disputes over a range of issues, including mineral exploration in the eastern Mediterranean region and rival claims in the Aegean Sea.
- ✓ Greece maintains Turkey has deliberately misinterpreted the treaties and says it has legal grounds to defend itself following hostile actions by Ankara, including a long-standing threat of war if Greece extended its territorial waters.



Respective affirmations

- Greece stands firm and has made clear to everyone that it has upgraded its geostrategic and geopolitical footprint as well as its deterrent capacity, to be able at any time to defend its national sovereignty and sovereign rights.
- Turkey is determined to launch a new cross-border offensive in Syria with the goal of pushing back Syrian Kurdish militia and creating a 30-kilometer (19-mile) buffer zone. Turkey regards the militia as an extension of the outlawed Kurdistan Workers' Party, or PKK.
- Turkey claims that it will not allow the establishment of terror corridors along its borders.

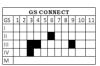


ENVIRONMENT

Horticulture Cluster Development Programme

News Excerpt

Union Minister of Agriculture and Farmers' Welfare launched the Horticulture Cluster Development Programme (CDP). The programme will be implemented in 12 horticulture clusters out of the total 53 clusters selected for the programme.



Pre-Connect

- The National Horticulture Board (NHB) was set up by the Government of India.
- The main objectives of the NHB are to improve the integrated development of the Horticulture industry and to help in coordinating, and sustaining the production and processing of fruits and vegetables.
- The mission for Integrated Development of Horticulture (MIDH) is a Centrally Sponsored Scheme for the holistic growth of the horticulture sector covering fruits, vegetables, root & tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashew, cocoa and bamboo.

About the Programme

- > The programme is intended to address all major issues related to the Indian horticulture sector including pre-production, production, post-harvest management, logistics, marketing and branding.
- > The programme is designed to leverage geographical specialisation and promote integrated and market-led development of horticulture clusters.
- P CDP is a central sector programme implemented by the National Horticulture Board (NHB) of the Ministry of Agriculture and Farmers' Welfare, CDP aims at growing and developing identified horticulture clusters to make them globally competitive.



Key Outcomes

- ✓ According to the Ministery of Agriculture and Farmers' Welfare, CDP will benefit about 10 lakh farmers and related stakeholders of the value chain.
- ✓ It will contribute to the doubling of farmers' income by improving exports of the targeted crops and the success of the programme will attract investment from India and Abroad.



- ✓ The Cluster Development Programme has a huge potential to transform the entire horticulture ecosystem improving its global competitiveness by building last-mile connectivity with the use of multimodal transport for the efficient and timely evacuation and transport of horticulture produce.
- ✓ CDP would help in attaining economies of scale and also create clusterspecific brands to entrench them into national and global value chains bringing higher remuneration to the farmers.



Analytica

- For Fruit crops, Long gestation period, Lack of technology to manage problems like spongy
 - tissue and lack of locationspecific technology may reduce horticulture productivity.
- Vegetable crop production involves challenges High cost of production due labour-intensive technologies, Exorbitant charges of hybrid seeds, Risk intensive production system, Lack of low-cost environmental controlled for greenhouses highquality production, and Supply and demand profile

Horticulture is the science and art of the development, sustainable production, marketing, and use of high-value, intensively cultivated food and ornamental plants. Horticultural crops are diverse; they include annual and perennial species, delicious fruits and vegetables, and decorative indoor and landscape plants.

ADVANTAGES Reduces Pollution Reduces Temperature Provides Employment Acts as Recreational Areas Provides Fresh Air DISADVANTAGES Costly Procedure High Maintenance Requires Huge Labor Force Skilled Labor and Techniques are necessary Hectic and hard Procedure

frequently changing with the season, year and kind of vegetable.

 Spices face challenges such as Lack of variability for host resistance to biotic and biotic stresses, Severe crop losses caused due to disease and pests, and Vagaries of monsoon affect crop growth, productivity and sustainability.

Way Forward

- Policy-oriented measures should be taken to improve the access to institutional loans and credit.
- Leveraging emerging technologies such as the Internet of Things (IoT), Artificial Intelligence (AI),

 Machine Learning (ML), Blockchain, etc., would bring predictability and precision into farming which would boost horticulture production.

PEPPER IT WITH

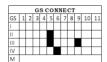
Krishi UDAN 2.0, E-NAM, Paramparagat Krishi Vikas Yojana (PKVY), Pradhan Mantri Krishi Sinchai Yojana (PMKSY)

→ The use of Big data-driven technology would ensure efficient supply chain management, yield prediction, and therefore, predictable income for farmers. Through the aforementioned precision farming technologies, startups can help horticulture farmers get a better picture of their farms, receive real-time alerts and advisory on the weather, soil conditions, pest and disease predictions and much more.

Renewables 2022: Global Status Report

News Excerpt

According to a global status report, India added around 15.4 gigawatts (GW) of renewable power capacity in 2021, the third-highest after China (136 GW) and the United States (43 GW).





Key Points of the report

As per the report, After two years of the COVID-19 pandemic, the global energy transition is not realized.

The greatest success for renewables in 2021 was in the power sector. A record 315 GW of new renewable power capacity was added which is enough to power every household in Brazil.

The biggest success stories are solar PV and wind, accounting for 90% of all new renewable power additions.

	1	2	3	4	5
Solar PV capacity	China	United States	India	Japan	Brazil
Nind power capacity	China	United States	Brazil	Vietnam	United Kingdom
Hydropower capacity	China	Canada	India	Nepal	Lao PDR
@ Geothermal power capacity	China	Turkey	Iceland	Japan	New Zealand
Oconcentrating solar thermal power (CSP) capacity	Chile	-	-	-	-
Solar water heating capacity	China	India	Turkey	Brazil	United States
Air-source heat pump sales	China	Japan	United States	France	Italy
Ethanol production	United States	Brazil	China	Canada	India
Biodiesel production	Indonesia	Brazil	United States	Germany	France

Global capacity additions of centralised utility-scale solar PV increased around 20%, with 100 GW of new installations. Utility-scale PV accounted for the majority of new installations in the United States, India, Spain and France. Renewables represented 84% of newly installed capacities.

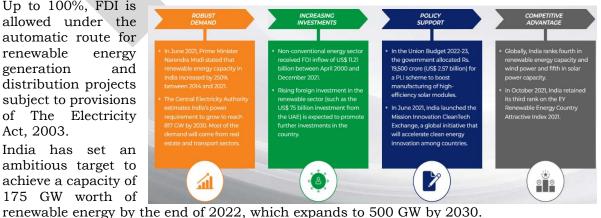
The energy used in buildings accounts for around one-third of the global final energy demand, yet renewables are progressing slowly at a 4 percentage-point increase from a decade before.



- The industry sector is the largest energy user despite large potential to meet industrial energy demand with renewables little progress has been made. For instance- 38 countries plus the EU have roadmaps for hydrogen production and 95% of hydrogen was produced by fossil fuels (as per the report).
- Progress in the transport sector remained slow. The share of renewables in the sector's final energy consumption grew only 1.2 percentage points between 2011 and 2019.
- Policy support for renewables remained strong throughout 2021, particularly in the power
- Renewable energy investment reached a record high in 2021 despite the impacts of the COVID-19 pandemic.
- Global new investment in renewable power and fuels (not including hydropower projects larger than 50 MW) reached an estimated USD 366 billion in 2021, a record high.

India's Progress in Renewable Energy Generation

- Up to 100%, FDI is allowed under the automatic route for renewable energy generation distribution projects subject to provisions of The Electricity Act, 2003.
- India has set an ambitious target to achieve a capacity of 175 GW worth of



DELHI: VIJAY NAGAR 9717380832 & **OLDRAJENDER NAGAR** 9811293743 | **JAIPUR:** 8290800441 BENGALURU: KORMANGALA 7619166663 & CHANDRA LAYOUT 7619136662 | BHOPAL: 7509975361 PATNA: 7463950774 | INDORE: 7314977441 | RANCHI: 9939982007 | www.ksgindia.com



- ➤ India's install renewable energy capacity has increased 396% in the last 8.5 years and stands at more than 159.95 Giga Watts (including large Hydro), which is about 40% of the country's total capacity.
- ➤ India has achieved its NDC target with a total non-fossil-based installed energy capacity of 159.95 GW which is 41.4% of the total installed electricity capacity.
- As per the union ministry of power, The government has installed renewable energy projects of 152.90 gigawatt (GW) capacity. This includes 50.78 GW from solar, 40.13 GW from wind, 10.63 GW from bio-power, 4.84 GW from small hydropower and 46.52 GW from large hydropower.

Issues with Renewables Energy Sources

- ✓ **Costs**: The most significant obstacle to renewable energy adoption right now is cost, in particular, the costs associated with building and installing facilities like solar or wind farms.
- ✓ **Transmission**: To sufficiently leverage renewable sources, new transmission infrastructure is required. This raises issues for renewable energy sources not located near existing infrastructure.
- ✓ **Demand side issues**: Renewable energy sources generate most of their energy at certain times of the day. Its electricity generation does not match with the peak demand hours. The intermittency of sunshine and wind cannot provide an on-demand power source 24 hours a week. Solar energy and wind are unpredictable.

PEPPER IT WITH ISA, OSOWOG, PM KUSUM Scheme, solar park

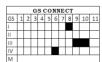
Conclusion

Renewable energy forms an integral part of India's current and future energy policy. If India follows the ambitious plan contionusly, it can accomplish the dual goal of economic development and green-energy production, which is certainly within the realms of possibility.

Warming of the Arctic

News Excerpt

According to a study by the Norwegian Meteorological Institute, Parts of the Arctic region near Norway are warming at as much as seven times the rate of warming in the rest of the world.



Pre-Connect

- The Arctic Ocean is Earth's northernmost body of water. Most of the Arctic Ocean is covered by ice throughout the year.
- The U.S., Canada, Greenland, Iceland, Norway, and Russia all have territories that reach into the Arctic Ocean.
- **ARCTIC COUNCIL**: It is the leading intergovernmental forum promoting cooperation in the Arctic. In particular on issues of sustainable development and environmental protection in the Arctic. It was formally established in 1996.
- The Ottawa Declaration defines these states as Members of the Arctic Council.
- India is currently an Observer member on the Arctic Council. Recently, the government unveiled India's Arctic policy document.





Key Points of the study

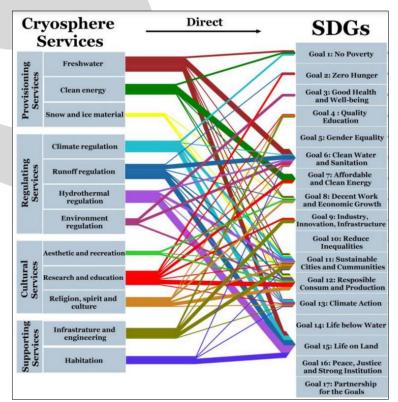
- The exceptional warming of the Arctic could lead to more extreme weather in North America, Europe and Asia, the Norwegian. Parts of the Arctic region near Norway are warming at as much as seven times the rate of warming in the rest of the world.
- > Such intense warming has never been observed in the Arctic region before and it hints at not just the future of other regions of the northern pole but is also ominous for the climate of the rest of the world as well, the study said.
- > The region around the northern Barents Sea has been warming two to two-and-a-half times the average warming of the Arctic region and five to seven times the warming in the rest of the world. In just the last 20 years, the average temperature northeast of the Norwegian archipelago of Svalbard has increased by more than five degrees Celsius.

Reasons for Warming

- ✓ The climate in the Arctic is changing faster than in midlatitudes. The Arctic helps to regulate the world's temperature. Rapid warming is due to several factors, including loss of glaciers, snow, and sea ice, thereby increasing absorption of solar radiation, and causing larger surface warming than in other regions.
- ✓ Over the past century, the global average sea level has risen four to eight inches. Melting Arctic ice is expected to speed up sea level rise.
- ✓ Along with calving glaciers, shrinking ice caps, and disappearing sea ice, evidence of Arctic warming can also be seen in the thawing of permafrost.
- ✓ Melting of permafrost exposes carbon dioxide and methane, a greenhouse gas that is about 30 times more powerful than CO2, in terms of its ability to trap heat.

Impacts

- In the Barents Sea itself, there is a huge impact on the marine ecosystem because of the warming and sea ice loss. The warming of the region since the 1980s has resulted in the northward shift and increase in abundance of Atlantic fish species and a decrease in the abundance of Arctic fish species.
- The warming of the Barents Sea also led to an extreme snowfall event, often dubbed as the 'Beast from the East'.
- The extreme weather events south of the Arctic are linked to the region's warming through the Arctic jet stream.
- The jet stream usually keeps the cold Arctic air within the region. But the excessive and rapid warming is causing this jet stream to become wavier due to which, the cold air is



interacting more frequently with the warm air from the lower latitudes, leading to extreme weather events.



- In India, the Arctic warming has been linked to the sweltering heatwaves in March, April, May and June across most of northwest, central and some parts of eastern India in 2022.
- In 2018, the warming northern polar region had also been linked to the unusual and deadly dust storms that killed around 500 people across north India.



- Rising seas endanger coastal cities and small island nations by exacerbating coastal flooding and storm surge, making dangerous weather events more frequent.
- Direct impacts include unsafe hunting conditions, risks to safe travel, and risks to subsistence activities due to changing and extreme weather events.

PEPPER IT WITH

Cryosphere warming, Albedo, World Meteorological Organization, IPCC

Way Forward

- There is a dire need for extensive research for a better understanding of Arctic warming.

 Therefore, funding and scientific collaboration is required. Research would prepare us for multiple scenarios.
- → The co-planning and co-management of Arctic marine conservation areas with Inuit organisations and communities and the inclusion of Inuit traditional knowledge in future decision-making can play a significant role in biodiversity conservation and the protection of cultural heritage.

Biomass co-firing

News Excerpt

Biomass demand of industries escalated since the Commission for Air Quality Management in National Capital Region and Adjoining Areas directed industries in Delhi-National Capital Region to switch to cleaner fuels by end of September 2022.



Pre-Connect

- The Government of India has made it mandatory for thermal power plants to use a 5 per cent blend of biomass pellets and coal.
- In the Union Budget (2022), Finance Minister stated that five-seven per cent of biomass pellets will be co-fired in the thermal plants.
- As on March, total biomass used in co-firing is 20,843 metric tonnes, the total tender awarded is 4.38 lakh metric tonnes (LMT) and tendering is in process for 38.34 LMT of biomass by 11 NCR Thermal power plants.
- The 'National Mission on use of Biomass in coal-based thermal power plants', also called SAMARTH Sustainable Agrarian Mission on use of Agro-residue in Thermal Power Plants has shared a list of 70-80 pellet manufacturers with the power plants.

About

- ➤ Biomass co-firing is the practice of substituting a part of the fuel with biomass at coal thermal plants which can help cut emissions. Biomass pellets made from agricultural waste have equivalent calorific value to that of Indian coal. (As per the Central Electricity Authority (CEA).
- It can help cut emissions from the combustion of fossil fuels, address India's burgeoning problem of farm stubble burning to some extent, and reduce waste burden while also creating jobs in rural areas.



- Around 95,000-96,000 tonnes of biomass pellets are required per day for co-firing, according to the 'National Mission on use of biomass for coal thermal power plants set up by the Union power ministry'.
- But India's pellet manufacturing capacity is 7,000 tonnes per day at present despite a surplus 228 million tonnes of agricultural residue available in the country.
- utilization Ex-situ of paddy straw an important strategy control stubble burning and instances of pollution in the National Capital region and surrounding fringes.

Banning of Coal use in NCR region

About

According to the Commission for Air Quality Management (CAQM), the use of coal as a fuel will be banned across the National Capital Region (NCR) with effect from January 2023.

Key Points

- * According to CAQM, Coal dominates industrial fuels in the NCR and current estimates indicate that approximately 1.7 million tonnes of coal is consumed annually for industrial applications in NCR, with about 1.4 million tonnes being consumed in six major industrial districts of NCR alone.
- The use of low-sulphur coal in thermal power plants has been exempted from the ban.
- ❖ An analysis by environmental non-profit, Centre for Science and Environment, estimated in 2020 that Delhi alone sourced 33.6% of its power needs from coal based thermal power plants with the rest from gas-fired plants.

Challenges of biomass Co-firing

- ✓ Unavailability of biomass pellets of agricultural residues is emerging as a dampener in implementing the Union power ministry's direction to co-fire biomass with coal in thermal power plants.
- ✓ The demand-supply gap has further intensified in the last two months. The pellet suppliers favour selling their product to industries such as textile, food processing, metal based or in open market at Rs 12-13 per kilogram, instead of supplying it to coal thermal power plants at the offered price of Rs 8-9 per kg. For instance- last year, the NTPC-Dadri was procuring biomass pellets at only Rs 5.35 per kg.
- ✓ Presently, To date, 36 gigawatts of coal-based thermal power capacity in the country have successfully co-fired biomass. Many of them were carried out on trial runs. Hence, Skewed demand supply and Lack of infrastructure further pose issues for the effective utilization of Biomass in the form of crop residual.
- ✓ Moreover, the gap between demand and supply is due to the seasonal availability and unreliable supply of biomass pellets to the utility.
- ✓ It is challenging to store biomass pellets for long durations at the plant sites since they absorb moisture from air quickly, rendering them useless for co-firing.

Positive Outcomes

- To reduce crop stubble burning and reduce the carbon footprint of thermal power plants in India while increasing farmers' income biomass co-firing can have a significant role to play.
- Co-firing biomass pellets with coal in will help to reduce GHG emissions from coal-based power plants. In places where agro-residue burning is prevalent, this can result in a reduction of coal dependence and a sharp decline in pollution levels.
- Agro-residue/biomass previously considered a waste product has now started to produce zero-carbon electricity in the country. In turn, farmers are generating additional income by selling the stubble/biomass for conversion into torrefied/non-torrefied biomass pellets.



- Biomass co-firing can have a multitude of impacts like
 - o Co-firing in coal plants would strongly increase biomass use
 - Lowest capital cost option for increasing the use of biomass to produce electricity
 - Co-firing biomass and coal takes advantage of the high efficiencies obtainable in large coal-fired power plants
 - o Improves combustion due to the biomass's higher volatile content

Way Forward

- The issue of shortage of pellets (agriculture residual/biomass) can be dealt with mapping of existing manufacturers and incentivising entrepreneurs to set up more pellet manufacturing plants that needed to be explored by SAMARTH.
- → To enhance co-firing, process changes such as the creation of separate bunkers for feeding biomass into the mill for crushing will need to be made.
- Government should ensure the price of biomass pellets, prices should be capped and protected from fluctuations in market demand. Finally, and perhaps most importantly, platforms need to be established to ensure farmers have an intrinsic role in this business model of

PEPPER IT WITH

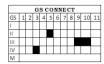
Rice Straw, Crop Residual, Waste to Wealth, National Policy for Management of Crop Residues, In-situ management

farmers have an intrinsic role in this business model of pellet manufacturing and co-firing in power plants.

Microplastics in Antarctica Snow

News Excerpt

According to the new research, Microplastics have been found in freshly fallen snow in Antarctica. The research was published in journal, The Cryosphere.



Pre-Connect

- Microplastics are tiny plastic debris that are smaller than 5 mm in length.
- There are two types of microplastics like
 - o Primary microplastics are tiny particles that are purposely designed as such for commercial use, like in cosmetics, nurdles-plastic pellets used in industrial manufacturing and in fibres from synthetic textiles like nylon.
 - o Secondary microplastics are formed through the degradation of larger plastic items like bottles, fishing nets and plastic bags.

Key Points of the Study

- > The study found an average of 29 particles of microplastic per litre of melted snow.
- These particles, due to their light weight and low density, might have travelled through air from more than 6,000 km away.
- Researchers argued that there is also a possibility that the human presence in Antarctica created a microplastic 'footprint'.
- Around 13 type of different plastic were found in form of polyethylene terephthalate (PET), a type of plastic used in everyday items such as clothes, plastic bottles, packaging etc.

Sources of pollution

- ✓ The most likely sources of the airborne microplastic are local research stations, due to the clothing worn by staff, broken fragments of plastic equipment and mismanaged waste.
- ✓ Microplastic fibers found in the Antarctic marine surface waters, sea-ice, sediments and biota likely originate from local sources, such as sewage (treated or untreated), from tourism, fishing and research vessels and from shoreline and scientific research stations.



Microplastic Impacts

- Due to their small size (≤ 5 mm), microplastics pose a threat to animals and the environment. The presence of these particles can pose a huge threat to Antarctica's distinctive ecosystem. Microplastics are not biodegradable and once they are found in the environment, they begin to accumulate.
- The presence of microplastics in Antarctica can also worsen the impact of climate change. Ice sheets and glaciers are already rapidly melting, and the report stated that the microplastics deposited in ice and snow can accelerate the melting of the cryosphere regions where water is in solid form, like the planet's North and South Poles.
- Micro-plastics pollute the water environment, quality of groundwater; change the ecosystem, affects biodiversity by reducing species diversity and act as vectors for spreading toxic chemical additives.
- The report cited that ingestion of microplastics by various life forms in the region, from microorganisms like zooplankton to larger predators like king penguins can disrupt their usual biological processes and negatively impact the entire Antarctic food chain.
- Severely affected micro-plastic pollution owing to the reduced fish population. Consumption of contaminated food further poses health risk for the coastal communities. Micro-Plastic pollution could aggravate the crisis of food security and issue of malnutrition in some other parts of world.

Way Forward

The most natural response to microplastic pollution is recycling. While recycling is not a permanent solution that will remove plastic from the face of the earth. It is, however, a smart solution to prevent microplastic pollution. Actively choosing recycled goods will ensure a greener and better life for everyone on the planet.

PEPPER IT WITH

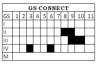
Microbeads, Single use plastic, Pseudomonas and Moraxella, Microbes

- Reducing plastic consumption is an important step that can be taken to ensure that the level of microplastic pollution in the country is removed. From regulating the use of single-use plastic to ensuring proper waste management, several steps can be taken by the government and local bodies to prevent microplastic pollution.
- ♣ Taking personal initiatives such as zero-waste trips, shunning disposal food, quitting the use of bottled water and giving up plastic packaging.

Stockholm+50

News Excerpt

Recently, The two-day Stockholm+50 meet is convened by the United Nations General Assembly in Stockholm to commemorate 50 years since 1972. The Stockholm conference made the environment a pressing global issue.

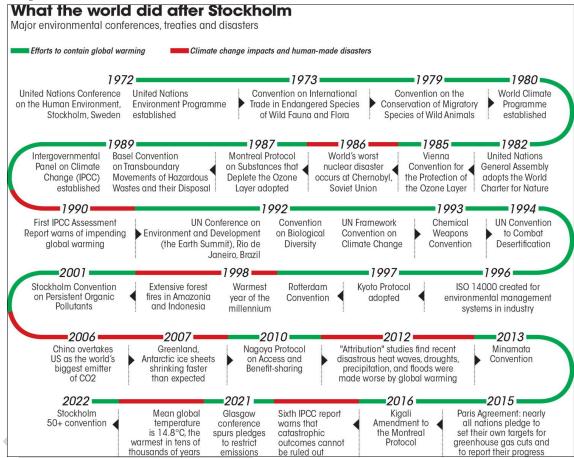


Pre-Connect

- Sweden will host Stockholm+50, with the support of Kenya. It will be during the same week as World Environment Day, which is held on 5 June each year and is also a result of the 1972 event.
- To commemorate the 50 years since the 1972 United Nations Conference on the Human Environment, which made the environment a pressing global issue for the first time, around 122 countries attended, and participants adopted a series of principles on the environment, including the Stockholm Declaration and Action Plan for the Human Environment.



- The United Nations Environment Programme was created as a result of this conference, UNEP is a global body that has been working for environmental protection across the world and the UN Framework Convention on Climate Change (UNFCCC).
- The then Indian Prime Minister Indira Gandhi had attended the 1972 conference and called for global collective action to save the environment.



About Stockholm+50

- Stockholm+50 will be collaborative and multi-stakeholder in nature, open to all participants who will be invited to share experiences and initiatives to protect the planet and contribute to sustainable and inclusive development, including a sustainable recovery from the COVID -19 pandemic.
- Firstly, the open architecture of engagement at Stockholm+50 was unique and allowed the global community to make their voices and views known.
- his response to a demand for action and co-created outcomes allowed for truly inclusive multi-stakeholder engagement and a sense of partnership.

India and Stockholm+50

- ✓ India pitches for circularity as Stockholm+50 opens with calls to accelerate action for healthy planet and prosperity for all.
- ✓ India advocated the concept of LIFE, that is, lifestyle for the environment, as an approach to combating climate change.
- ✓ It promotes mindful consumption, reduction of waste and promotion of resource efficiency and circular economy



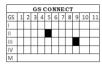
Analytica

Now, 50 years after that Stockholm meeting, the world faces a triple planetary crisis of climate change, pollution and waste, nature and biodiversity loss, as well as other planetary ills that are affecting current and future prosperity and wellbeing. An unhealthy planet threatens human health, prosperity, equality and peace – as the world has seen only too clearly in COVID-19. It also threatens the achievement of the Sustainable Development Goals.

Keibul Lamjao National Park (KLNP)

News Excerpt

The State government of Manipur has announced that a heritage park would come up near the Keibul Lamjao National Park in Bishnupur district.

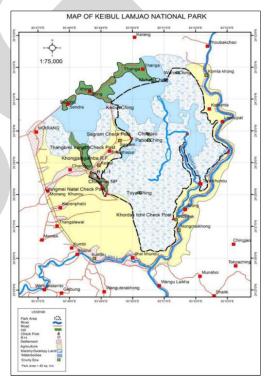


Pre-Connect

- The park is located in the south western part of the Loktak lake.
- The park is the natural habitat of the brow-antlered deer(Sangai) the dancing deer of Manipur.
- The Park is the only floating park in the world.
- The Keibul Lamjao Conservation Area represents an extraordinary story of natural antiquity, diversity, beauty and human attachment.
- The Keibul Lamjao Conservation Area (KLCA) comprises of a core area of Keibul Lamjao National Park and a buffer of Loktak Lake and Pumlen Pat.



- ➤ The Manipur government has set aside ₹46 crore for the construction of the heritage park. However, the villagers took out a demonstration near the KLNP.
- The government had taken up steps to shift the site to a place six km away from the KLNP.
- > The proposed site has no connection with efforts to save the endangered deer. On the other hand, the people in surrounding villages have been doing everything possible to protect the deer.
- ➤ The people of the proposed site are not associated with steps for the protection of the endangered brow-antlered deer (Sangai) in the KNLP.



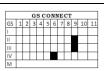
Reason for shifting a site

- ✓ It was expected that the museum of the Indian National Army where the first Indian flag of Independence was hoisted near the Loktak lake and the heritage park will attract tourists from the country and abroad.
- ✓ There will be traditional thatched houses of the different communities in this heritage park.

Environmental Performance Index (EPI)

News Excerpt

India has been placed at the bottom on a list of 180 countries, judged for their environmental performances by Yale and Columbia universities.



Kev Points

The EPI provides a data-driven summary of the state of sustainability around the world.

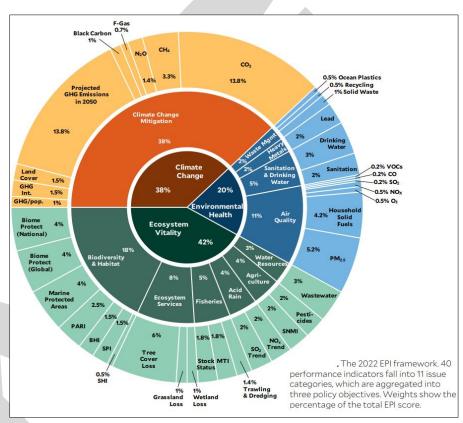


- Using 40 performance indicators across 11 issue categories, the EPI ranks 180 countries on climate change performance, environmental health, and ecosystem vitality.
- EPI indicators provide a way to spot problems, set targets, track trends, understand outcomes, and identify best policy practices.
- Overall EPI rankings indicate which countries are best addressing the environmental challenges that every nation faces.
- The lowest scores go to India (18.9), Myanmar (19.4), Vietnam (20.1), Bangladesh (23.1) and Pakistan (24.6).
- Most low-scoring countries are those that have prioritised economic growth over sustainability, or those that are struggling with civil unrest and other crises
- EPI projections indicate that just four countries -- China, India, the US and Russia -- will

account for over 50 per cent of residual global greenhouse gas emissions in 2050 if current trends hold.

Report and India

- India, with increasingly dangerous air quality and rapidly rising greenhouse gas emissions, falls to the bottom of rankings for the first time.
- The report stated that Many other nations are headed in the wrong direction, with rapidly rising greenhouse emissions in major countries like China, India and Russia.



Significance

- ✓ Good data and fact-based analysis can also help government officials refine their policy agendas, facilitate communications with key stakeholders, and maximize the return on environmental investments.
- ✓ The EPI offers a powerful policy tool in support of efforts to meet the targets of the UN Sustainable Development Goals and to move society toward a sustainable future.

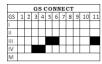


SCIENCE & TECHNOLOGY

Web 5.0

News Excerpt

A new decentralized web platform is being conceived by former twitter CEO Jack Dorsey which will return ownership of data and identity to individuals. It is being developed by Dorsey's Bitcoin business unit, The Block Head (TBH).



Pre-Connect

- World Wide Web (WWW) or Web is a network of interconnected hypertext documents that can be accessed over the Internet. A web browser is used to see online pages with text, photos, videos, and other multimedia and move between them via hyperlinks.
- Tim Berners-Lee proposed World Wide Web in 1989 to improve CERN' communication infrastructure, later in 1990, Lee along with Robert Caillou, led to foundation of WWW a web of nodes in which the user may traverse at whim.

Evolution of Web

➤ Web 1.0 -

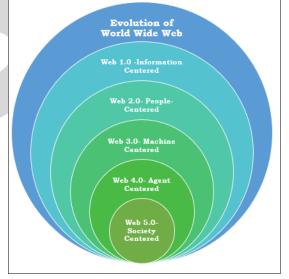
- Read-Only Internet made of static web pages that only allowed for passive engagement.
- It brought plethora of web browsers and early e-commerce website such as Amazon and eBay.

> Web 2.0-

- Read-Write Internet, It allows users to communicate with servers and other users leading to the creation of the social web. This is the world wide web that we use today.
- This interaction ability brought era of social media with websites like Myspace, Facebook (Now Meta) etc.

Web 3.0-

- Read-Write-Execute web with decentralization as its bedrock
- A semantic web that is focused on the intelligent connection between people and machines.



- It will leverage blockchain technology to allow users to interact without an intermediary.
- It will be driven by Artificial Intelligence and machine learning where machines will be able to manipulate information like humans.
- It won't be able to provide context to data, understand relevance, or make more complex decisions with regard to data. As a result, it couldn't tell that what was helpful and what wasn't.

• Web 4.0

• The read-write-execution-concurrency web will be Web 4.0.



- Mobile Web- A symbiotic web an Interaction between people and robots in symbiosis. A highly intelligent interactions between man and machine.
- Web would be reacting in the form of executing and determining what to execute first in order.

Web 5.0

- o Intelligent / Emotional (Symbiotic) Web- Web that acts in true symbiosis with daily life, without a thought, organically intertwined with what an individual does.
- Will focus on the individual, perhaps allowing a website to convey a different experience for each different person.

Dorsey Web 5.0

Dorsey concept focus on a web which is extra decentralized, which put a user in control of his/her data and identity. It is defined as a combination of Web 2.0 and Web 3.0.

- Since no government or big tech company can control information exchange, it can potentially end censorship and will be far more secure from outages.
- The decentralized Web 5.0 would be based on a digital wallet that will store user identity, data and authorisations. This will help users in multiple ways-
 - Single User ID and password for all applications on decentralized web.
 - Portability will be improved for e.g. User music playlist will be replicated from one app to another when permission is granted.
 - User can monetize data by selling it to vendor for market research and can control the amount and type of data they wish to share.
 - Will make internet experience more seamless and less anxiety-inducing.

Analytica

Web 5 and Data Decentralisation

- ✓ Essentially, Web5 will enable decentralized apps to take the place of centralized social networks, all while allowing individuals to maintain ownership over their data.
- ✓ Web5 is conceptualized as giving ownership of data back to end-users through decentralization.
- A decentralized web relies on a peer-to-peer network built upon a community of users. This group's own internet-connected devices would host websites or applications, rather than a group of high-powered servers.
- Every website or application gets distributed across hundreds of nodes located on different devices. This process reduces the chance of a server crash, hackers taking down a website or an authoritarian government taking control of and/or

censoring opinions.

Conclusion

The technology is an idea at a very early stage so its

PEPPER IT WITH

Semantic Web, Distributed Social network, URL technology, Non-fungible tokens (NFT)

implications cannot be ascertained. However, one potential challenge is that it is averse to government control and could become a bone of contention between Government and developers. Therefore, a clear blue-print on technology is required from the developers on which governments can make policy decisions. Real-world testing is required with focus on safety of personal data and individual privacy.



AmbiTAG

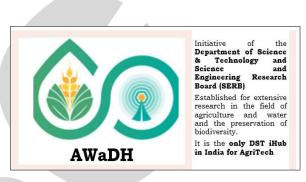
News Excerpt

IIT Ropar (Punjab) has developed a first-of-its-kind IoT device that monitors realtime ambient temperature during the transportation of perishable products, body organs, blood, vaccines, etc. It is called AmbiTAg. The device has been developed under Technology Innovation Hub - AWaDH (Agriculture and Water Technology Development Hub) and its Startup ScratchNest.



Pre-Connect

- India witnesses food wastage worth Rs. 92000 crores each year due to the lack of cold chain facilities and logistics. About 40% of the produced food never reaches the end consumers.
- India also witnesses huge Vaccine wastage during recent Corona crisis, majority of which happened due to logistics issues.



Key Features

- It is shaped as USB (Universal Serial Bus) and waterproof.
- ➤ Its temperature range is -40°C to 80°C in any time zone.
- Works for a full 90 days on a single charge.
- > Generates alert system when temperature changes beyond a pre-set limit.
- > All recorded data is retrievable.

Significance

- ✓ It has critical edge over other devices of same category as they work only for 30-60 days on single charge.
- ✓ It promotes Atamanirbhar Bharat as it will reduce import dependence of such devices and stand as an alternative for other countries.

PEPPER IT WITH

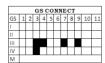
National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS), ARTPARK, RAKSHAK, I-STAC.DB

- ✓ It can also monitor the temperature of animal semen during transit. Providing support to intelligent bovine management.
- It will help in easing farm to fork business model and support the objective of doubling of farmers income

Liquid Nano Urea

News Excerpt

Prime Minister of India has inaugurated the country's first liquid Nano urea plant at Kalol, Gujarat. It is indigenously developed by Indian Farmers Fertiliser Cooperative Limited (IFFCO) at Nano Biotechnology Research Centre (NBRC) in Kalol.





Pre-Connect

- India currently ranks 3 in fertilizer production and 2 in terms of fertilizer consumption.
- Urea forms 82% of the total nitrogenous fertilizer consumed in India, with an annual consumption of 33.6 million tonnes in 2019-20
- India faces the problem of rampant overuse of urea which has resulted in worsening of soil quality and affected farm productivity as well as farmers profitability.
- On Urea, India faces double whammy on one hand it contributes to its import bill while on the other domestic production cost has increased significantly due to cost of feedback. This has increased the subsidy bill.
- Despite indicated N:P:K usage of Indian soil in 4:2:1, it was askew at 6.1:2.5:1 in 2017-18.

- **About IFFCO**
- Founded in 1967 as wholly owned by Indian cooperatives and one of the biggest cooperative societies with over 36000 Indian cooperatives.
- Core business is of manufacturing and selling of fertilizer.
- It has diversified business interests ranging from General Insurance to Rural Telecom.
- It provides timely supply of reliable, high quality agricultural inputs and services in an environmentally sustainable manner.

• With low nitrogen use efficiency of Indian soil the bulk of the urea applied contaminates ground- and surface water and the atmosphere and increasing soil acidity. It is also a major cause of various health conditions like blue baby syndrome.

About Liquid Nano Urea (LNU)

- > LNU is a nanotechnology based Agri-input which provides nitrogen to plants.
- ➤ It contains 4 % nanoscale nitrogen particles. These have a small size (20-50 nm) and therefore covers more surface area and number of particles per unit area than conventional urea.

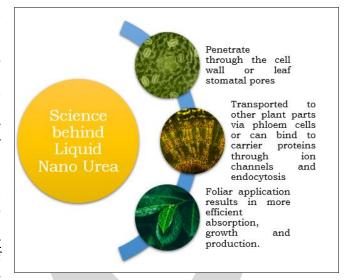




Benefits

- ✓ <u>Higher Crop Yield</u>-Average Yield increasesz up to 8 % have been recorded as per 11,000 field trials conducted across India during 2019-20
- ✓ Increased Income for Farmers- Due to reduction in input cost average increase in income of Rs 2000 per acre have been registered as per Farmer Field trials.
- ✓ <u>Increased Nutritional quality</u>
 Nutritional quality of harvested produce is better in terms of protein and nutrient content.
- ✓ Reduction in Chemical Fertilizer
 Usage- It rationalizes application of bulk nitrogenous fertilizers like Urea

and its one bottle (500 ml) can potentially replace at least 1 bag of conventional urea.



PEPPER IT WITH

Neem Coated Urea, Biozar, Nano

Nanoparticles,

Polymeric

Nanobiosensers

- ✓ Environment Friendly- It ensures agriculture sustainability and environment safety can be ensured and reduces excess application of bulk urea and associated volatilization as well as leaching and run off losses.
- ✓ **Easy to store and transport**: It has a significant impact in terms of relative logistics and warehousing cost

Significance

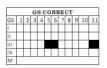
It increases Urea availability to crop by more than 80% resulting in higher Nutrient Use efficiency.

- It promotes precision and sustainable agriculture.
- It promotes clean and green technology as its industrial production is neither energy intensive nor resource consuming.
- It helps in minimizing the environmental footprint by reducing the loss of nutrients from agriculture fields in the form of leaching and gaseous emissions which used to cause environmental pollution and climate change.
- It will be a step in the direction of self-reliance in terms of 'ATMANIRBHAR BHARAT' and 'ATMANIRBHAR KRISHI'.

Critical Information Infrastructure

News Excerpt

Union Ministry of Electronics and IT (MeitY) has declared IT resources of ICICI Bank, HDFC Bank and National Payment Corporation of India (NPCI) as critical information infrastructure.

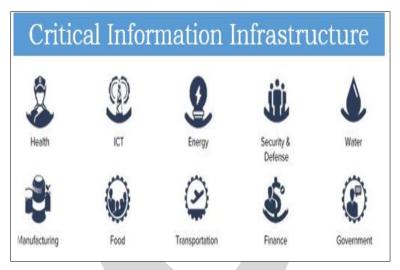


Pre-Connect

- Information Infrastructure is the totality of inter-connected computers and networks, and information flowing through them.
- The impact of any sudden failure or outage on National well being or National Security marks them as being Critical.



- Information Technology Act (2000), 2008 amendments recognized the need for a focused approach to cybersecurity and divided it into two segments: Critical and Non Critical.
- According to act, CII means the computer resource, the incapacitation or destruction of which, shall have debilitating impact on national security, economy, public health or safety.
- Section 70 of the IT Act 2000 empowers government to declare any computer resource which directly or indirectly affects the facility of CII, to be a 'Protected System'.



- The National Critical Information Infrastructure Protection Centre (NCIIPC) was created by a gazette notification with specific responsibilities for protecting all CII. The Computer Emergency Response Team India (CERT-IN) would be responsible for all non-critical system.
- Any person who secures access or attempts to secure access to a protected system in violation of the law can be punished with a jail term of up to 10 years.

Importance of CII Security

- ➤ <u>Common Global Practice</u>: Governments across globe are working on securing their CIIs, while some are moving forward in developing capacities to disrupt adversary CIIs.
- > <u>ICT is a new backbone:</u> Multiple critical operations are now not only based on ICT but also depends on the interconnectedness it provides, therefore any disruption can have cascading effects.
- > <u>Anti-Satellite Warfare:</u> Non-Kinetic ASATs can render a satellite inoperative through blinding satellites with lasers or jamming frequency. This can have a significant economic impact, especially when targeted in conflict between nations.
- More-Smart More-Risk: Smart sensors and communication technologies bundled into various industrial control systems expose infrastructures and organizations to risks.
- Problem of Isolation: The accelerated pace of development within the IT sector will make difficult for critical systems to isolate themselves from the outside world, and to maintain the boundaries between inside and outside.



➤ <u>Private Sector dilemma:</u> With increasing globalization and opening up of economy many private sector players are now part of CII. But they lack management as well as budgetary support for acquiring the latest counter-measures against future cyber threats.

Role of AI in Cyber Security				
Early detection	All can identify vulnerabilities and threats as quickly as possible and allows for necessary fixes. It can isolate those systems and ensure the attack does not spread in other areas			
Fraud Detection	 AI can help verify the original credit card holder, protect passwords, and warn them on detecting anything unusual, suspicious, or risky. 			
Blockchain Security	 AI can read, correlate, and understand data comprehensively at high speeds and bring better intelligence and protection to blockchains. 			
Protect and Manage Huge Data	All use automation to skim through a large chunk of data and flag the suspicious traffic out. It enable safe data transfer and provide better protection.			
Manage Vulnerabilities	 All detect vulnerabilities in systems and networks at an early stage. It helps in discovering all the weak points in a system and inform users quickly. 			
Eliminate Duplication	 AI Can manage errors and security duplications by mimicking the best human qualities while ignoring the shortcomings and leaves no room for human-error. 			
Authentication Password Protection	It incorporates tools like fingerprint scanning, facial recognition, etc., to verify identities and make sure only the authentic users can access their accounts.			
Behavioral Analytics to Identity Patterns	 AI creates behavior patterns of users and it can flag unusual activities. It can block a user from detecting suspicious activities so no one can hack into systems. 			

Pandemic and CII

- ✓ Covid-19 pandemic has seen a shift of attacks from small businesses to critical infrastructure, government and major corporations.
- ✓ Healthcare and humanitarian organisations such as WHO are being targeted and Check Point Software Technologies reported a 500% increase in attacks toward these organisations.
- ✓ A global phishing campaign was focused on organisations associated with the Covid-19 vaccine cold-chain.
- ✓ In India, a cyber-attack allegedly being originated from China disrupted the electric grid supply to Mumbai hitting the city's hospitals, trains and businesses.

Conclusion

India needs to develop an eco-system that can support the development of indigenous software and hardware. But this will require adequate cybersecurity professionals to partner with NCIIPC to cover the whole sector. Forging partnerships between public and the private entities will not only merge the strengths of the private and public in creation of standardized operating

PEPPER IT WITH

CERT-IN, DDOS, Malware, Ransomware, WBOM, Cyber Warfare Doctrine, Cyber Sabotage.

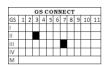
procedures, but also build an eco-system that is sensitive to each other's lacunae and strengths.



Managing Type 1 diabetes mellitus (T1DM)

News Excerpt

Indian Council of Medical Research (ICMR) for the first time released guidelines for the diagnosis, treatment, and management for type-1 diabetes.



Pre-Connect

Diabetes affects the five major organs namely, Kidney, Heart, Blood vessels, Nervous System, and Eyes (retina).

Old Classification

Hybrid forms of

diabetes

- India is home to world's largest second adult diabetes population and every sixth person with diabetes in the world is an Indian. By 2045, it is projected that India will have 134.3 million people with diabetes.
- The past three decades witnessed 150% increase in the number of people with diabetes in the country.
- The growing prevalence of pre diabetes indicates a further increase

Type-1

- It is an auto-immune condition in which islets cells on the
- pancreas that produce insulin are destroyed.

 Usually Appears during adolescence and can develop in adults.
- · Risk Factor-Family History

• Type-2

- Impairment in the way body regulates and uses glucose as fuel.
- Not insulin dependent always, however prolong exposure might
- · Risk Factor-Obesity-Family History- High Blood Pressure

New Classification-

· Immune-mediated diabetes

- · Slow Progressing form of diabetes.
- · Insulin requirement comes at later stage

Ketosis-prone

- Combination of Type 1 and Type 2
- · Severe beta cell dysfunction • Requires temporary insulin therapy
- Unclassified
- · It is a temporary label, when it is difficult to make a precise diagnosis regarding the type of diabetes
- diabetes in the near future. Diabetes has traversed from high to the middle income and underprivileged sections of our society.
- Type-2 diabetes is seeing a progressive lowering of age with inflection is becoming apparent in the age group of 25-34 vrs in both urban and rural areas.
- India has the highest number of incident and prevalent cases of type 1 diabetes in the world with majority under the age of 14 vears.
- Insulins were earlier the only option for T1DM patients however new avenues such as Artificial Pancreas and Stem cell therapy to increase islets cells are being discussed.

Economic Cost of Diabetes

- The Economic cost of Diabetes is both direct viz. consultations. medicines, hospitalization etc. indirect viz. transport, lifestyle modification and income lost due to absenteeism.
- Between 2005-2015, 84 billion USD of GDP was lost due to Diabetes and half of this loss come from India, Russia and China.
- For T1DM patients mean administration of Insulin cost hover around Rs 29000 per annum.
- On an average diabetes related expenses including hospitalization were 49% of total family income in India.

Factors responsible for Type 1 Diabetes

- > Genetics factors play significant role:
 - In Monozygotic twins (identical twins-fertilization of single egg by single sperm) is 30%
 - o In case blood relations having TIDM
 - Mother-3%



- o Father-5%
- o Sibling-8%
- ➤ Prevalence of two particular genes DR3-DQ2 and DR4-DQ8 (It presence means the patient is permissive for celiac disease and is capable of developing the disease) is seen in 30-40% patients with T1DM compared with 2.4% in the general population.
- \triangleright Enteroviral infections, older maternal age, rapid weight gain in early life, and β -cell stress are some other factors for T1DM.

ICMR Guidelines

Nutritious diet with reduce intake of salt and carbs amounting to 50-55% of total calorie intake.

- ✓ Scheduling serving time of meals and snacks to avoid fluctuations in glucose.
- ✓ Regular physical activity with focus on aerobic fitness as it increases glycemic regulation.
- ✓ Regular blood glucose monitoring with a "basic minimum" of two to four times per day for two to three consecutive days per month.
- ✓ Alternating between two pairs of shoes can decrease the risk of blisters and calluses.
- ✓ Patient should inform the physician in advance, preferably four to six weeks before the planned travel.

PEPPER IT WITH

NPCDCS, Global Diabetics Compact, NFHS, MODY, FCPD, Gestational Diabetes

✓ The patients who have language problems should have simple cards to convey their problem such as my sugar in the local language is going down.

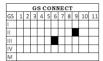
Conclusion

The burden due to diabetes in the young is increasing rapidly in India and becoming common in Children and adolescents. Though T1DM is common in them they are becoming prone to T2DM. Diabetic ketoacidosis though better managed in urban pockets, still remains a big problem in rural areas, and in peripheral centers. There are still formidable challenges in providing equitable treatment to everyone with type 1 diabetes in the world and India is no exception to this. Better control is the only option to avoid complications like blindness, kidney failure, amputations, heart attacks and stroke etc.

China's Tiangong Space Station (TSS)

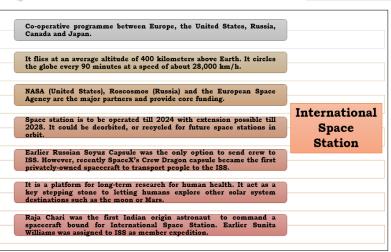
News Excerpt

China's strategically significant space station project entered the final phase as three astronauts entered the orbiting module of TSS.



Pre-Connect

- A space station is a type of a space craft that supports crew members and provide docking space to other spacecrafts and remains in space of an extended period of time.
- China will be the only country to own a space station, with the International Space Station (ISS) of Russia being a collaborative project of several countries.





- Shenzhou space flights are used for this mission. Shenzhou-5 to 14 spaceflights are manned spaceflight missions.
- TSS part of China Manned Space program, was formulated when USA barred China from participating in the International Space Station.
- China Manned Space Program was launched in 1992 using a three-step method mechanism, where they moved from basic human space technologies to long-term man tended utilization on a large scale.

About TSS

- > TSS is a LEO (Lower Earth Orbit) space station and is between 340 and 450 kms above the earth. It will be operational for at least 10 years.
- ➤ It will have three modules viz. the core module, Tianhe, and two lab modules Wentian and Mengtian.
- It will have two robotic arms which has ability to grab objects including satellites from space, thereby becoming a cause of concern.
- The space station is designed to be a versatile space lab, capable of accommodating 25 experiment cabinets for scientific exploration.
- Focus will be on life and ecology and biotechnology. Astronauts can conduct experiments on molecules, cells, tissues, and organs.
- Wentian lab will study impact of variable gravity environments on the biological growth.
- Mengtian lab will focus on building a precise time and frequency system in space that can serve the gravitational redshift research, the measurement of fine structure constants, and other applications.

Chinese Space Quagmire

- China's Space program has often been criticized for being irresponsible which is not only risking people and property on Earth (re-entries of space objects) but also creating space debris (ASAT
 - objects) but also creating space debris (ASAT test).
- ✓ TISS program had uncertainties in trajectory and is often came close to ISS, further China doesn't alarm about such situations.

India Space Station

- Indian Space Station is an extension of the Ganganyaan Mission.
- ISRO will launch a small module for microgravity experiments
- To be launched by 2030 Indian space station is envisaged to weigh 20 tonnes.
- Astronauts can stay for 15-20 days
- ❖ To be placed in an orbit 400 km above earth.
- ❖ ISRO is working on Space Docking Experiment (Spandex) technology that allows transferring humans from one spacecraft to another.

UN and Space Issues

- United Nations Office for Outer Space Affairs was created to service the ad hoc Committee on the Peaceful Uses of Outer Space.
- It serves as a focal point for international cooperation in the peaceful exploration and use of outer space.
- Outer Space Treaty (OST)- Article VI- Make nations responsible for activities carried out by both governmental and non-government bodies of a nation
- Article VII of OST makes nations liable for damage caused by their space objects, such as satellites.

PEPPER IT WITH

Outer Space Treaty, Liability Convention of 1972, Ganganyaan, Starlink project

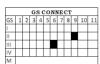


- ✓ Although instruments like Outer Space Treaty are in place to avoid Space conflicts, but China have a terrible track record when it comes to meeting their treaty commitments.
- ✓ It's important for a safer outer space that each player flow PPWT-like (Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force Against Outer Space Objects) measures.

Transfer of Ten in-orbit communication satellites to NSIL

News Excerpt

The Union Cabinet approved the transfer of 10 in-orbit communication satellites from the Government of India to NewSpace India Ltd (NSIL). a Public Sector Enterprise under the administrative control of the Department of Space.



Pre-Connect

- India's space program has been known for credible and cost-effective space launch missions. It has potential to emerge as a hub for cost-effective satellite launches.
- The ISRO has a proven track record in launching small satellites with the success of the PSLV.



NewSpace India Limited

- Incorporated as wholly-owned Government of India Company, under the administrative control of Department of Space (DOS).
- NSIL will be the nodal agency for carrying out PSLV productionisation through Indian Industry under consortium route.
- Manufacturing of SSLV through Indian Industry partners will be the responsibility of NSIL
- NSIL will be responsible for providing launch services to global satellite customers, on-board SSLV, PSLV. GSLV and GSLV-MKIII launchers.
- · Satellite Based services include
- Satcom services including leasing of space segment capacity
- · Mission Support services
- Remote Sensing data services
- · Technology Transfer
- Transfer of Technologies to Indian Industry
- Transfer of Spin-off Technologies.

development of the SSLV will give India a further boost in this segment.

- India has launched numerous foreign satellites belonging to various countries and it has the potential to do it significantly more.
- The global commercial space market is growing and is expected to generate a revenue of more than \$1 trillion by 2040.
- In 1992, Government of India founded Antrix Corporation Limited as marketing arm of ISRO for promotion and commercial exploitation.

New Changes

- Other than GSAT-7 and 7A entire GSAT will go to NSIL.
- Downstream satcom businesses will now be managed by NSIL.
- NSIL is already operating new Communication Satellite (CMS).
- Paid-up share capital of NSIL increased from Rs 1000 cr to 7500 cr

PEPPER IT WITH

National Space Transportation Policy (NSTP) 2020, IN-SPACe, SATCOM Policy, Indian Space Association (ISpA), NAVIC, ATL Space Challenge 2021



Significance

- ✓ Financial autonomy will help NSIL in realizing capital intensive projects. This will help in creating employment and have technology spin-off for other sectors of the economy.
- ✓ NSIL will be empowered to price the transponders as per market trends and global dynamics. Thereby helping India in gaining a larger share of the global space market.
- ✓ NSIL as single window operator will facilitate Ease of doing business and allocate capacity as per its internal policies and guidelines.

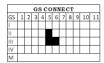
Conclusion

India needs to stay competitive at a time when there are fast emerging competitors including China and foreign commercial players who have been eyeing the global commercial space. India stepping up its competitiveness, in terms of both manufacturing and launching of satellites, can change the game significantly in its favor. Further, the growing importance of outer space in India's national security in navigation, intelligence, surveillance, and reconnaissance (ISR) and military communication is a reality that India can no longer ignore especially given the changing security dynamics in India's neighborhood and in the Indo-Pacific.

5G Auctions

News Excerpt

The Digital Communications Commission (DCC) had approved the 5G spectrum auction in accordance with recommendations made by Telecom Regulatory Authority of India (TRAI).

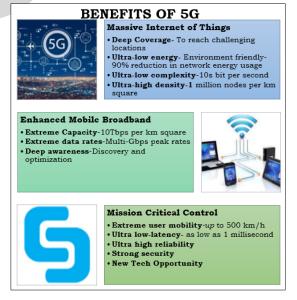


About Auction

- At reserve price, the entirety of the spectrum is valued at over Rs 5 lakh crore.
- The auction will be of 72 GHz of spectrum for a period of 20 years.
- Bidders will have option to surrender the spectrum after 10 years with no future liabilities with respect to balance installments (as payment can be made in 20 installments).
- There will be zero spectrum usage charge and no requirement of bank or financial guarantees, further no upfront payment by successful bidders.
- Number of backhaul carriers in the existing frequency bands will be double to allow smooth functioning of 5G.

Private Captive Network

- ➤ Government of India has also allowed the development and setting up of private captive networks.
- This will allow companies to test and test and build industry 4.0 applications such as machine-to-machine communications, Internet of Things etc.





- > It will provide an additional source of revenue for the government through the license fees and administrative costs.
- ➤ This can also be deployed at a single unit for instance Airports can also have their own private 5G cellular network to process imaging data coming from surveillance cameras to manage their facility.
- > Telcos have raised several objections in this regard
 - o Severe Impact on revenues and can cause business degradation.
 - As globally, 40 per cent of the revenues from 5G come from the enterprise segment. Price difference in acquisition of 5G spectrum between Telcos and Private tech companies will make enterprise network deal more competitive for them.
 - Decrease access to market is possible if private tech companies used their network to provide internet access in their residential township.

Challenges

- ✓ Pricing remains a bone of contention with telcos demanding 90% reduction in base price while Government of India decided to go with TRAI's recommendation of 36% reduction. These are already facing difficulties in managing cash inflows.
- ✓ 5G efficiency will be depended on the Fiber optics connectivity in India, which is currently 30% of telecom towers, just half of what is required.
- ✓ Procurement of Hardware becomes another hurdle due to ban on certain OEM (Original Equipment Manufacturers).
- ✓ Electronic-magnetic frequency regulations have to be in sync with new 5G requirements as tower density need to be changed but setting up new tower for the same won't be easy.
- ✓ 5G requires augmentation for data transfer, this calls for creation of augmenting infrastructure as well as fundamental changes in core architecture of the communication system.
- ✓ Harmonization on standards is also required between India's own 5G standard and 3rd Generation Partnership Project (3GPP).
- ✓ Covid-19 has dented Indian economy which is on its recovery path but roll out of 5G will create financial liability on consumers.

Way-forward

- Designing of the spectrums will be important as it will not only help in making 5G pocket friendly for public at large but also reduce the cost burden of telcos.
- Middle path policy is required on the sensitive issue of pricing, TRAI's can play a crucial role in the doing the same.
- Schemes like Production Linked Incentives (PLIs) need to be promoted for domestic manufacturing of the hardware required for the 5G implementation. It will create a new tech-export avenues for India.

PEPPER IT WITH

Telecom Sector Reforms (2021), Internet of Things (IoT), Spectrum Usage Charges (SUC), India Semiconductor Mission Production-Linked Incentives)

- Focus must be on implementation of 5G is rural area to not only decrease digital divide but also provide effective governance and targeted delivery of benefits.
- Collaboration among key stakeholders in necessary to leverage 5G capabilities.

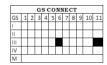


SECURITY

Prithvi-II Missile

News Excerpt

India successfully test-fired the indigenously developed and nuclear-capable Prithvi-II missile.



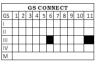
Salient Features

- A Short-Range Ballistic Missile, Prithvi-II is a proven system and is capable of striking targets with a very high degree of precision.
- Prithvi-II is capable of carrying 500-1,000 kilogram of warheads and is powered by liquid propulsion twin engines.
- The state-of-the-art missile uses advanced inertial guidance system with manoeuvring trajectory to hit its target.
- Already inducted into the armoury of Indian defence forces in 2003, the nine-metre-tall, single-stage liquid-fuelled "Prithvi" is the first missile to have been developed by the DRDO under the Integrated Guided Missile Development Programme (IGMDP).

Vertical Launch Short Range Surface to Air Missile (VL-SRSAM)

News Excerpt

Vertical Launch Short Range Surface to Air Missile (VL-SRSAM) was successfully flight-tested by Defence Research & Development Organisation and the Indian Navy.



Salient features

- The VL-SRSAM is a ship borne weapon system, is meant for neutralising various aerial threats at close ranges including sea-skimming targets.
- The development of this indigenous missile system will strengthen the defensive capabilities of the Indian Navy.
- · Two key features of the VL-SRSAM are cruciform wings and thrust vectoring-
- The cruciform wings are four small wings arranged like a cross on four sides and give the projective a stable aerodynamic posture. The thrust vectoring is an ability to change the direction of the thrust from its engine control with respect to the angular velocity and the attitude of the missile.
- VL-SRSAM is a canisterised system, which means, it is stored and operated from specially designed compartments. In the canister, the inside environment is controlled, thus making its transport and storage easier and improving the shelf life of weapons.

Operation Sankalp

News Excerpt

Third year of Indian Navy's Maritime Security Operations.

Significance

- Indian Navy's stealth Frigate, INS Talwar was deployed for Operation Sankalp (Op Sankalp) to commemorate the 3rd year of Indian Navy's presence in the Gulf of Oman for protection of India's Maritime Interests.
- In the milieu of the deteriorating security situation in the Gulf region, post attacks on merchant ships in the Gulf of Oman in June 2019, Indian Navy had commenced Maritime Security



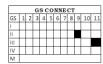
Operations, code named 'Op SANKALP', in the Gulf Region to ensure safe passage of Indian Flag Vessels transiting through the Strait of Hormuz.

- Indian Navy continues to monitor the situation in the Gulf region and is maintaining presence in the region to ensure security of our sea borne trade and the safety of Indian Flag Merchant Vessels transiting through the region.
- The Indian Navy stands committed to protection of the nation's Maritime Interests.

India-Indonesia Coordinated Patrol (IND-INDO Corpat)

News Excerpt

38th India-Indonesia Coordinated Patrol begins in Andaman Sea and Straits of Malacca.



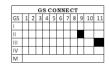
Significance

- The 38th India-Indonesia Coordinated Patrol (IND-INDO CORPAT) between the Indian Navy Units of Andaman & Nicobar Command (ANC) and Indonesian Navy was conducted in the Andaman Sea and Straits of Malacca.
- The 38th CORPAT is the first post pandemic Coordinated Patrol (CORPAT) between the two countries.
- It includes a visit by the Indonesian Navy units to ANC at Port Blair followed by a Sea Phase in the Andaman Sea and visit by IN Units to Sabang (Indonesia). As part of Government of India's vision of SAGAR (Security And Growth for All in the Region), Naval Component under the aegis of HQ ANC undertakes coordinated patrols with other littoral countries of the Andaman Sea along respective Exclusive Economic Zones (EEZ) towards enhancing regional maritime security.
- India and Indonesia have maintained close relations, covering a wide spectrum of activities and interactions which have strengthened over the years. The two Navies have been carrying out CORPAT along their International Maritime Boundary Line (IMBL) since 2002.
- This has helped build understanding and interoperability between both the Navies and has facilitated measures to prevent and suppress Illegal Unreported Unregulated (IUU) fishing, drug trafficking, maritime terrorism, armed robbery and piracy, etc.
- The IND-INDO CORPAT contributes towards forging strong bonds of friendship across the Andaman Sea and Straits of Malacca.

Ex-Sampriti-X

News Excerpt

India-Bangladesh joint military exercise "Ex-Sampriti-X" commenced in Bangladesh.



Pre-Connect

- As part of India Bangladesh bilateral defence cooperation, a joint military training exercise Ex SAMPRITI-X was conducted at Jashore Military Station in Bangladesh.
- Exercise SAMPRITI is an important bilateral defence cooperation endeavour conducted alternately by both countries which aims to strengthen and widen the aspects of interoperability and cooperation between both the armies.
- The aim of the exercise is to strengthen interoperability between the two armies and to understand each other's tactical drills and operational techniques.
- The Indian contingent of company strength is being represented by a Battalion of the DOGRA Regiment.



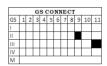
Significance

- > During the joint military exercise Ex SAMPRITI-X, armies of both the Nations will share expertise in multiple simulated scenarios of Counter Terrorism, Humanitarian Assistance & Disaster Relief and UN Peacekeeping Force under UN mandate.
- > The exercise was s progressively planned in such a manner that the participants will initially get familiar with each other's organisational structure and tactical drills. As the exercise progresses, joint tactical exercises will be conducted wherein the joint battle drills of both contingents will be practised.
- The exercise will culminate with a final validation exercise in which troops of both armies will jointly practice a Counter-Terrorism Operation in a simulated environment.
- In addition to sharing best practices and understanding each other at the tactical level, this exercise is an opportunity for greater cultural understanding to strengthen trust and cooperation between armies of both the Nations.
- The exercise will benefit both the armies by gaining from each other's vast experience which will further contribute to peace and stability in the region.

Ex Khaan Quest 2022

News Excerpt

Indian Army Contingent Participates In Multinational Joint Exercise "Ex Khaan Quest 2022" Hosted By Mongolia.



Significance

- A Multinational Peacekeeping exercise "Ex Khaan Quest 2022" featuring participation from military contingents from 16 countries has commenced in Mongolia.
- Indian Army was represented by a contingent from the LADAKH SCOUTS. The 14 day exercise is aimed at enhancing interoperability, building military to military relationships, developing peace support operations and military readiness among participating nations.
- The exercise enabled sharing of best practices between the Armed Forces of participating nations and will include field training exercises, combat discussions, lectures and demonstration.
- The military exercise will enhance the level of defence co-operation between Indian Army and participating countries especially with the Mongolian Armed Forces which will enhance bilateral relations between the two countries.

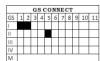


ART AND CULTURE

Buddha's Relics

News Excerpt

Four Holy Relics of Lord Buddha are being taken to Mongolia for an 11-day exposition to coincide with Mongolian Budhha Purnima celebrations.



Pre-Connect

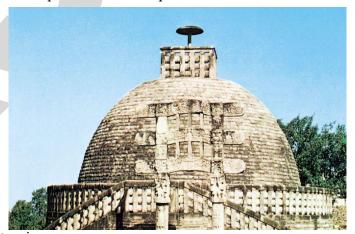
- The four relics come from among 22 Buddha relics, currently housed at Delhi's National Museum.
- Together, they are known as the 'Kapilvastu Relics' since they are from a site in Bihar believed to be the ancient city of Kapilvastu.
- The Kapilavastu relics are believed to contain Gautam Buddha's remains. The relics were found during excavations at Piprahwa in present-day Bihar.
- > The relics are to be displayed at the Batsagaan Temple in Gandan Monastery complex in Ulaanbaatar.
- > The last time these relics were taken out of the country was in 2012 when their exposition was held in Sri Lanka and were on display at several locations across the island nation. However, later guidelines were issued and the Holy Relics were placed under the 'AA' category of those Antiquities and Art Treasures which should not be ordinarily taken out of the country for exhibition, considering their delicate nature.

Buddha's Relics- A background

- ✓ The Buddha had instructed his followers to cremate his body as the body of a universal monarch would be cremated and then to distribute the relics among various groups of his lay followers, who were to enshrine them in hemispherical reliquaries called stupas.
- ✓ According to tradition, 10 sets of relics were enshrined, 8 from portions of the Buddha's remains, 1 from the pyre's ashes, and 1 from the bucket used to divide the remains. The relics were subsequently collected and enshrined in a single stupa.
- ✓ More than a century later, King Ashoka is said to have redistributed the relics in 84,000 stupas. The stupa would become a reference point denoting the Buddha's presence in the landscape of Asia.
- ✓ The importance given to the stupa suggests the persistence of the Buddha in the world despite his apparent passage into nirvana.
- ✓ Eight shrines are typically recommended for pilgrimage and veneration. They are located at the place of his birth, his enlightenment, his first turning of the wheel of dharma, and his death, as well as sites in four cities where he performed miracles.
- ✓ A stupa in Samkashya, for example, marked the site where the Buddha descended to the world after teaching the dharma to his mother (who died seven days after his birth) abiding in the Heaven of the Thirty-three Gods.

Buddhism in Afghanistan- Antagonism

• Buddhism spread to the Bamiyan valley, first during the Mauryan period under Asoka's rule (3rd century BCE) and later under the Kushan Empire (1st to 3rd century CE).





- Several attempts were made to date the site as well as the construction of the Buddhas and it was later deduced that the Eastern Buddha (544-595CE) was built earlier than the western Buddha (591-644CE) through carbon dating.
- The formation of the monastery is said to be dated back to 2nd century BCE, quite earlier than the construction of the Buddhas.
- Other than the statues the monastery has about 700 caves for housing travellers, pilgrim hostels and storage.
- The Buddhist period was first disrupted in 770CE and the region became Islamic for a short period of time. The second Buddhist phase started in 870 CE and the region was finally dominated by Islam in 977 CE.

Recent developments

- ♣ In March 2001 the Buddhas were blown to pieces by the Taliban to take down the 'gods of infidels. Where the once towering Buddhas used to stand, now there is just a gaping cavity in the space.
- ♣ Even Genghis Khan left the Buddhas standing when he destroyed the valley in the 13th century.
- The Bamiyan Buddhas were designated as World Heritage site in 2003 by the United Nations. The site was also put under the endangered sites list as there was a significant boom in tourism after the destruction of the Buddhas.

PEPPER IT WITH

Buddhism and its sects, Buddhism during Ashoka's reign

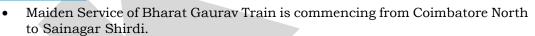
This leads to the question as to why the sites were only declared as world heritage after it witnessed such destruction. Its historical value was paramount even before the destruction of the Buddhas.

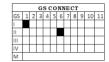
Bharat Gaurav Scheme

News Excerpt

Railways flags off country's first private train under Bharat Gaurav scheme.

Pre-Connect





- The services are offered by the Registered Service provider for an itinerary consisting of 5 days and it involves a full round trip from Coimbatore to Shirdi and back.
- Registered Service Provider will offer an inclusive package for tourists including AC accommodation, Bus transport, Special Darshan arrangements at Sainagar Shirdi and Tourist Guide.
- Bharat Gaurav Trains is Union Government Initiative under "Dekho Apna Desh" to promote Domestic Tourism.
- With this, Southern Railway becomes the first zone in Indian Railways to get the first Registered service provider under the 'Bharat Gaurav' Scheme and commence the operations of the maiden service from Coimbatore North to Sainagar Shirdi.

Other features of the train service are:

- > There will be a Doctor on board to attend any emergency.
- > There are Private securities engaged along with the Railway Police Force to protect us from any kind of harm.
- There will be on board electricians and AC Mechanic and Fire and Safety Officers.



- > The train is maintained by branded housekeeping service providers who will clean the utility areas on frequent intervals and the caterers are experienced and rich in holding the traditional vegetarian menus.
- > The coaches are fitted with high bass sounding speakers and an on-rail Radio Jockey to keep the passengers entertained during the journey. There will be **devotional songs**, spiritual stories and live interviews to keep the journey pleasant.
- ➤ Completely Toxic-free and Smoke-free.

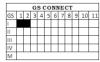
Bharat Gaurav Trains

- ✓ Indian Railways had launched the operation of theme-based Bharat Gaurav train in the month of November 2021. The objective of this theme is to showcase India's rich cultural heritage and magnificent historical places to the people of India and the world, through Bharat Gaurav Trains.
- ✓ This scheme also aims to leverage the core strengths of the professionals of the tourism sector to run theme-based trains to tap the vast tourist potential of India.
- ✓ At present, IRCTC is already running several tourist circuit trains in Railways. With introduction of this policy, all tourist circuit trains w.e.f 01-04-2022 shall be operated as per the guidelines issued under this policy.
- ✓ This Bharat Gaurav scheme will now help in roping in of more tour operators with professional experience and will give boost to tourism sector in the country.

Sant Tukaram

News Excerpt

Prime Minister inaugurated a shila (rock) temple at the Sant Tukaram Maharaj Mandir.



Pre-Connect

- Sant Tukaram was a Warkari saint and poet, famously known for Abhanga devotional poetry and community-oriented worship through spiritual songs known as Kirtans.
- He lived in Dehu.
- A Shila Mandir was built after his demise, but it was not formally structured as a Temple. It has been rebuilt in stone masonry with 36 peaks, and also carries an idol of Sant Tukaram.
- The site for centuries has been the starting point of the *Wari* the annual pilgrimage to the shrine of Lord Vithoba in Pandharpur made by devotees (*warkaris*) carrying palanquins bearing the footprints of the Bhakti saints Dnyaneshwar (from Alandi) and Tukaram (from Dehu).

Sant Tukaram- Background

- Sant Tukaram Maharaj, also known as Tuka, Tukobaraya, and Tukoba in Maharashtra, was a 17th-century Marathi poet and Hindu sant. In Maharashtra, India, he was a Sant of the Varkari sampradaya.
- > He was a follower of the Varkari devotionalism tradition, which was egalitarian and personalised.
- ➤ He devoted the most of his final years in spiritual worship, community kirtans (singing group prayers), and Abhanga poetry composition.





- Tukaram's kiratans and Abhangs exposed the evils of the time's society, social system, and Maharajs. As a result of this, he encountered some resistance from society and some individuals.
- Tukarama mentions four more people in his Abhangas work who had a major influence on his spiritual development: the previous Bhakti Sants Namdev, Dnyaneshwar, Kabir, and Eknath.
- Tukaram's teachings were regarded Vedanta-based but lacked a systematic theme by early twentieth-century scholars.

International Literature Festival-Unmesha

News Excerpt

Unmesha- an International Literature Festival organised in Shimla.

Highlights of the event

- The Ministry of Culture, Government of India, and Sahitya Akademi organised Unmesha, an International Literature Festival in Shimla as part of Azadi ka Amrit Mahotsav celebrations, with the support of Department of Art and Culture, Government of Himachal Pradesh.
- The festival was organised in the heritage buildings, the Gaiety Heritage Cultural Complex and the Town Hall, on the Ridge, Shimla.
- The inaugural session took place in the main auditorium of Gaiety Theatre.
- Literature of any country represents and reflects culture of that country. Literary Festivals bring out these reflections and representations in all their colours.
- That is the reason why the Ministry of Culture and Sahitya Akademi organized this Festival. With over 425 writers, poets, translators, critics and distinguished personalities from various walks of life from 15 countries including India, representing over 60 languages and 64 events.
- UNMESHA International Literature Festival is the largest literature festival in the country.
- The event is free for public on all the days during the festival. There is display of about 1000 books related to the Indian freedom movement and the publications of five Indian publishers for sale.

Thang-ta

News Excerpt

Martial arts of Manipur-Thang-ta (sword and spear) flourishing in Kashmir.

Pre-Connect

- Manipuri martial art is called Thang-Ta (sword and spear). It is dedicated to fighting skill and worship.
- It is popular term for the ancient Manipuri Martial Art known as HUYEN LALLONG. The art developed from the war environment of the tiny state of Manipur in North-east India, which was an independent kingdom since the early Christian era.
- It played an important role in the geopolitical environment of medieval times in between India and China with many independent states at war with each other.

Thang-ta and cosmic relation

- The art of the battle and the use of weaponry, when its warlike engagements were over, developed into a system of wielding objective elements in organic relationship with the cosmos.
- > The body itself became a space where the tensions and dynamics of creation was worked out in a system of movements reflecting the essence of these creative forces. The whole world of the dynamic cosmos was recreated within the world of the body of man.



- ➤ THANG TA (The art of sword and the spear) thus became an expressive art form which however retained its fighting character at the secret home schools of individual teachers or Gurus, after being prohibited during the period of the colonial raj (1891-1947)
- > The movement behaviour of the different parts of the Manipuri martial body are derived from the cultural and habitual uses of daily life. Certain extra-daily postures, positions and movements are compiled into codes adding to the natural repertoire.

Physical Characteristics in Customary Usage and Ritual Practice

- ✓ **Khurumba (the bow)** where the forward/downward flexion of the relaxed spine is used.
- ✓ **Tha Leiba** -Rotation and tilts of the pelvic joint in different angles while supporting the torso in regular curvilinear uses are most common. The half turn of the chest are also common.
- ✓ **Thong khong (bridge support)** The squat is also a familiar use of the lowering of the upper extremities nearer to the ground, where the two legs in deep bent position support the whole body, thereby proximally utilizing the use of the upper extremities at the ground level.
- ✓ **Wai teiba** a daily ritual of cleaning the floor by women. Women use a different flexible squat system with the bent knees opened out to enable the forward flexion of the torso or spine. The hand uses the washcloth with more space at her command while rubbing the floor.
- ✓ **Thang (Art of the sword)** emphasizes
 Phidup (coil), lowering of one's body near to
 the ground to enable a spring action for expansion and attack.
- ✓ **TA (Spear)** emphasizes PHANBA, an opening out of the body with two forms, NONGPHAN to stimulate the expanse of the sky, and the LEIPHAL emulating the expanse of the earth at the ground level in order to reach out to all directions of space.





MISCELLANEOUS

Dak Karmayogi Portal

• Dak Karmayogi portal is an E-Learning platform launched to enhance competencies of about 4 lakh Gramin Dak Sevaks & Departmental employees.



• This portal will enable trainees to access uniform standardized training content to enable them to effectively deliver a number of G2C services for enhanced customer satisfaction.

• This portal has been developed 'In-House' under vision of 'Mission Karmayogi', which was conceptualized by Prime Minister with a view to bring efficiency in actions of all the employees of Government of India and transforming efficiency of bureaucracy with 'Minimum Government' and 'Maximum Governance'.

Significance

- 'Dak Karmayogi' portal will enhance the competencies of about 4 lakh Gramin Dak Sevaks & Departmental employees by enabling the trainees to access the uniform standardized training content online or in blended campus mode to enable them to effectively deliver a number of G2C services for enhanced customer satisfaction.
- On successful completion of final summative assessment, a system generated course completion certificate will be sent on trainee's registered email ID automatically. Trainees can give their feedback, ratings and suggestions for each and every video and other learning content so that necessary enrichment can be ensured.
- To recognise the good performance of employees of Department of Posts and motivate them to maintain or improve their good work, Meghdoot Awards were also conferred in eight different categories.

International Yoga Day-2022

- Prime Minister of India led mass yoga event in Mysuru.
- Yoga is considered as India's gift to humanity and it is a holistic approach to health and wellbeing, balancing mind, body and soul.
- Recognizing its universal appeal, on 11 December 2014, the United Nations proclaimed 21 June as the International Day of Yoga by resolution 69/131.
- The International Day of Yoga aims to raise awareness worldwide of the many benefits of practicing yoga.
- People around the world embraced yoga to stay healthy and rejuvenated and to fight social isolation and depression during the pandemic.
- Yoga is also playing a significant role in the psycho-social care and rehabilitation of COVID-19 patients in quarantine and isolation.
- In addition to the human suffering, the COVID-19 pandemic has also highlighted several key vulnerabilities of the economic and developmental models of countries around the world. Future prosperity demands that the member states rebuild differently as they recover from the COVID-19 pandemic.
- Yoga can be an important instrument in the collective quest of humanity for promoting sustainable lifestyle in harmony with planet Earth. In keeping with this spirit, the theme for this year's Yoga Day celebrations is "Yoga for Humanity."
- Interestingly, Indian Prime Minister suggested June 21 as the International Day of Yoga at a UN address in 2021 since that was the longest day in the Northern Hemisphere. Also,



Christmas happens around the day of the summer solstice in Australia and other countries in the southern hemisphere.

Summer Solstice-2022

- June 21 is the day of the summer solstice in the northern hemisphere. The summer solstice marks the beginning of the astronomical summer and occurs when the earth's northern hemisphere has its maximum tilt towards the sun.
- For temperate regions, the summer solstice is when the sun reaches its highest point in the sky.
- The Earth orbits the sun at an angle. So for half the year, the Northern Hemisphere is tilted towards the Sun and therefore, it is summer for the Northern hemisphere and winter for the Southern Hemisphere.
- During the other half of the year, the Northern Hemisphere is tilted away from the sun, thus creating winter in the Northern Hemisphere and summer in the south.
- Solstices happen twice per year: one for the winter and one for the summer and this is interchanged depending on which Hemisphere one lives in.
- The longest day of the year happens on the day of the summer solstice in northern hemisphere since the norther hemisphere of earth receives the longest period of daylight during the day.

Startup for Railways

- Railway Innovation Policy "Start Ups for Railways" launched. This policy will bring scale and efficiency in the field of operation, maintenance and infrastructure creation through participation of very large and untapped startup ecosystem.
- Through this platform start ups will get a good opportunity to connect with Railways. Out of over 100 problem statements received from different divisions, field offices/zones of Railways, 11 problem statements like rail fracture, headway reduction etc. have been taken up for phase 1 of this program. These will be presented before the start ups to find innovative solutions.

Salient details of Indian Railway Innovation Policy are as under: -

- ➤ Grant up to Rs. 1.5 Crore to innovator on equal sharing basis with provision of milestone-wise payment.
- Complete process from floating of problem statement to development of prototype is online with defined time line to make it transparent and objective.
- > Trials of prototypes will be done in Railways. Enhanced funding will be provided to scale up deployment on successful performance of prototypes.
- > Selection of Innovator/s will be done by a transparent and fair system which will be dealt through online portal inaugurated today by Minister of Railways.
- Developed Intellectual property rights (IPR) will remain with innovator only.
- > Assured developmental order to innovator.
- > De-centralization of complete product development process at divisional level to avoid delays.



Concept Clearing Assignment

- 1. The tendency of law enforcement agencies to pronounce verdicts and dispense punishment, without going through due process, signals a setback to the quest for a more humane justice system. Comment.
- 2. Examine the role played by primary health care in India. Discuss the challenges faced by ASHA workers.
- 3. In the recently released Environment Performance Index-2022, India was at the bottom among 180. What steps should India take to promote environmentally secure and equitable future?
- 4. India, with its diverse soil and climate conditions and varied agro-ecological regions, provides a possibility to grow a large number of horticultural crops. What role can emerge technologies such as the Internet of Things (IoT), Artificial Intelligence (AI), Machine Learning (ML), Blockchain, etc., could play to enhance the horticulture production?
- 5. The millions of tons of plastic swirling around the world's oceans have garnered a lot of media attention recently. But plastic pollution arguably poses a bigger threat to the plants and animals including humans, who are based on land. Analyse.
- 6. Digital access to education has gained a lot of attention due to Covid pandemic. Evaluate the steps taken by government in this regard and what should be the way forward?
- 7. In 2019, nearly a billion people including 14% of the world's adolescents were living with a mental disorder (World Mental Health Report: WHO). What India must do to solve this crisis?
- 8. What were the social conditions that led to the rise of Bhakti Movement during medieval times? What impact it had on the society?
- 9. The concept for space weaponization came up in the early 1980s through the "Strategic Defence Initiative" (SDI) of the United States. Discuss the issues of Militarisation and Weaponization of Space.
- 10. Recently USA has taken several steps to re-energise and revitalise American partnerships across the world. Evaluate the statement in light of recently founded I2U2 initiative.
- 11. An independent, sovereign, democratic, pluralistic and inclusive Afghanistan is crucial for peace and stability in the region. The American mission in Afghanistan came to a tragic and chaotic end. Evaluate the need for a joint effort to resolve Afghan crisis in light of recent UNSC report on Taliban.
- 12. Urban co-operative banks do useful work in mobilising deposits and financing the sector of small borrowers such as small-scale industries, professionals, retailers and so on. What are the problems associated with UCBs and suggest the way forward?
- 13. Surety bonds are the key to infrastructure financing and hold promising future in India. Evaluate.
- 14. In recent times, the Governor has been acting more of an 'agent of the centre' rather than being the 'constitutional head of state? Analyse.
- 15. India-Bangladesh relations today are deeper than any other strategic partnership. It is a role model for relations between two neighboring countries. Critically evaluate.



PT Oriented Questions

- 1. Which of the following conditions are qualify as defection under the anti-defection law?
 - 1. Voluntarily renunciation of membership
 - 2. Independently Elected members joins the political party.
 - 3. Nominated member joins the political party after 6 months.

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
- 2. Consider the following statements regarding the Urban Co-operative Banks (UCBs):
 - 1. These banks are allowed to lend money only for non-agricultural purposes.
 - 2. UCBs are registered and governed by the respective states' cooperative societies acts as well as the Banking Regulation Act of 1949.

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
- 3. With reference to Periodic Labour Force Survey for July 2020 to June 2021, consider the following statements:
 - 1. The unemployment rate in rural areas is more than that of urban area.
 - 2. According to the survey there is an increase in work population rate.
 - 3. Employment in the unpaid selfemployed category continued to show an increase.

Which of the 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

- 4. With reference to Neobanks, consider the following statements:
 - 1. Neobanks are financial institutions that give customers a cheaper alternative to traditional banks.
 - 2. These firms don't have a bank licence of their own but rely on bank partners to offer licensed services.

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. Consider the following statements regarding the Public Financial Management System (PFMS):
 - 1. PFMS is a web-based online software application developed and implemented by the Controller General of Accounts (CGA).
 - 2. Direct payment to beneficiaries under all Schemes is done through PFMS.

Which of the statements given above is/are incorrect?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 6. With reference to Surety Bond, Consider the following statements:
 - 1. Advance Payment Bond is a promise by the Surety provider to pay the outstanding balance of the advance payment in case the contractor fails to adhere to the scope of the contract.
 - 2. Bid Bond provides assurance to the public entity, developers, subcontractors and suppliers that the contractor will fulfil its contractual obligation.
 - 3. Performance Bond provides assurance that the obligee will be



protected if the principal or contractor fails to perform the bonded contract.

Which of the 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
- 7. With reference to Leadership Group for Industry Transition (LeadIT), consider the following statements:
 - 1. LeadIT gathers countries and companies that are committed to action to achieve the goals of the Minamata Agreement.
 - 2. LeadIT also supports governments and industries to co-produce stakeholder-led pathways to low carbon industry transformation.

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
- 8. Which of the following countries are on the The Financial Action Task Force (FATF) grey list?
 - 1. Uganda
 - 2. South Africa
 - 3. Pakistan
 - 4. Myanmar

Select the correct answer using the code given below:

- (a) 2 and 3 only
- (b) 1, 3 and 4 only
- (c) 1, 2 and 4 only
- (d) 1, 2, 3 and 4
- 9. Consider the following statements regarding the United Nation Security Council (UNSC):
 - 1. Under the Charter of the United Nations, all Member States are obligated to comply with Council decisions.
 - 2. The Security Council takes the lead in determining the existence of a threat to the peace or act of aggression.

3. Security Council can resort to imposing sanctions or even authorize the use of force to maintain or restore international peace and security.

Which of the 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 about Arctic Council:
 - 1. It is a high-level intergovernmental body set up in 1996 by the Ottawa declaration.
 - 2. Its Secretariat is located in Quebec, Canada.
 - 3. India has Observer status in Arctic Council.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- 11. With reference to Environment Performance Index 2022, Consider the following statements:
 - It is published by the IUCN in coordination with Yale Center for Environmental Law and Policy and the Center for International Earth Science Information Network
 - 2. India scored better in 2022 Environment Performance Index (EPI) as compared to last year.

Which of the statements given above is/are incorrect?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 12. Consider the following statements about Keibul Lamjao National Park:
 - 1. It is the only floating park in the world.
 - 2. It is characterized by floating decomposed plant material locally called phumdi.



3. The sangai is an endemic and endangered subspecies of Eld's deer found only in Manipur.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- 13. Consider the following statements:
 - 1. Global Partnership on Marine Litter (GPML) was launched at the Earth Summit in 2012 under the Manila Declaration.
 - 2. Plastic Waste Management (Amendment) Rules 2018 introduced the concept of Extended Producer Responsibility (EPR) in India.

Which of the statements given above are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 14. Which of the following are benefits of Horticulture?
 - 1. Reduces Pollution
 - 2. Acts as recreational areas
 - 3. Cheap Inputs
 - 4. High employment generation

Select the correct answer using the code given below:

- (a) 2 and 3 only
- (b) 1, 2 and 4 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4
- 15. Consider the following statements:
 - 1. New Space India Limited deals with capacity building of local industry for space manufacturing.
 - 2. Indian National Space Promotion and Authorization Centre (IN-SPACe) provides a level playing field for private companies to use Indian space infrastructure.
 - 3. Antrix is ISRO's commercial arm which deals for satellites and launch vehicles with foreign customers.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- 16. Consider the following statements about Outer Space Treaty of 1967:
 - 1. The treaty prohibits countries from placing any weapon into orbit around the Earth.
 - 2. India is not a party to the Outer Space Treaty.

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
- 17. Consider the following statements about 5G technology:
 - 1. The 5G network operates in the millimetre-wave spectrum (30-300 GHz)
 - 2. It works only on High-band spectrum
 - 3. It has very low latency which is predicted to be below 10 milliseconds, and in best cases around 1 millisecond.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- 18. Consider the following statements about Prithvi-II Missile:
 - 1. It is a Short-Range Ballistic Missile, Prithvi-II is a proven system and is capable of striking targets with a very high degree of precision.
 - 2. It is a state-of-the-art missile that uses advanced inertial guidance system with manoeuvring trajectory to hit its target.

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
- 19. Sea of Marmara connects:
 - (a) Black Sea and Aegean Sea
 - (b) Black Sea and Thracian Sea
 - (c) Aegean Sea and Thracian Sea
 - (d) Thracian Sea and Mediterranean Sea
- 20. Recently held, Ex-Sampriti-X is a joint military exercise between:
 - (a) India and Sri Lanka
 - (b) India and Bangladesh
 - (c) India and Vietnam
 - (d) China and Pakistan
- 21. Consider the following statements about Sant Tukaram:
 - 1. Sant Tukaram was famously known for Abhanga devotional poetry.
 - 2. Shila Mandir is a temple dedicated to a slab of stone (shila) on which Sant Tukaram meditated.

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. Consider the following pairs:

Martial Arts State

- (1) Silambam Tamil Nadu
- (2) Kalaripayattu Kerala
- (3) Gatka Punjab
- (4) Thang-Ta Nagaland
- (5) Pari Khanda Orissa

Which of the pairs given above are correctly matched?

- (a) 1, 2 and 3 only
- (b) 3, 4 and 5 only
- (c) 1, 2 and 4 only
- (d) 1, 2, 3, 4 and 5
- 23. SHRESHTA Scheme is a -
 - (a) Residential Education scheme for Students in High school in Targeted Areas
 - (b) Social Security scheme for SC/ST
 - (c) Social security scheme for Divyangs
 - (d) Online schooling scheme for rural children

- 24. Consider the following statements regarding the powers of the governor:
 - 1. Article 174 of the Constitution gives powers to the Governor to dissolve the Assembly on the aid and advice of the cabinet.
 - 2. Under Article 175(2), the Governor can summon the House and call for a floor test.

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. Consider the following statements regarding the Composition of the Legislative Council:
 - 1. One-third members of the House are elected by the Legislative Assembly.
 - 2. One-third of members are nominated by the president of India.
 - 3. One-twelfth of the members are elected by graduates.

Which of the statements given above is/are correct?

- (a) 1 and 3 only
- (b) 2 and 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3
- 26. Which one of the following objectives is not embodied in the Preamble to the Constitution of India? (UPSC 2017)
 - (a) Liberty of thought
 - (b) Economic liberty
 - (c) Liberty of expression
 - (d) Liberty of belief
- 27. With reference to the Indian freedom struggle, consider the following events: (UPSC 2017)
 - 1. Mutiny in Royal Indian Navy
 - 2. Quit India Movement launched
 - 3. Second Round Table Conference What is the correct chronological sequence of the above events?
 - (a) 1-2-3



- (b) 2-1-3
- (c) 3-2-1
- (d) 3-1-2
- 28. With reference to the cultural history of India, which one of the following is the correct description of the term 'paramitas'? (UPSC 2020)
 - (a) The earliest Dharmashastra texts written in aphoristic (sutra) style.
 - (b) Philosophical schools that did not accept the authority of Vedas.
 - (c) Perfections whose attainment led to the Bodhisattva path
 - (d) Powerful merchant guilds of early medieval south India.
- 29. With reference to Ocean Mean Temperature (OMT), which of the following statements is/are correct? (UPSC 2020)
 - 1. OMT is measured up to a depth of 26°C isotherm which is 129 meters in the south-western Indian Ocean during January March.
 - 2. OMT collected during January March can be used in assessing whether the amount of rainfall in

monsoon will be less or more than a certain long-term mean.

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. Consider the following statements: (UPSC 2018)
 - 1. The Reserve Bank of India manages and services Government of India Securities but not any State Government Securities.
 - 2. Treasury bills are issued by the Government of India and there are no treasury bills issued by the State Governments.
 - 3. Treasury bills offer are issued at a discount from the par value.

Which of the statements given above is/are correct?

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

ANSWERS

1. D	11. C	21. C
2. B	12. D	22. A
3. B	13. C	23. A
4. C	14. B	24. C
5. D	15. D	25. A
6. C	16. D	26. B
7. B	17. B	27. C
8. B	18. D	28. C
9. D	19. A	29. B
10. B	20. B	30. C
	1	