

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

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

POLITY

Marital Rape

News Excerpt

A two-judge bench is listening to petitions from 2015 asking for non-consensual sex in a marriage to be treated as rape.

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Pre-Connect

- Since January, a two-judge bench of the Delhi High Court has been conducting hearings of a clutch of petitions asking for the marital rape exception under the Indian Penal Code to be struck down.
- India remains one of the few countries in the world that does not treat non-consensual sex within marriage as rape.
- One of the primary issues being considered is whether marriage gives the husband an expectation of sexual relations and if there is implied consent for sex by the wife. Since marital rape is not treated as rape now, it would be if the court reads down the exception.

What is in contention here?

- Section 375 of the Indian Penal Code says that sexual acts by a man on a woman against her free will or consent would constitute rape. However, there are two exceptions to this. The first exception says that “a medical procedure or intervention shall not constitute rape”.
- As per the second exception, “sexual intercourse or sexual acts by a man with his own wife” when the wife is above 18 years of age would not constitute rape. It is this provision that is being constitutionally tested.
- While marital rape is not a criminal act in India, a woman could file a case under other provisions of the Indian Penal Code, such as cruelty, and could also file for a divorce.
- The petitioners want the exception to be struck down in totality, on the grounds that this exception violates the fundamental rights of married women.

Why is there an exception for marital rape in Indian law?

- ✓ The Indian Penal code was enacted in 1860 under British colonial rule. In the hearings petitioners argued that the marital rape exception was premised on archaic concepts.
- ✓ In England, there had been a long-standing “doctrine of coverture”. As also noted by the Supreme Court while decriminalising adultery in 2018, this doctrine meant that the husband and wife were one person after marriage and “the very being or legal existence of the woman is suspended during the marriage, or at least is incorporated and consolidated into that of the husband”. As a consequence, a woman could not perform activities against her husband’s wishes, such as buying property or entering into a contract.
- ✓ In addition, as noted in a case in England from 1707, “in return for support and protection, the wife owed her husband a ‘consortium’ of legal obligations, which included sexual intercourse”.
- ✓ One of the first instances of the exception of marital rape appears in what is known as Hale’s doctrine. It says that “the husband cannot be guilty of a rape committed by himself upon his lawful wife, for by their mutual matrimonial consent and contract: the wife has given up herself in this kind unto her husband, which she cannot retract”.
- ✓ When the Indian Penal Code was being drafted in British India, it was due to notions such as these that marital rape found an exception in the definition of rape.

The petitioners’ positions

- The petitioners’ argument is that the exception to marital rape should be struck down because it is unconstitutional. It violates a married woman’s right to equality, the right to life with dignity and the right to self-expression, all of which are guaranteed under the Constitution. They point

out that this provision also creates an anomaly, where slapping or killing one's, wife is criminal but not raping her.

- They also argue that concerns of misuse in case the exception is struck down are misplaced since only a minuscule percentage of the reported rapes turn out to be false.

The respondents' positions

- ✚ The Union government recently said that it is already contemplating an overhaul of the entire criminal law framework and has invited suggestions from all stakeholders. This is in contrast to its earlier stance: in 2017, the Centre had told the court in the same case that removing the marital rape exception would destabilise the institution of marriage and would be used to harass husbands.
- ✚ Delhi government has told the court that remedies for marital rape are already present under the Indian Penal Code under offences such as cruelty and grievous hurt. It said that striking down this exception would lead to the creation of a new offence, something that is outside the powers of the court.
- ✚ Two amici curiae, appointed in the case have told the court that the exception should be struck down. However, some men's rights groups have opposed striking down the marital rape exception.

Analytica

- A fundamental question that the court has asked is whether striking down the exception of marital rape would create a new offence, since husbands who have non-consensual sex with their wives could be convicted for rape.
- The petitioners argue that striking down the marital rape exception does not create a new offence. The offence of rape already exists in Section 375. What removing the exception would do is just remove the protection married men receive from being prosecuted for rape.
- The Supreme Court, when raising the age for the marital rape exception from 15 to 18 years, noted that "by partly striking down Section 375 IPC, no new offence is being created".
- Petitioners rely on a decision of the United Kingdom's highest court from 1991, striking down implied sexual consent in marriage does not lead to creating a new offence. Parties challenging this maintain that the function of criminalising marital rape should come from the legislature and not the judiciary.
- Legal academics have pointed out that striking down the exception only removes an immunity that is based on unconstitutional grounds for married men to avoid prosecuted for marital rape.

PEPPER IT WITH

Right to equality, The
right to life with dignity,
Right to self-expression

Conclusion

Research indicates a need for those who come into contact with marital rape survivors, police officers, health care providers, religious leaders, advocates and counselors to comprehensively address this problem and provide resources, information and support. Those who work in batterers' intervention programs should also work to eliminate marital rape and to comprehensively address sexual violence.

Vulnerable Witness

News Excerpt

Supreme Court expanded the definition of "vulnerable witness" in a criminal case, which earlier used to be a child below the age of 18, to include age and gender-neutral victims of sexual assault and witnesses suffering from mental illness among others.

Pre-Connect

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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

- The definition of “vulnerable witnesses” would now also include those with speech or hearing impediments and a “person suffering from any other disability who is considered to be vulnerable by court concerned.”
- A Bench of SC issued the new guidelines while hearing a plea on protection of vulnerable witnesses in compliance with a 2018 Supreme Court verdict.
- In the 2018 case, the Supreme Court had issued directions for setting up special centres for examining vulnerable witnesses in criminal cases to create a “conducive environment” which would allow them to make statements before the court.

Highlights

- A bench of the SC has appointed former Chief Justice of Jammu and Kashmir High Court Gita Mittal as chairperson of the committee for designing and implementing an all-India Vulnerable Witness Deposition Centre (VWDC) training programme for managing such centres and sensitizing all the stakeholders including judicial officers, members of the bar and staff of the court establishments.
- The definition of "vulnerable witness" contained in clause 3 of the VWDC scheme formulated by the Delhi High Court shall not be limited to child witnesses, who have not attained the age of 18 years and would be expanded, while including the categories of age-neutral victims of sexual assault, gender-neutral victims of sexual assault, witnesses suffering from mental illness and any witness deemed to have threat perception under the witness protection scheme of 2018 of the Union government.
- Upon the estimation of the costs by the VWDC committee of each High Court, the state government shall expeditiously sanction the requisite funds not later than within a period of three months from the date of submission of the proposals and disburse the same to the High Court in accordance with the plan.

What makes for a good Witness Protection Programme

Independence

Investigative units separate from protection mechanisms to avoid compromising sensitive information

Neutrality

Witnesses' role, as victim, bystander or collaborator with authorities should not be the criteria for protection

Inclusivity

Protection not confined to witnesses and victims, but to include staff, intermediaries and individuals at risk due to their role in a case

Holistic approach

All agencies involved to work in tandem to ensure an efficient mechanism
Informed consent
Risks involved explained to witnesses and their free and informed consent obtained

Witness-focussed

Protective measures to be proportionate to the risk and taken with the best interest of the witness



Fairness to suspects and defendants

Balance the protective measures with the rights of the accused, which includes right to a fair trial

Clarity

A framework that provides for understanding of all parties on the available protection measures

Transparency and accountability

Performance of programme reviewed through an external independent authority

Transgender persons to get separate jail wards, facilities

Transgender inmates will soon get a separate enclosure/ward in prisons to ensure their right to privacy and dignity. While providing exclusive space for transmen and transwomen in correctional facilities, prison officials will ensure that they are not completely isolated from others.

A person recognised as a transgender had the right to the self-perceived gender identity under the Transgender Persons (Protection of Rights) Act, 2019. While respecting the self-identity at all times in admission procedures, medical examination, search, lodging, clothing, treatment and care, the jail officials should facilitate their access to the identity certificate by helping them apply/register on the national portal for them.

Search protocol

There is a procedure for searches suggesting that they be carried out by a person of their preferred gender or by a trained medical professional or a paramedic trained in conducting searches. The person conducting the search must ensure the safety, privacy and dignity of the person being searched. At the stage where the search procedure requires stripping, it must be done in a private room or in a partitioned place. The search procedure should be confined to compliance with security protocols and restriction of contraband and should not be aimed at determining the gender of the person.

- The High Courts shall ensure that at least one permanent VWDC is set up in every district court establishment within a period of four months and the registrar general shall file compliance reports with this court. Several other guidelines were also issued by the top court in order to facilitate efficient working of VWDCs on the suggestion of amicus curiae and in coordination with the Union Ministry of Women and Child Development and respective ministries of the States.
- Court have referred to a verdict of 1996 in which the top court had passed similar directions, then in 2004 and in 2017, when it had asked all the High Courts of the country to adopt the guidelines prepared by the Delhi High Court in 2017 for vulnerable witnesses.
- The Bar suggested for implementation and setting up of “Vulnerable Witness Deposition Centres” at all High Courts. The vulnerable witness scheme deposition may be placed under National Legal Services Authority. There can be a Vulnerable Witness Deposition Centre, every High Court should have such a kind of vulnerable witness deposition centre. There also needs to be continuous training which will be an ongoing subject.
- Based on the suggestions, the court ordered that all High Courts should adopt and notify a Vulnerable Witness Deposition Centre scheme within two months of the order. Every High Court should set up a permanent Vulnerable Witness Deposition Centre Committee.
- Setting up of one centre for vulnerable witnesses may be required in almost every district in the country. All the High Courts may take appropriate steps in this direction in due course in phases. Thereafter, more such centres may be set up as per the decision of the High Courts, the top court had directed in the year 2017.
- The Ministry of Women and Child Development shall designate a nodal officer for coordinating the implementation of these directions and facilitating logistical support. All such ministries on the state level shall provide financial support.
- The top court directed all the High Courts to adopt and notify a Vulnerable Witness Deposition Centre (VWDC) scheme within two months from the date of order unless a scheme has already been notified.

PEPPER IT WITH
Salient Features of the
Whistleblower Protection
Act, Salient Features of the
Right to Information Act

Conclusion

- ✓ There is the need for the importance of setting up special facilities which cater to the creation of a safe and barrier-free environment for recording the evidence of vulnerable witnesses, have been engaging court's attention over the last two decades.

Election Spending Limit

News Excerpt

Election Commission has enhanced the existing election expenditure limit for candidates in Parliamentary and Assembly constituencies. These limits will be applicable in all upcoming elections.

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Pre-Connect

- The ceiling on parliamentary poll expenditure has been raised from 70 lakh to 95 lakh rupees in bigger states and 54 lakhs to 75 lakhs in smaller states.
- Expenditure limit refers to the amount a candidate is allowed to legally spend on election campaigning, including public meetings, rallies, advertisements, posters and banners, and

vehicles. All candidates are required to submit their expenditure statement to the EC within 30 days of completion of an election.

- For Assembly constituencies, expenditure limits have been enhanced from 28 lakh rupees 40 lakh rupees in bigger states and from 20 lakhs to 28 lakhs in smaller states.
- Last major revision in the election expenditure limit was carried out in 2014, which was further increased by 10 percent in 2020. EC had formed a committee to study the cost factors and other related issues, and make suitable recommendations.

The Cost Inflation Index (CPI) — used to estimate the increase in prices of goods and assets year-on-year due to inflation — has gone up from '240' in FY 2014-15 to '317' in current FY. The CPI indicates the fall in purchasing power (quantity of goods that one unit of money can buy)

Analytica

- The EC had set up a committee in 2020, to consider the change in the expense limits, and it invited suggestions from political parties, Chief Electoral Officers and Election Observers.
- The primary reasons for the revision were a rise in the number of electors and the Cost Inflation Index. The committee also took into account the plea by political parties regarding the added expense they had to bear of digital campaigning on account of Covid.
- The number of total voters in the country has increased from 834 million in 2014 to 936 million now. This means that each candidate is canvassing for a much larger group of electors. Accordingly, in case of Assembly elections, a candidate can now, as per the EC limit, spend Rs 40 lakh in the big states, while the limit for smaller states is Rs 28 lakh, up from Rs 20 lakh.
- This is the first major revision in the election expenditure limit for candidates since 2014. In 2020, the Ministry of Law and Justice notified an amendment in Rule 90 of the Conduct of Elections Rules, 1961, which enhanced the then expenditure limit for Assembly elections, as the Bihar polls approached, by 10%.
- As per the Representation of the People Act (RPA), 1951, Section 77, every candidate must keep an account of all expenditure incurred from the date on which they are nominated to the date of declaration of the result. Section 10A of the Act states that an incorrect account or expenditure beyond the cap can lead to disqualification of a candidate for up to three years.
- Parties are allowed to issue a list of star campaigners, the money spent on whom is credited to the party's account rather than the candidates.

Conclusion

It has often been argued by political parties that the limit on the legal expenditure of candidates is not realistic. A report by the Association for Democratic Reforms (ADR) in July 2021, analysing election expenditure statements of 538 of 543 MPs elected in 2019, showed that they had on paper spent an average amount of Rs 50.84 lakh, or 73% of the expense limit. There is incidentally no limit on how much a political party can spend on elections, but they have to submit a statement of their expenditure to the EC within 90 days of completion of the elections.

PEPPER IT WITH

Representation of the People Act, 1950, Representation of the People Act, 1951, Delimitation Act, 2002

Lok Adalat

News Excerpt

Supreme Court has ruled that Lok Adalats are not courts as it does not resort to judicial adjudication in resolving disputes.

Pre-Connect

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- The Lok Adalat is a forum where the cases (or disputes) which are pending in a court or which are at pre-litigation stage (not yet brought before a court) are compromised or settled in an amicable manner.
- The Supreme Court has explained the meaning of the institution of Lok Adalat as: The 'Lok Adalat' is an old form of adjudicating system prevailed in ancient India and its validity has not been taken away even in the modern days too.
- The word 'Lok Adalat' means 'People's Court'. This system is based on Gandhian principles. It is one of the components of ADR (Alternative Dispute Resolution) system. As the Indian courts are overburdened with the backlog of cases and the regular courts are to decide the cases involving a lengthy, expensive and tedious procedure. The court takes years together to settle even petty cases.
- The Lok Adalat, provides alternative resolution or devise for expeditious and inexpensive justice. In Lok Adalat proceedings, there are no victors and vanquished and, thus, no rancour. The experiment of 'Lok Adalat' as an alternate mode of dispute settlement has come to be accepted in India, as a viable, economic, efficient and informal one.
- The Lok Adalat is another alternative in judicial justice. This is a recent strategy for delivering informal, cheap and expeditious justice to the common man by way of settling disputes, which are pending in courts and also those, which have not yet reached courts by negotiation, conciliation and by adopting persuasive, common sense and human approach to the problems of the disputants, with the assistance of specially trained and experienced members of a team of conciliators.

Recent Achievements

- To achieve the goal, the Legal Services Authorities shifted to dynamic preparation strategies for organization of the Lok Adalats. As a preparatory measure, NALSA started organization of prior consultative and review meetings with all the State Legal Services Authorities to guide them towards the maximum disposal during such Lok Adalats. Before the organization of each National Lok Adalat, multiple interactions were organised with the Executive Chairpersons of all the State Legal Services Authorities, wherein one-to-one interactions were made to take a stock of the preparations as well as to boost the morale of the stakeholders tasked to organize the Lok Adalats.
- Achieving the unprecedented disposal figures of the suits was not an easy task. A major contribution to this success can be attributed to the technological advancements. In June 2020, the Legal Services Authorities integrated technology with the conventional modes of dispute settlement and introduced virtual Lok Adalats called as 'E-Lok Adalats'. Since then, all the Lok Adalats including National Lok Adalats are organized through virtual and hybrid modes. To provide an unhindered experience during the proceedings, the Legal Services Authorities across the country are continuously upgrading their digital infrastructure.
- Due to the technological advancements, Lok Adalats have reached to the doorsteps of the parties. The parties are now able to join the Lok Adalat proceedings from their homes or workplaces, saving them the hassle of travelling and reserving a full day for an affair, which gets over within minutes. The Authorities have witnessed that a large number of persons joined the virtual proceedings sitting hundreds of kilometers away from the physical location where the Lok Adalat was organized. Technology has also provided effective ways of supervision and monitoring of Lok Adalats.
- The major factor in the success of Lok Adalats was the formulation of decisive strategies at the National level. Under these strategies, the State Legal Services Authorities were instructed to conduct meetings with various stakeholders across every level with an objective to ensure their full cooperation and coordination. The authorities were guided to follow a litigant friendly approach as well as to persuade such litigants to settle the cases involving settled propositions of law.

PEPPER IT WITH

Subordinate Courts,
Family Courts,
Gram Nyayalaya

- Moreover, certain areas of law having greater possibilities of settlement such as NI Act cases, Bank recovery cases along other financial matters were highlighted and authorities were instructed to explore all the possibilities of compromise in such cases. The authorities were advised to proactively monitor the issuance and completion of processes in such financial matters as well as to conduct pre-Lok Adalat sittings to take a matter to a settlement.

Conclusion

There is no doubt regarding the fact that the number of pending cases surged during the ongoing pandemic. However, with a large number of disposals through Lok Adalats, a balance was created by the Legal Services Authorities in the judicial administration of the country. There is no gainsaying that the Lok Adalats settled greater number of cases than any other dispute resolution mechanism and emerged as the most efficacious tool of Alternative Dispute Resolution Mechanism.

Assam-Meghalaya Border Dispute

News Excerpt

On vexed border dispute both Assam and Meghalaya exchanged reports submitted by their respective regional committees. The border dispute is an old problem attributed to different readings of the demarcation of the boundaries.

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Pre-Connect

- Assam and Meghalaya share an 885-km-long border. As of now, there are 12 points of dispute along their borders.
- The Assam-Meghalaya border dispute are the areas of Upper Tarabari, Gazang Reserve Forest, Hahim, Langpih, Borduar, Boklapara, Nongwah, Matamur, Khanapara-Pilangkata, Deshdemoreah Block I and Block II, Khanduli and Retacherra.
- Meghalaya was carved out of Assam under the Assam Reorganisation Act, 1971, a law that it challenged, leading to disputes.
- A major point of contention between Assam and Meghalaya is the district of Langpih in West Garo Hills bordering the Kamrup district of Assam. Langpih was part of the Kamrup district during the British colonial period but post-Independence, it became part of the Garo Hills and Meghalaya.
- Assam considers it to be part of the Mikir Hills in Assam. Meghalaya has questioned Blocks I and II of the Mikir Hills -now Karbi Anglong region - being part of Assam. Meghalaya says these were parts of erstwhile United Khasi and Jaintia Hills districts.



Assam And Border Issues

- The states of the Northeast were largely carved out of Assam, which has border disputes with several states. Assam's border disputes with Arunachal Pradesh and Nagaland are pending in the Supreme Court.
- Assam's border disputes with Meghalaya and Mizoram are currently in the phase of resolution through negotiations. The border dispute with Mizoram turned violent, leading to intervention from the Centre.
- The chief ministers of Assam and Meghalaya have held separate talks in recent period also to resolve border dispute. Incidentally, Assam's capital was Shillong, Meghalaya's present capital, before it was shifted to Dispur in 1972.

How the resolution came about?

- ✓ The long-standing land dispute was sparked in the year 1972 when Meghalaya was carved out of Assam. The border issues came about as a result of different readings of the demarcation of boundaries in the initial agreement for the new state's creation.
- ✓ A presentation prepared by the Assam government for a meeting state that "12 areas of differences evolved over time since 1993". Over the years, at least 50 high-level meetings have been held to resolve these border issues.
- ✓ In a meeting, the two state governments decided to work towards the resolution of disputes in six sectors: Hahim, Gizang, Tarabari, Boklapara, Khanapara-Pilingkata and Ratacherra.
- ✓ The Assam and Meghalaya governments then set up regional committees headed by cabinet ministers from the two states to study these areas.
- ✓ The committees adopted a "five-phase approach", which included the "exchange of records", "joint field visits", detailed deliberations, negotiations, and then the preparation of the final recommendations. In each of the areas, the committees would take into account the composition of the local population.

ASSAM AND MEGHALAYA'S RECOMMENDATIONS FOR DISPUTED LAND

SECTOR	Total Area of Difference (In Sq. Km)	Final Recommendations (In Sq. Km)	
		ASSAM	MEGHALAYA
Hahim	3.51	0.3	3.21
Gizang	13.53	10.63	2.9
Tarabari	4.69	0	4.69
Boklapara	1.57	1.01	0.56
Khanapara-Pilingkata	2.29	1.79	0.5
Ratacherra	11.2	4.78	6.42
	36.79	18.51	18.28

Source: Government of Assam

ThePrint

PEPPER IT WITH

Parliament's Power to Reorganise the States, Exchange of Territories with Bangladesh, Evolution of States and Union Territories

The Way Forward

- ✚ Those sites will be identified as at Tarabari, Gizang, Hahim, Baklapara, Khanapara (Pilingkata) and Ratacherra, which fall under Cachar, Kamrup and Kamrup Metropolitan districts of Assam, and corresponding districts of West Khasi Hills, Ri-Bhoi and East Jaintia Hills of Meghalaya to resolve in the first phase.
- ✚ Six regional border committees, comprising cabinet ministers of both sides for recommending the way forward, submitted their reports.
- ✚ The more complicated disputes at the remaining six sites at Langpih, Borduar, Nongwah, Matamur, Deshdemoreah Blockland Block II and Khanduli will be taken up in the next phase.
- ✚ Union Government has been constantly monitoring the progress on resolving the dispute.

National Commission for Safai Karamcharis

News Excerpt

The Union Cabinet, chaired by the Prime Minister has approved the extension of the tenure of the National Commission for Safai Karamcharis (NCSK) for three years beyond 31.3.2022.

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Pre-Connect

- The NCSK was established in the year 1993 as per the provisions of the NCSK Act, 1993 initially for the period upto 31.3.1997. Later, the validity of the Act was initially extended upto 31.3.2002 and thereafter upto 29.2.2004.
- The NCSK Act ceased to have effect from 29.2.2004. After that the tenure of the NCSK has been extended as a non-statutory body from time to time through resolutions. The tenure of the present Commission is upto 31.3.2022.

The mandate of the National Commission for Safai Karamcharis

- The NCSK has been giving its recommendations to the Government regarding specific programmes for welfare of Safai Karamcharis, study and evaluate the existing welfare programmes for Safai Karamcharis, investigate cases of specific grievances etc.
- As per the provisions of the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013, the NCSK has been assigned the work to monitor the implementation of the Act, tender advice for its effective implementation to the Centre and State Governments and enquire into complaints regarding contravention/non-implementation of the provisions of the Act.
- Though the Government has taken many steps for the upliftment of the Safai Karamcharis, the deprivation suffered by them in socio-economic and educational terms is still far from being eliminated.
- Although manual scavenging has been almost eradicated, sporadic instances do occur. Hazardous cleaning of sewer/septic tanks continues to be an area of the highest priority for the Government.
- The Government feels that there is a continued need to monitor the various interventions and initiatives of the Government for welfare of Safai Karamcharis and to achieve the goal of complete mechanization of sewer/septic tanks cleaning in the country and rehabilitation of manual scavengers.

A 'dehumanizing practice'

- The Indian government distinguishes between manual scavenging and the practice of cleaning sewers and septic tanks. But labor activists argue that the latter is a mere extension of the former.
- The term "manual scavenger" broadly represents sanitation workers who are involved in cleaning, carrying and disposing of untreated human excreta.
- India has banned the practice under the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013. Outlawing the practice began in 1993, but in 2013, the definition of manual scavengers was broadened to include people employed to clean septic tanks, ditches or railway tracks.
- The Act recognizes this as a "dehumanizing practice," and cites a need to "correct the historical injustice and indignity suffered by the manual scavengers."
- However, a lack of implementation has led to the continuation of the practice in several parts of the country. A 2019 study by the World Health Organization (WHO) said "weak legal protection and lack of enforcement" of the laws, as well as the poor financial status of sanitation workers, contributes to the practice still prevailing."

Composition of the NCSK

The National Commission for Safai Karamcharis comprises one Chairman (in the rank and status of the Union Minister for States) and four members, including a lady member (in the rank and status of the Secretary to the Government of India) and the Secretary (in the rank of Joint Secretary to the Govt. of India) along with other supporting staff.

Working of the Commission

- ✓ The Chairperson and Members of the Commission undertake extensive touring of the country to study the socio-economic and living conditions of Safai Karamcharis and their dependents. During their visits, the members of the Commission interact with the Safai Karamcharis- both individually as well as through their representative associations. The grievances of the Safai Karamcharis are then taken up by the Commission with the concerned local civil and police authorities.
- ✓ The Commission receives complaints, petitions from Safai Karamcharis from all over the Country. The Commission calls for the factual reports in connection with these complaints, petitions from the concerned authorities and impress upon them to redress the grievances of the affected Safai Karamcharis.

- ✓ Based on the information received through print or electronic media, the Commission suo motu takes cognizance of problems of Safai Karamcharis and try to resolve them by playing a proactive role.
- ✓ Whenever a matter is to be investigated or inquired into or progress of any scheme, programme etc. has to be evaluated or non-implementation of any decision, guidelines, instructions, measures or provisions of any law in relation to Safai Karamcharis etc. has to be looked into, the Commission holds sittings, as often as may be necessary, in any part of the country, for the purpose.
- ✓ Based on its findings, the Commission gives its recommendations for rehabilitation and liberation of Safai Karamcharis from the scourge of manual scavenging to the Ministry of Social Justice and Empowerment from time to time as well as in its Annual Reports.

Conclusion

Safai Karamcharis are at risk of death from asphyxiation due to poisonous gases and are often exposed to diseases such as cholera, hepatitis, meningitis, jaundice, skin disorders and even cardiovascular diseases. They often lack access to proper safety gear and equipment. Most of the deaths reported are due to accidents in septic tanks and sewer areas. A lack of precautions, such as taking lamps down in sewers with a large concentration of methane gas, is responsible for accidents. Some states including Delhi have launched the use of sewage cleaning machines for this purpose. However, they are not widely used across the country. Moreover, narrow lanes prevent access for larger machines while poorly designed septic tanks make it difficult for machines to function. Prime Minister's push to provide toilets to every household across the country sought to reduce defecation in the open. Many NGOs are also working to educate and train workers for other vocations, so that they are not forced to work as manual scavengers. Organizations and the government have to come together in solving the problem, with zeal and sincerity.

PEPPER IT WITH

Swachhta Abhiyan App, Safaimitra
Suraksha Challenge, World Toilet Day

MLA Suspension

News Excerpt

The Supreme Court has observed that the suspension of 12 MLAs from the Maharashtra Assembly for a full year is prima facie unconstitutional, and "worse than expulsion".

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Pre-Connect

- The state legislature occupies a preeminent and central position in the political system of a state. Articles 168 to 212 in Part VI of the Constitution deal with the organisation, composition, duration, officers, procedures, privileges, powers and so on of the state legislature. Though these are similar to that of Parliament, there are some differences as well.
- The twenty-two states have unicameral system. Here, the state legislature consists of the governor and the legislative assembly. In the states having bicameral system, the state legislature consists of the governor, the legislative council and the legislative assembly.
- The legislative council (Vidhan Parishad) is the upper house (second chamber or house of elders), while the legislative assembly (Vidhan Sabha) is the lower house (first chamber or popular house).

Rules for the Suspension

- Rules 373, 374, and 374A of the Rules of Procedure and Conduct of Business in Lok Sabha provide for the withdrawal of a member whose conduct is "grossly disorderly", and suspension of one who abuses the rules of the House or willfully obstructs its business.
- The maximum suspension as per these Rules is "for five consecutive sittings or the remainder of the session, whichever is less".

- The maximum suspension for Rajya Sabha under Rules 255 and 256 also does not exceed the remainder of the session. Several recent suspensions of members have not continued beyond the session.
- Similar rules are in place for state legislative assemblies and councils which prescribe a maximum suspension not exceeding the remainder of the session.

The Counter Arguments

- ✓ Article 212 (1) states that “The validity of any proceedings in the Legislature of a State shall not be called in question on the ground of any alleged irregularity of procedure”.
- ✓ The next subsection says “no officer or member of the Legislature, in whom powers are vested by or under this Constitution for regulating procedure or the conduct of business, or for maintaining order, in the Legislature shall be subject to the jurisdiction of any court in respect of the exercise by him of those powers.”
- ✓ The state has referred to Article 194 on the powers and privileges of the House, and argued that any member who transgresses these privileges can be suspended through the inherent powers of the House.
- ✓ It has denied that the power to suspend a member can be exercised only through Rule 53 of the Assembly.

Suspension beyond the remainder of the session

- Article 190 (4) of the Constitution, which says, “If for a period of sixty days a member of a House of the Legislature of a State is without permission of the House absent from all meetings thereof, the House may declare his seat vacant.”
- Under Section 151 (A) of The Representation of the People Act, 1951, “a bye-election for filling any vacancy... [in the House] shall be held within a period of six months from the date of the occurrence of the vacancy”. This means that barring exceptions specified under this section, no constituency can remain without a representative for more than six months. Anything in excess of that would be irrational suspension entailing deprivation of the constituency from being represented in the House.
- Exceeding the stated timeline as per the Rules for withdrawal of members is a substantive matter. It raises the question as to what purpose does it serve to withdraw a member from the House for successive sessions within the one-year period. If the conduct of a member is gross, warranting his removal from the Assembly for a longer period, the House can invoke its inherent power of expulsion.

Observations of the Court in the matter

- ✚ The court agreed with the MLAs’ contention that the suspension has to follow the procedure laid down in Rule 53. Suspension of a member must be preferred as a short term or a temporary, disciplinary measure for restoring order in the Assembly. Anything in excess of that would be irrational suspension. It said that Rule 53 only provides for the withdrawal of a member for the remainder of the day or in case of repeat misconduct in the same session, for the remainder of the session.
- ✚ As per this rule, withdrawal of a member can only be done in case of the member’s conduct being “grossly disorderly”. It relied on definitions of the two words and said that the conduct has to be considered in a graded objective manner. It is not a punishment like expulsion but more a direction to ensure that the business of the House can be carried on smoothly, without any disruption. It termed the one-year suspension worse than expulsion or disqualification or resignation as far as the rights of the constituency to be represented in the House are concerned.

✚ The suspension beyond the ongoing session is violative of basic democratic values as it would mean the constituency the member represents in the House would remain unrepresented. It would impact the democratic setup. A thin majority coalition government could use such suspensions to manipulate the number of Opposition party members and that Opposition will not be able to effectively participate in discussions, debates in the House fearing suspension of its members for a longer period.

PEPPER IT WITH
Presiding Officers of State
Legislature, Sessions of the
State Legislature, Legislative
Procedure in State Legislature

Conclusion

The court considered whether the legislature had complete immunity from judicial review in matters of irregularity of procedure. It ruled that procedures are open to judicial review on the touchstone of being unconstitutional, grossly illegal, irrational or arbitrary.

Social Issues, Government Schemes, Reports & Indices

Padhe Bharat Campaign

News Excerpt

Recently, Ministry of Education launched 100 days reading campaign 'Padhe Bharat'.

Pre-connect

- The launch of 100 Days Reading Campaign is in alignment with the National Education Policy (NEP) 2020 and 21st February (International Mother Tongue Day) is also been integrated with this campaign.
- The NEP 2020 is the first education policy of the 21st century and replaces the National Policy on Education (NPE), 1986. Built on the foundational pillars of Access, Equity, Quality, Affordability and Accountability, this policy is aligned to the 2030 Agenda for Sustainable Development.
- The NEP 2020 aims to transform India into a vibrant knowledge society and global knowledge superpower by making both school and college education more holistic, flexible, multidisciplinary, suited to 21st century needs and aimed at bringing out the unique capabilities of each student.

Significance of the Campaign

- It signifies the important of reading that children needs to develop to ensure continuous and lifelong learning.
- The habit of reading, if inculcated at an early age, helps in brain development and enhances imagination and provide a conducive learning environment for children.
- Padhe Bharat campaign will focus on children studying in Balvatika to Grade 8.
- The reading campaign aims to have participation of all stakeholders at national and state level including children, teachers, parents, community, educational administrators etc.
- The 100 days reading campaign will also focus on Indian languages including mother tongue/local/regional languages.
- 21st February (International Mother Tongue Day) will be celebrated with the activity of Kahani Padho Apni Bhasa Main (Reading story in own language) across the country by encouraging children to read in their mother tongue/local language.

Conclusion

100 days Reading Campaign is envisaged to support and encourage students, along with their schools, teachers, parents, and communities, in every possible way and encourage children to read for joyful learning experience. Department of School Education & Literacy invites all stakeholders to participate wholeheartedly in this campaign to build strong foundation for our children.

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International Mother Tongue Day

- The idea to celebrate International Mother Language Day was the initiative of Bangladesh. It was approved at the 1999 UNESCO General Conference and has been observed throughout the world since 2000.
- International Mother Language Day recognizes that languages and multilingualism can advance inclusion, and the Sustainable Development Goals' focus on leaving no one behind. UNESCO believes education, based on the first language or mother tongue, must begin from the early years as early childhood care and education is the foundation of learning.
- The theme of the 2022 International Mother Language Day, "Using technology for multilingual learning: Challenges and opportunities," raises the potential role of technology to advance multilingual education and support the development of quality teaching and learning for all.

Unemployment in India

News Excerpt

According to data from the Centre for Monitoring Indian Economy (CMIE), India's unemployment rate touched a fourth-month high of 7.9 per cent in December 2021.

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Pre-connect

- CMIE, or Centre for Monitoring Indian Economy, is a leading business information company. It was established in 1976, primarily as an independent think tank.
- CMIE has a presence over the entire information food-chain - from large scale primary data collection and information product development through analytics and forecasting.
- It provides services to the entire spectrum of business information consumers including governments, academia, financial markets, business enterprises, professionals and media.

Global unemployment ILO report

Global unemployment is expected to remain above pre-Covid-19 levels until at least 2023 and is estimated at 207 million this year, almost 21 million more than in 2019, according to a report from the International Labour Organisation that gives assessments on how labour market recovery has unfolded worldwide.

What is the latest unemployment rate?

- The unemployment rate rose to 7.9 per cent in December. It stood at 7 per cent in November last year and 9.1 per cent in December 2020.
- **Urban unemployment:** The rate rose to 9.3 per cent in December from 8.2 per cent in the previous month.
- **Rural unemployment:** The rate increased to 7.3 per cent from 6.4 per cent, the data showed.

The risk involved:

- ✓ Urban employment is a proxy for better paying jobs and a decline in these numbers reflects impact on better-paying organised sector's jobs.
- ✓ With Covid-19 cases on the rise amid the threat posed by the Omicron variant and many states imposing fresh curbs, economic activity and consumption levels have been affected. This could adversely affect economic recovery further going ahead.
- ✓ Comparison between urban and rural unemployment rate
- ✓ Unemployment is more in the urban areas as compared to the rural areas. Between 2019-20 and December 2021, the manufacturing sector has lost 9.8 million jobs; by contrast, agricultural jobs jumped by 7.4 million.

Factor responsible for unemployment in India

- The percentage of salaried people has dropped from 21.2 per cent in 2019-2020 to 19 per cent in 2021, which means that 9.5 million people have left the salariat and become jobless or part of the informal sector.
- The informal sector itself has shrunk, so much so that — to return to aggregate figures — the employed population, over the same period, has decreased from 408.9 million people to 406 million, at a time about 10 million young Indians were entering the job market.
- India's Labour Force Participation (LPR) does not compare favourably with other emerging countries — a category that is vanishing quickly.

- In fact, according to the NSSO, in 2019, when India had the highest unemployment rate in the last 45 years, this rate was particularly high among India's youth: 34 per cent for those between 20 and 24 years.
- Unemployment among women is higher than men, both in urban as well as rural areas.
- For women, the average unemployment was 14.28 per cent and for men, it was 7.88 per cent. Further, of the women willing to seek work in urban areas, 92.1 per cent don't get any work. This count for rural women stands at 54.8 per cent.
- The absorption of women in the workforce, as compared to men, is much less for two main reasons. One, most women were involved in agricultural jobs in rural areas; the mechanisation of these jobs has had a huge impact on female labour force participation in the country.
- Unemployment in India has undeniably reached a critical stage and perhaps, raises serious questions on the quality of the economic recovery, which the third wave of the pandemic may affect anyway, making joblessness an even more acute problem.

How many jobs India need to create and how much India actually have?

- ❖ India needs to create 90 million non-farm jobs between 2023 and 2030, to ensure our demographic surplus is absorbed. Instead, we have tinkered with short-term fixes, hoping the newest trends will solve this problem.
- ❖ As of 2019, before the pandemic, there were about 2,00,000 million health worker vacancies, 1 million teacher vacancies and 1.17 million anganwadi worker positions — totalling over 2.5 million vacancies. Additionally, there is a clear need to expand capacity in healthcare by 2,90,000-4,20,000 health workers. It's not enough to simply announce a new AIIMS every campaigning season. We also have a moral duty to regularise contractual and seasonal workers in these sectors. Doing this would create over 5.2 million jobs.

The solution

- ✚ The creation of public assets and invested in human capital. And as we simplified regulations and incentivized production, jobs would be created.
- ✚ We need to help up-skill the existing labour force, particularly in urban India. A national urban employment guarantee scheme, with a focus on creating public assets.
- ✚ Such a scheme could cover 20 million urban casual workers for 100 days, at a wage rate of Rs 300 per day, with an overall cost of Rs 1 lakh crore annually.
- ✚ Another way out could be to foster "green jobs" — including those traditionally under the remit of public services (water conservation, waste management).
- ✚ It is estimated that a municipal council-based town could create about 650 "green jobs" in such categories, while a city municipal council could lead to the creation of 1,875 jobs and a full-fledged municipal corporation could lead to 9,085 jobs.

Total Employment in Jul-Sep 2021

Total employment generated by nine select sectors stood at 3.10 crore in the July-September 2021 quarter, which is 2 lakh more than that of the April-June period, according to a quarterly employment survey by the labour ministry.

These nine sectors are Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation and Restaurant, IT/ BPO and Financial Services, accounting for a majority of the total employment in the non-farm establishments.

Conclusion

India's cities can be magnets for job creation, if the right policies are implemented. We need a national conversation on urban unemployment, with roundtable meetings for government officials, MPs and MLAs to hear the needs of youth, along with more detailed thoughts on the development and implementation of this strategy. We need to face the challenge of job creation and up-skilling of youth for the labour market to ensure that India's demographic dividend does not become a demographic disaster. Mere rhetoric will no longer be enough.

UJALA Programme

News Excerpt

Recently, Ministry of Power has successfully completed seven years of distribution and selling LED lights under its flagship UJALA Programme.

Pre-connect

Prime Minister in 2015 launched Unnat Jyoti by Affordable LED for All (UJALA) program. Under UJALA scheme, LED bulbs, LED Tube lights and Energy efficient fans are being provide to domestic consumers for replacement of conventional and inefficient variant.

About the UJALA Programme

- Under the programme, the government has ensured transparency and encouraged competition by e-procurement of goods and services.
- This has resulted in significant reduction in transaction cost and time, enhancing process efficiency. With UJALA, the cost of LED bulb has come by down by 85 percent.
- This, in turn has led to a much larger pool of bidders, enhanced quality of the product and availability of better specifications for the consumers.
- Leveraging increased industry competition and mass procurement, EESL has adopted an innovative procurement strategy which resulted in well-known benefits and now known as USP of Program Ujala.

Procurement strategy

- Credits to UJALA, energy efficient, cost saving lighting has been made available to the middle class and lower middle-class consumers.
- As part of its inclusive growth strategy to enable growth in lower income communities, EESL has also enrolled Self-Help Groups (SHGs) for distribution of LED bulbs under UJALA programme.
- It also provides economies of scale to manufacturers through regular bulk procurement enabling them to bring down the cost of LEDs for retail segment as well.
- The procured price has been reduced by almost 90 per cent between 2014 and 2017, from ₹310 to ₹38.
- It is now a part of Leadership case study in Indian Institute of Management (IIM), Ahmedabad. Furthermore, it is also under consideration for being included in the curriculum of the Harvard Business School.

Achievements of UJALA Programme

- ✓ 36.78 crore LEDs distributed across the country under UJALA
- ✓ UJALA programme saved 47,778 Million kWh energy per annum, 3,86 crore tonnes of reduction in CO2 emissions made possible.
- ✓ Readily adopted by all the states, UJALA helped in reducing annual household electricity bills.

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- ✓ It provides an impetus to the domestic lighting industry. It encourages Make in India as domestic manufacturing of LED bulbs has increased from 1 lakh per month to 40 million per month.
- ✓ UJALA provides economies of scale to manufacturers through regular bulk procurement. This enables manufacturers to bring down the cost of LEDs for retail segment as well.

Conclusion

Credits to UJALA, energy efficient, cost saving lighting has been made available to the middle class and lower middle-class consumers. As part of its inclusive growth strategy to enable growth in lower income communities, EESL has also enrolled Self-Help Groups (SHGs) for distribution of LED bulbs under UJALA programme.

World Risk Report

News Excerpt

Climate change was seen as the number one danger by respondents in the WEF's annual risks report.

While erosion of social cohesion, livelihood crises and mental health deterioration were identified as risks which had increased the most since the start of the COVID-19 pandemic.

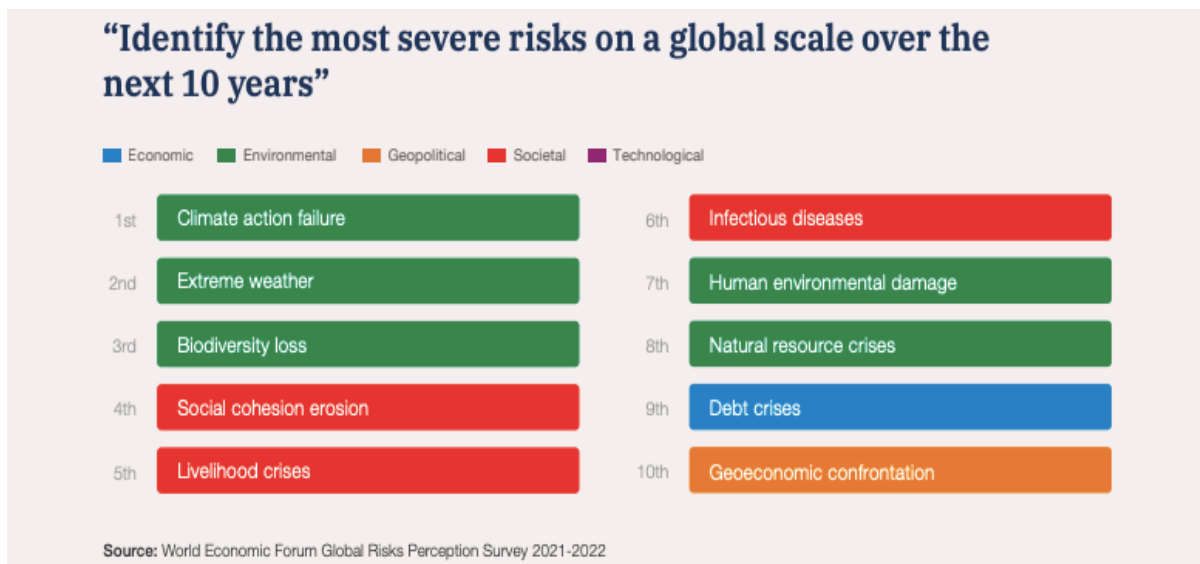
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Pre-connect

- The World Economic Forum is the International Organization for Public-Private Cooperation.
- The Forum engages the foremost political, business, cultural and other leaders of society to shape global, regional and industry agendas.
- It was established in 1971 as a not-for-profit foundation and is headquartered in Geneva, Switzerland. It is independent, impartial and not tied to any special interests.
- The Forum strives in all its efforts to demonstrate entrepreneurship in the global public interest while upholding the highest standards of governance. Moral and intellectual integrity is at the heart of everything it does.

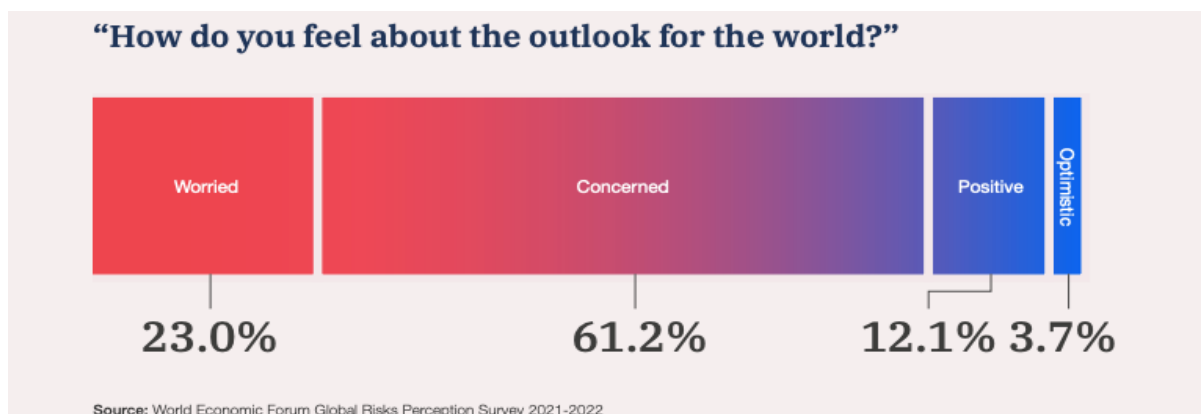
Highlight of the report

- As 2022 begins, COVID-19 and its economic and societal consequences continue to pose a critical threat to the world. Vaccine inequality and a resultant uneven economic recovery risk compounding social fractures and geopolitical tensions.
- In the poorest 52 countries— home to 20% of the world's people—only 6% of the population had been vaccinated.
- By 2024, developing economies (excluding China) will have fallen 5.5% below their pre-pandemic expected GDP growth, while advanced economies will have surpassed it by 0.9%—widening the global income gap.
- Societal risks make up a third of the global top 10, with societal cohesion erosion and livelihood crises completing the top five, while infectious diseases come lower down at number six.
- Climate action failure is also considered the most critical threat to the world in both the medium term (2-5 years) and long term (5-10 years), with the highest potential to severely damage societies, economies and the planet.



Risks outlook and global divergence

- ✓ By 2024, the report says, developing economies (except China) will have fallen 5.5% below their pre-pandemic expected GDP growth, while advanced economies will have surpassed it by 0.9%.
- ✓ Such global divergence will impact on the world's ability to tackle common challenges including climate change, enhancing digital safety, restoring livelihoods and societal cohesion, and managing competition in space.



Short, medium and long-term global risks

- ✚ The risk horizon changes over the coming years, as the full implications of the pandemic become clearer.
- ✚ In the next two years, risk experts and leaders see the erosion of social cohesion, the deterioration of mental health, infectious diseases and livelihood crises as being equal to environmental threats - which are constant across the short to long term.
- ✚ In the next five years, economic risks of debt crises and geo economic confrontations emerge as governments struggle to balance fiscal priorities. While the long-term top five is dominated by environmental risks.
- ✚ But amid all the bleak predictions, there's still reason to hope for more positive outcomes, with the Global Risks Report 2022 including lessons in resilience from the COVID-19 pandemic, advice for cooperation in space, greater cyber resilience and a more sequenced climate transition.

What's the World Economic Forum doing about climate change?

- Climate change poses an urgent threat demanding decisive action. Communities around the world are already experiencing increased climate impacts, from droughts to floods to rising seas. The World Economic Forum's Global Risks Report continues to rank these environmental threats at the top of the list.
- To limit global temperature rise to well below 2°C and as close as possible to 1.5°C above pre-industrial levels, it is essential that businesses, policy-makers, and civil society advance comprehensive near- and long-term climate actions in line with the goals of the Paris Agreement on climate change.
- The World Economic Forum's Climate Initiative supports the scaling and acceleration of global climate action through public and private-sector collaboration.
- The Initiative works across several workstreams to develop and implement inclusive and ambitious solutions.
- This includes the Alliance of CEO Climate Leaders, a global network of business leaders from various industries developing cost-effective solutions to transitioning to a low-carbon, climate-resilient economy.
- CEOs use their position and influence with policy-makers and corporate partners to accelerate the transition and realize the economic benefits of delivering a safer climate.

Way forward

- > Reflecting on the distinct resilience goals of governments, businesses and communities will help ensure that agendas are aligned in achieving a whole of-society approach to tackling critical risks of any nature.
- > Businesses—recognizing that better national-level preparedness is critical for planning, investing and executing their strategies—can leverage opportunities in areas such as supply chains, codes of conduct within their industry and inclusion of a resilience dimension into workforce benefit offerings.
- > Businesses—recognizing that better national-level preparedness is critical for planning, investing and executing their strategies—can leverage opportunities in areas such as supply chains, codes of conduct within their industry and inclusion of a resilience dimension into workforce benefit offerings.
- > Communities can help local governments to join up with national efforts, improve communication and support grassroots resilience efforts.
- > At an organizational level, strategies such as grounding resilience analyses in key delivery requirements, appreciating systemic vulnerabilities and embracing a diversity of approaches can help leaders build better resilience as well.

The NEAT initiative

News Excerpt

A first-of-its-kind government scheme, set in motion over two years ago, has finally taken shape, bringing courses offered by a group of edtech platforms within the reach of college and university students from socio-economically disadvantaged backgrounds.

Pre-connect

The scheme, guided by the public-private partnership model, was launched by the Ministry of Education in September 2019. While its success will be reviewed in the days to come, its intent places it among policy interventions that aims to address the question of digital inequality.

About the initiative

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- The National Education Alliance for Technology (NEAT), which is being implemented by the All-India Council for Technical Education (AICTE), aims to act as a bridge between edtech companies, academic institutions and students.
- The initiative was taken after a Ministry of Education review noted that learning tools developed by edtech platforms that can supplement classroom teaching need to be made more accessible.
- Accordingly, it was proposed that a portal be created where edtech platforms can be roped in to display their products after a shortlisting process.

How were students picked under the Scheme?

- There are two different ways through which students can enroll under the scheme.
- The basic objective of the scheme is to make students from disadvantaged backgrounds aware of the availability of such opportunities that can help them learn new skills or polish existing ones.
- In that regard, the AICTE reached out to higher education institutes across the country, directing them to inform students about the portal and enroll them based on their needs and consent. The edtech platforms have been allowed to charge fees as per their policies.

What is EdTech?

EdTech (a combination of "education" and "technology") refers to hardware and software designed to enhance teacher-led learning in classrooms and improve students' education outcomes.

In-classroom tablets, interactive projection screens and whiteboards, online content delivery, and MOOCs are all examples of EdTech.

The goal of EdTech is to improve student outcomes, enhance individualized education, and reduce the teaching burden on instructors.

While many praise technology in the classroom, others fear that it is impersonal and can lead to data collection and tracking of both students and instructors.

Will it benefit students from backward communities?

- ✓ In order to do that, the government has mandated that every shortlisted company will have to offer free coupons to the extent of 25 per cent of the total registrations for their solution through NEAT portal.
- ✓ Through this route, the government created a bank of 12.15 lakh free coupons over the last two years. And it has now started distributing those coupons among students belonging to SC/ST/OBC and EWS categories with the annual family income cap fixed at Rs 8 lakh.

What are the courses in demand?

The top five courses in terms of demand are python programming, C, C++, Java programming, data science, life science and healthcare analysis, and interview preparation.

Concerns

- Many of the fears about EdTech are looking farther into the future where entire courses could potentially be managed by software.
- The current state of the field uses analytics to judge a student's competency in different areas of the curriculum, allowing the student to move ahead more quickly in some areas while taking more time to reinforce areas of weakness.
- EdTech is still in the early stages of development for even basic subjects like math or reading and composition skills. There are a variety of design challenges for EdTech. The biggest hurdle is adjusting for different learning styles in the classroom.
- Currently EdTech is usually delivered through a laptop or tablet, resulting in a read-and-respond learning experience.

Income Inequality: Oxfam report

News Excerpt

Recently, the income of 84 per cent of households in the country declined in 2021, but at the same time the number of Indian billionaires grew from 102 to 142, according to Oxfam report, pointing to a stark income divide worsened by the Covid pandemic.

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Pre-connect

- Oxfam has been in India since 1951. It first came to India to respond to Bihar famine. In 2008, Oxfam India became an independent affiliate and an Indian NGO. Oxfam took stock of the states it was needed the most in and started working on the ground in six poorest states of India—Uttar Pradesh, Jharkhand, Bihar, Chhattisgarh, Assam and Odisha.
- Oxfam India is an autonomous Indian organization and has staff and board members from within India. Oxfam India is a member of the global confederation of 20 Oxfams across the world. Government of India has registered Oxfam India as a non-profit organization under Section 8 of the Indian Companies Act, 2013 and have a Foreign Contribution Regulation Act (FCRA) license.

What report says?

- The report found that as Covid continued to ravage India, the country's healthcare budget saw a 10% decline from RE (revised estimates) of 2020-21.
- There was a 6% cut in allocation for education, the Oxfam report says, while the budgetary allocation for social security schemes declined from 1.5% of the total Union budget to 0.6%.
- The India supplement of the global report also says that in 2021, the collective wealth of India's 100 richest people hit a record high of Rs 57.3 lakh crore (USD 775 billion).
- In the same year, the share of the bottom 50 per cent of the population in national wealth was a mere 6 per cent.
- During the pandemic (since March 2020, through to November 30, 2021) the wealth of Indian billionaires increased from Rs 23.14 lakh crore (USD 313 billion) to Rs 53.16 lakh crore (USD 719 billion).
- More than 4.6 crore Indians, meanwhile, are estimated to have fallen into extreme poverty in 2020, nearly half of the global new poor according to the United Nations.
- The pandemic has set gender parity back from 99 years to now 135 years. Women collectively lost Rs 59.11 lakh crore (USD 800 billion) in earnings in 2020, with 1.3 crore fewer women in work now than in 2019.
- The Oxfam India briefing also points out to the increase in indirect taxes as a share of the Union government revenue last four years, while the proportion of corporate tax in the same was declining.
- The additional tax imposed on fuel has risen 33 per cent in the first six months of 2020-21 as compared to the last year, 79 per cent more than pre-Covid levels.
- Lowering of corporate taxes from 30 per cent to 22 per cent to attract investment last year resulted in a loss of Rs 1.5 lakh crore, which contributed to the increase in India's fiscal deficit.

What is it that has led to such a wide gap between rich and poor? What is it that is not working in favour of/ against the poor of the country?

- India's story of rising inequality is as much about rising income and wealth gap as it is about inequality in non-income dimensions such as education, health, nutrition and opportunities. Moreover, our structures social identities (religion, caste, class, gender) promote discrimination and add to this crisis.

- ✓ The policy choices of successive governments in building an economic system that values the interest of a few over the needs of the poor is responsible for the widening gap we see today.
- ✓ We continue to make policy decisions which shelter crony capitalism and make India one of the most unequal countries in the world.
- ✓ Corruption impacts inequality in different ways. As the most basic level, the poorest people are more likely to have to pay bribes. In India, Transparency International data shows that India's ranking slid to 80 among a group of 180 countries.
- ✓ Our government's decisions to not invest significantly in human potential of this country is working against the poor.

What government policies have indeed helped/ worked in favour of the poor/ raise income levels?

- All schemes and policies that work directly for poverty alleviation starting from—MNREGA to Janani Suraksha Yojna have a positive impact. While there could be leakages in their implementation, which surely must be addressed, they still help in reducing vulnerability.
- Schemes like anganwadi center (AWC), spread across the country, deliver early education, health, and nutrition services as part of the country's Integrated Child Development Services (ICDS).
- Equally important are other laws like Right to Education Act and policies like access to free medicines. It is a composite whole that creates long-lasting impact and helps in bringing a generation out of the cycle of poverty or saving them from sliding into one.

Is wealth tax being good?

- ✚ Yes. Both since wealth tax is equalizing and since it has the potential to increase domestic revenues for much needed investment.
- ✚ Wealth tax and inheritance tax are vital to prevent excessive concentrations of wealth and power in the hands of a few and to ensure greater equality of opportunity across generations by reducing the amount of wealth that can be handed down through families.
- ✚ Introducing wealth tax would send a powerful signal that governments want to use the tax system for redistribution.
- ✚ Taxing wealth can also boost economic growth by incentivising individuals to use assets productively.

'Desh ke Mentor' programme

News Excerpt

A controversy recently broke out after the National Commission for Protection of Child Rights (NCPCR) recommended that the Delhi government suspend its flagship 'Desh ke Mentor' programme till "the time when all the loopholes pertaining to the safety of the children are overhauled".

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What is the Desh ke Mentor programme?

- The programme was launched in October 2021 and is aimed at connecting students in classes IX to XII with voluntary mentors.
- People between the ages of 18 and 35 can sign up to be mentors through an app created by a team at the Delhi Technological University and will be connected with students based on mutual interests.
- The mentorship entails regular phone calls for a minimum of two months, which can optionally be carried on for another four months. The idea is for the young mentors to guide

students through higher education and career options, preparation for higher education entrance exams, and dealing with the pressure of it all.

- 44,000 people have signed up as mentors so far and have been working with 1.76 lakh children.

What are the concerns raised by the NCPCR regarding this process?

- There are five primary points on which the NCPCR has raised concerns with regard to the programme:
- It has stated that assigning children to a mentor of the same gender as them does not necessarily assure their safety from abuse.
- It has also expressed concern over the lack of police verification of the mentors.
- On the psychometric test it has asked, “Is this Psychometric Test a full (sic) proof assessment of a person in terms of potential threat to any child? Is this Psychometric Test analyzed/checked/scrutinized by professional practising experts? Can this Psychometric Test identify paedophiles or potential paedophiles?”
- It has also stated that limiting interactions to phone calls also does not ensure the safety of children since “child related crime can be initiated through phone calls as well.”
- It has stated that while taking the consent of parents is an essential pre-requisite, the “responsibility and accountability of preventing children from such situation lies with the Department. The consent of parents cannot be used as a cushion in case of any untoward incident.”

Shared parenting

News Excerpt

With access to courts in child custody matters getting tougher with the return on restrictions on court hearings during the pandemic, non-custodial parents and children are again at the receiving end.

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Pre-connect

While the concept of shared parenting is a reality in countries such as the U.S., the U.K. and Australia, it is not an option in India.

What does the law say?

- Two laws determine the custody of children in India. The first is The Hindu Minority and Guardianship Act (HMGA) of 1956, which states that the natural guardian of a Hindu minor boy or unmarried girl shall be the father and mother, provided that custody of a minor who has not completed five years of age shall ordinarily be with the mother.
- But the HMGA does not contain any independent, legal or procedural mechanism for deciding custody rights or declaring court-appointed guardians.
- Guardian and Wards Act of 1890 (GWA) deals with the appointment of a person as a ‘guardian’ to a child, both with respect to the child and property.
- Child custody, guardianship and visitation issues between parents are determined under the GWA, if a natural parent wants to be declared as an exclusive guardian to his/her own child.
- Upon disputes between parents in a petition under the GWA, read with the HMGA, guardianship and custody can be vested with one parent with visitation rights to the other parent. In doing so, the welfare of the minor or “best interests of the child” shall be of paramount consideration.

What does “best interests of the child” mean?

- India is a signatory to the United Nations Convention on the Rights of the Child (UNCRC).

- The definition of “best interests of the child” has been incorporated from the UNCRC in the Juvenile Justice (Care and Protection of Children) Act, 2015.
- The “best interests of the child” means “the basis for any decision taken regarding the child, to ensure fulfillment of his basic rights and needs, identity, social well-being and physical, emotional and intellectual development” and is paramount in any custody battle.
- In 2019, the Supreme Court of India held in *Lahari Sakhamuri v. Sobhan Kodali* that the “best interests of the child” is wide in its connotation and “cannot remain the love and care of the primary care, i.e., the mother in case of an infant or the child who is only a few years old.”
- Again, in 2022, the Supreme Court in *Vasudha Sethi v. Kiran V. Bhaskar* held that a child’s welfare, not the individual or personal legal right of the parents, is of paramount concern in a custody battle. Welfare of the child must get precedence over the parents’ rights.

Have any recommendations been made for joint parenting?

- ✓ The Law Commission of India Report in 2015, on Reforms in Guardianship and Custody Laws in India, recommended joint custody and shared parenting. It disagreed with the idea of singular child custody with one parent.
- ✓ It made exhaustive recommendations for amendments in the HMGA and GWA for joint custody and for guidelines for such custody, child support, and visitation arrangements.
- ✓ Report 263 of the Law Commission of India, titled *The Protection of Children (Inter-Country Removal and Attention) Bill*, 2016, recommended a draft Bill for protecting the “best interests of the child” relating to custody as per the UNCRC.
- ✓ The report of the Justice Bindal Committee, submitted to the Government in 2018, also said that “best interests of the child” are of paramount importance in matters relating to child custody in view of the UNCRC.
- ✓ A complete draft of *The Protection of Children (Inter-Country Removal and Retention) Bill*, defining wrongful removal and retention, with a complete mechanism for redress was given in a two-volume report to the Government of India.

What has happened to these recommendations?

- Unfortunately, these reports are gathering dust in Government archives, and impasse over the issue has resulted in ugly custody disputes.
- Against this backdrop, in 2017, in *Vivek Singh v. Romani Singh*, Justice A.K. Sikri of the Supreme Court highlighted the concept of Parental Alienation Syndrome, which refers to the unjustified disdain of a child towards his or her parents.

Way forward

- ✚ Despite the idea of joint parenting growing in India, the laws remain unchanged. Courts are bound to the HMGA/GWA and have no other option. As a result, it is children who suffer in silence. During the pandemic, there have been many cases of custodial parents taking advantage of the laws and denying visitation rights to non-custodial parents. This affects the child in unimaginable ways. Family courts offer little aid in such cases.
- ✚ Therefore, general guidelines or practice directions by the Supreme Court are the need of the hour. Shared or joint parenting with equal rights is a viable, practical, balanced solution for the child’s optimal growth.
- ✚ Family courts are equipped under the Family Courts Act of 1984 to devise their own procedure, independent of the technicalities of law.
- ✚ They can formulate out-of-box methods and insist that children be shared by the father and mother.
- ✚ For a child to be caught in a conventional single parent custody trap is archaic and destructive to the child. It ruins the child’s life and also causes misery to the parent, especially to the one who does not have custody.

Economics

India-Israel free trade agreement

News Excerpt

India is in dialogue with Israel for concluding a Free Trade Agreement (FTA). The announcement coincides with the 30th anniversary of the establishment of diplomatic ties between the two countries.

Free Trade Agreement (FTA)

FTA is one of the stages of economic integration where two or more countries in a region agree to reduce or eliminate barriers to trade on all goods coming from other members.

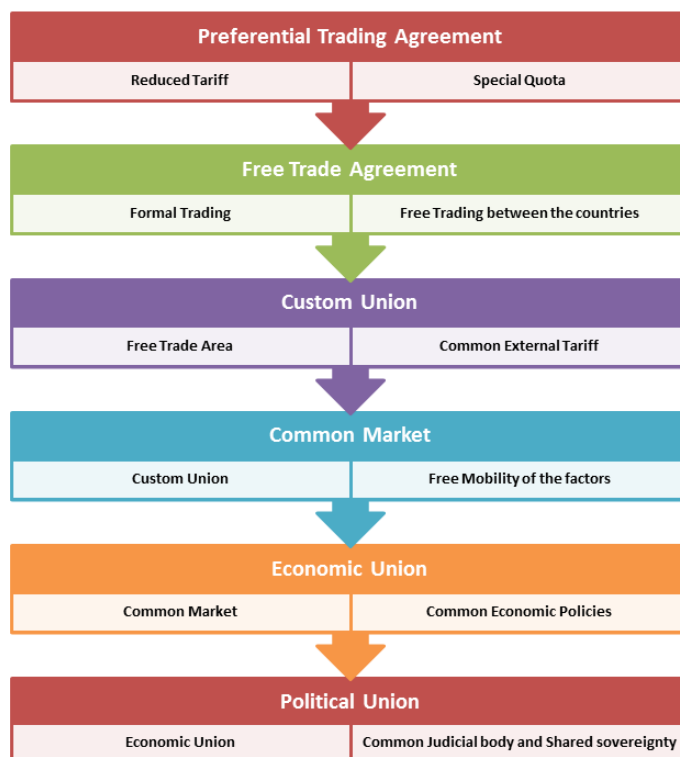
Stages of economic integration:

- 1st stage=**Preferential Trade Areas (PTAs)** exist when countries within a geographical region agree to reduce or eliminate tariff barriers on selected goods imported from other members of the area.
- 2nd stage=**Free Trade Areas (FTAs)** are created when two or more countries in a region agree to reduce or eliminate barriers to trade on all goods coming from other members.
- 3rd stage=A **Custom Union** involves the removal of tariff barriers between members, together with the acceptance of a common (unified) external tariff against non-members.
- 4th stage= A **Common market** is the most significant step towards full economic integration. In the case of Europe, the single market is officially referred to as the 'internal market'. The key feature of a common market is the extension of free trade from just tangible goods, to include all economic resources. This means that all barriers are eliminated to allow the free movement of goods, services, capital, and labour.
- 5th stage: **Economic union** is a term applied to a trading bloc that has both a common market between members, and a common trade policy towards non-members, although members are free to pursue independent macro-economic policies. The European Union (EU) is the best known Economic union
- 6th stage: **Political union**=it represents the potentially most advanced form of integration with a common government and where the sovereignty of a member country is significantly reduced.

Significance of FTAs for India

- India's real market size is not sufficiently big to support domestic demand led economic growth and exports have been a crucial component of India's growth.
- Access to new markets – Trade with MERCOSUR saw a significant growth post the FTA.
- Trade risk diversification – Increasing the diversification in terms of product basket and diversification countries help in hedging the unfavourable consequences on global and national

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trade due to geopolitical turmoil e.g. Oil crisis after Iran imbroglio, rift in GCC and incidental issues that are on rise in 21st century.

- Innovation and competition – Generally better market integration tend to enhance competition thereby it pushes the industry towards innovation benefitting consumers in long run.
- Technology transfer and increased integration – Increased trade leads to better integration of market and also facilitate transfer of skills and technology.
- Post-COVID world presents several opportunities for India. Structural changes could boost demand for tradable services from India.

PEPPER IT WITH
ASEAN, MERCOSUR,
APTA, EU, Other trade
agreements.

India and trade agreements

✓ India today is a fairly open economy, and as far as trade is concerned it has done well particularly in the area of FTAs (free trade agreements).

- ✓ India-ASEAN Trade in Goods, South Asia Free Trade Agreement (SAFTA), Indo Malaysia CECA (IMCECA), India Singapore CECA (ISCECA), and Japan India CEPA (JICECA) are some of the major agreements that have had a significant impact on India's international trade.

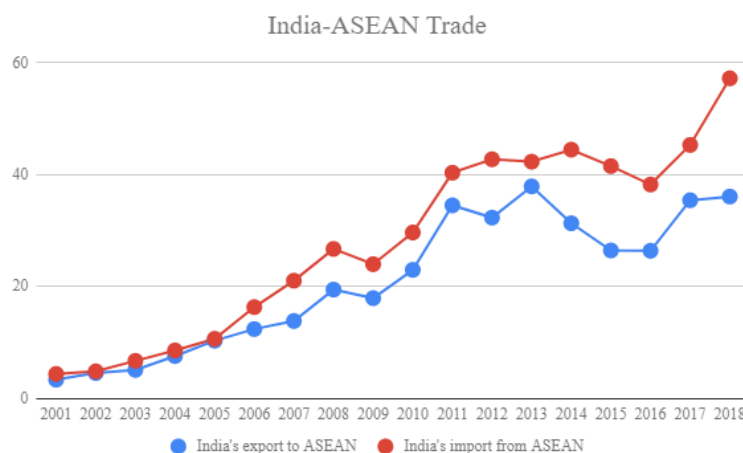
- ✓ India is looking to fast-track its FTA negotiations with countries such as the US, the UK, Australia, the EU, Canada and the UAE.
- ✓ FTAs have helped India compete at a global level and enhance its growth. However, since some market sizes are smaller, the impact of various FTAs shows that India has underperformed, with imports always being more than exports.
- ✓ In certain cases, domestic manufacturers were the worst affected as FTA made imports cheaper. Therefore, the government has to focus on two areas when negotiating on FTAs-enhancing trade and protecting the domestic sector.

Case study: India-ASEAN FTA

- ASEAN and India signed the ASEAN-India Trade in Goods (TIG) Agreement in Bangkok on 13 August 2009, after six years of negotiations. The ASEAN-India TIG Agreement entered into force on 1 January 2010.

TRADE TIES

Existing Agreements		In the Pipeline
<ul style="list-style-type: none"> ■ Singapore ■ Thailand ■ Malaysia ■ Asean ■ Chile 	<ul style="list-style-type: none"> ■ Japan ■ Afghanistan ■ South Korea ■ MERCOSUR ■ Sri Lanka 	<ul style="list-style-type: none"> ■ Australia ■ EU ■ New Zealand ■ UK ■ US ■ Mauritius



ASEAN trade strengthened post the FTA in 2010 however the degree of increase in imports has been much higher than exports to ASEAN. The wedge between import and export from and to ASEAN has increased post the FTA which was intertwined till 2005.

Way forward

- India should be careful while negotiating the clauses.
- Simply for the sake of gaining an advantage in the services sector and access to overseas markets in services, which are anyway not completely accessible due to various clauses, India should not end up losing on the primary and secondary sectors, as this will not only affect the livelihood of millions but also the economy as a whole.
- It would be a good idea to link the production linked incentive (PLI) scheme with 'AtmaNirbhar Bharat' initiative and guard against the ills of FTAs.
- The aim is to make Indian manufacturers globally competitive, attract investment in the areas of core competency and cutting-edge technology, ensure efficiencies, create economies of scale, enhance exports and make India an integral part of the global supply chain.
- India's post-Covid FTA strategy can grab world attention as the country is being projected as a bright spot in the global economy.

Challenges: Why are FTAs not working in favour of India?

- Complex rules of origin and its circumvention.
- Lack of information on FTAs.
- Asymmetrical and unfavourable tariff commitments.
- Absence of services components.
- Higher compliance costs and administrative delays dissuade exporters from using preferential routes.
- Non-tariff barriers in partner countries like import controls, sanitary and phyto-sanitary measures, etc.
- Global perception that India is a protectionist country.
- Spaghetti bowl effect i.e. overlapping FTAs between countries.

Pradhan Mantri Formalisation of Micro food processing Enterprises (PMFME) Scheme

News Excerpt

Ministry of Food Processing Industries launched six, One District One Product (ODOP) brands under the Pradhan Mantri Formalisation of Micro food processing Enterprises (PMFME) Scheme.

About the scheme

Ministry of Food Processing Industries (MoFPI), in partnership with the States, has launched an all India **centrally sponsored** "PM Formalisation of Micro Food Processing Enterprises Scheme (PM FME Scheme)" for providing financial, technical and business support for up gradation of existing micro food processing enterprises.

The objectives of the scheme are:

- Support for capital investment for upgradation and formalization with registration for GST, FSSAI hygiene standards and Udyog Aadhar.
- Capacity building through skill training, imparting technical knowledge on food safety, standards & hygiene and quality improvement.
- Hand holding support for preparation of DPR, availing bank loan and upgradation.

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➤ Support to Farmer Producer Organizations (FPOs), Self Help Groups (SHGs), producers cooperatives for capital investment, common infrastructure and support branding and marketing.

➤ Integration with organized supply chain by strengthening branding & marketing.

Coverage of States/ UTs and Funding Pattern

➤ An All India **Centrally Sponsored Scheme** with an outlay of Rs. 10,000 crore for coverage of 2,00,000 enterprises **over 5 years** from 2020-21 to 2024-25.

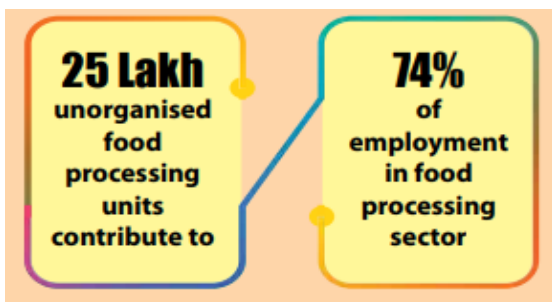
➤ The expenditure under the scheme would be shared in **60:40 ratio** between Central and State Governments, in **90:10 ratio** with North Eastern and Himalayan States, **60:40 ratio** with UTs with legislature and **100%** by Center for other UTs.

➤ Expenditure **in the first year 2020-21**, whether incurred by the Centre or the States would be **borne 100% by the Central Government**.

The expenditure made for the first year would be adjusted in ratio given above in the funds being transferred to the States equally in the next four years.

One district one product (ODOP)

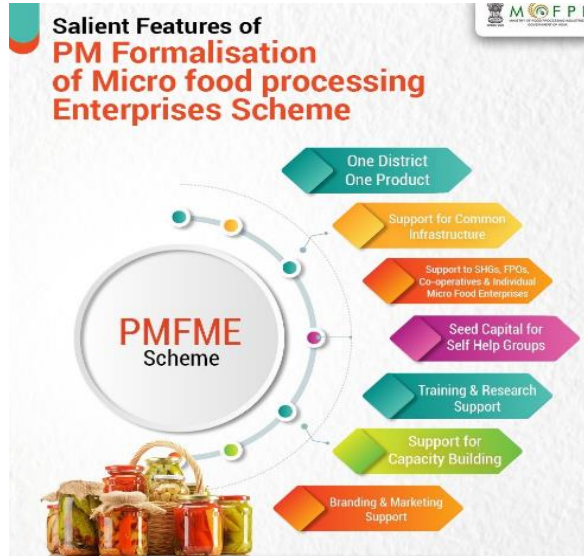
The Scheme adopts One District One Product (ODOP) approach to reap benefit of scale in terms of procurement of inputs, availing common services and marketing of products. The **States would identify food product** for a district keeping in view the existing



clusters and availability of raw material. The ODOP could be a perishable agri-produce, cereal based product or a food product widely produced in a district and their allied sectors. Preference would be given to those producing under ODOP approach. However, units producing other products would also be supported.

Food-processing sector at a glance

- ✓ The unorganized food processing sector comprising nearly 25 lakh units contributes to 74% of employment in food processing sector.
- ✓ Nearly 66% of these units are located in rural areas and about 80% of them are family based enterprises supporting livelihood in rural household and minimizing their migration to urban areas.
- ✓ These units largely fall within the category of micro enterprises.



PEPPER IT WITH
Centrally sponsored vs. Central sector schemes.

Pradhan Mantri Kisan SAMPADA Yojana (PMKSY)

The following schemes are being implemented under PMKSY:

- Mega Food Parks
- Integrated Cold Chain and Value Addition Infrastructure
- Creation/ Expansion of Food Processing/ Preservation Capacities (Unit Scheme)
- Infrastructure for Agro-processing Clusters
- Creation of Backward and Forward Linkages
- Food Safety and Quality Assurance Infrastructure
- Human Resources and Institutions

Challenges faced by these units:

- ✓ Lack of access to modern technology & equipment,
- ✓ Training, access to institutional credit,
- ✓ Lack of basic awareness on quality control of products, and
- ✓ Lack of branding & marketing skills, etc.

Therefore, the unorganised food processing sector contributes much less in terms of value addition and output despite its huge potential.

Other schemes/initiatives taken for the food-processing industries

- Pradhan Mantri Kisan SAMPADA Yojana (PMKSY)
- Production Linked Incentive Scheme for Food Processing Industry (PLISFPI)
- 'Operation Greens' on the line of 'operation flood'.

Extension of GST compensation**News Excerpt**

States are demanding extension of GST compensation for another five years which is set to end in June 2022, in view of the financial stress created by the outbreak of the pandemic.

Why demand for the extension?

✓ There has been a loss of revenue to the States due to the GST tax system subsuming many State taxes such as VAT.

✓ The impact of the COVID-19 pandemic on the overall economy and more specifically States' revenues. It had pushed back any possible rebound in revenue especially at a time when States have to spend more on the socio-economic front.

- At the time of introduction of GST, the States had agreed to forego their fiscal autonomy with an assurance from the Union government that their revenues would be protected. However, over the last five years, there had been a widening gap between the actual revenues realised and the protected revenues guaranteed.

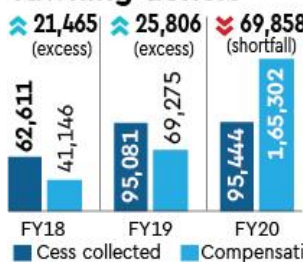
About GST compensation**Background**

○ GST was introduced through **101st Amendment Act**. It subsumed almost all the indirect taxes including States power, except few, into a single unified indirect tax i.e. GST.

○ While States would receive the SGST (State GST) component of the GST, and a share of the IGST (integrated GST), it was agreed that revenue shortfalls arising from the transition to the new indirect taxes regime would be made good from a pooled **GST Compensation Fund for a period of five years** that is currently set to end in June 2022.

○ This corpus in turn is funded through a compensation cess (called **Compensation Cess, recommended by the GST Council**) that is levied on so-called 'demerit' goods.

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**Yawning deficit**

April-July FY21	Protected state revenue	₹2.55 lakh cr	Gross GST collected*	₹2.57 lakh cr
	States' share (@50% of gross)	₹1.28 lakh cr	Shortfall	₹1.1 lakh cr
	*Minus cess funds of ₹15,665 cr			
	Cess fund shortfall in FY21: Between 1.9-2.1 lakh cr^A			

^AFE estimate

Accordingly, the Parliament enacted a law - **GST (Compensation to States) Act, 2017**. The law prescribes that the financial year 2015-16 shall be taken as the base year for the purpose of calculating compensation and States were assured of a 14 per cent growth in revenues every year.

PEPPER IT WITH
GST types and its slabs, GSTIN, Reverse charge mechanism.

Who pays compensation to whom? When?

The **consumer** is required to pay for compensation. It is **collected by the Centre** which **releases it to States**. The proceeds of the compensation cess will be credited to a **non-lapsable fund known as the Goods and Services Tax Compensation Fund** in the public account. All amounts payable to the States as compensation will be released **bi-monthly**, provisionally, from said fund against figures given by the Central accounting authorities.

Can the deadline be extended?

The deadline for GST compensation was set in the original legislation and so in order to extend it, the **GST Council must first recommend it and the Union government**. The government then move an amendment to the GST law allowing for a new date beyond the June 2022 deadline at which the GST compensation scheme will come to a close.

GST tax at a glance:



Definition of Developing and Developed countries in WTO

News Excerpt

China's status as a 'developing country' at the World Trade Organization (WTO) has become a contentious issue with a number of countries raising concerns about the definition and classification of countries.

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Who are the developing countries in the WTO?

Developing countries comprise a majority of the WTO membership. They are grouped as "developing countries" and "least developed countries", in accordance with the criteria set out below.

How is the selection made?

- There are **no** **WTO definitions** of "developed" and "developing" countries.
- Members announce for themselves whether they are "developed" or "developing" countries.
- However, other members can challenge the decision of a member to make use of provisions available to developing countries.

What are the advantages of "developing country" status?

Developing country status in the WTO brings certain rights. There are for example provisions in some WTO Agreements which provide developing countries with longer transition periods before they are required to fully implement the agreement and developing countries can receive technical assistance.

Special and differential treatment

provisions: The WTO Agreements contain special provisions which **give developing countries special rights** and which give developed countries the possibility to treat developing countries more favourably than other WTO Members. These special provisions include, for example, **longer time periods** for implementing Agreements and commitments or measures to increase trading opportunities for developing countries.

These provisions are referred to as "**special and differential treatment**" (S&D) provisions. The special provisions include:

- Longer time periods for implementing Agreements and commitments,
- Measures to increase trading opportunities for developing countries,

World Trade Organization (WTO)

The World Trade Organization (WTO) is the **only** global international organization dealing with the rules of trade between nations. At its heart are the WTO agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. The goal is to ensure that trade flows as smoothly, predictably and freely as possible.

- It officially commenced operations on **1 January 1995**, pursuant to the 1994 **Marrakesh Agreement**, thus replacing the General Agreement on Tariffs and Trade (GATT) that had been established in 1948.
- Created by: **Uruguay Round negotiations** (1986-94)
- Headquarter:** Geneva, Switzerland.
- Membership: Total 164 countries. China becomes its member only in 2001.
- Its top decision-making body is the **Ministerial Conference**, which is composed of all member states and usually convenes **biennially**. All decisions are taken **by consensus**.

Developing	Developed	Least-developed countries
India	U.S.	Afghanistan
China	European Union	Bangladesh
Russia	Japan	Bhutan
Brazil	Canada	Myanmar
South Africa	Australia	Nepal
South Korea	New Zealand	South Sudan

- Provisions requiring all WTO members to safeguard the trade interests of developing countries,
- Support to help developing countries build the capacity to carry out WTO work, handle disputes, and implement technical standards, and
- Provisions related to least-developed country (LDC) Members.

Why are some against China being classified as developing country?

Given the rise in China's per capita income to become an upper middle-income country according to the World Bank and the country's alleged use of unfair trade practices such as preferential treatment for state enterprises, data restrictions and inadequate enforcement of intellectual property rights, a number of nations have called on China to either refrain from seeking benefits available to developing countries or forego its classification as a developing country altogether.

Least-developed country (LDC)

The WTO recognizes least-developed countries (LDCs) as those countries which have been designated as such by the United Nations.

- o These countries exhibit the lowest indicators of socio-economic development, with the lowest Human Development Index ratings of all countries in the world.
- o Three criteria:
Poverty
Human resource weakness (low nutrition, education, health etc.)
Economic vulnerability

India appeals against WTO dispute panel

News Excerpt

India has appealed against a ruling of the World Trade Organization's (WTO) trade dispute settlement panel which ruled that the country's domestic support measures for sugar and sugarcane are inconsistent with global trade norms. The appeal was filed by India in the **WTO's Appellate Body**, which is the final authority on such trade disputes.

Background

- In 2019, Brazil, Australia and Guatemala dragged India into the WTO's dispute settlement mechanism.
- It alleged that New Delhi's domestic support measures to producers of sugarcane and sugar and export subsidies are inconsistent with global trade rules including various provisions of the WTO's Agreement on Agriculture, Agreement on Subsidies and Countervailing Measures, and the General Agreement on Trade and Tariffs (GATT).
- India has now appealed at the WTO's Appellate Body, claiming that the ruling has made "erroneous" findings about domestic schemes to support sugarcane producers and exports.
- India has sought review of the panel's finding that the scheme for providing assistance to sugar mills for expenses on marketing costs, including handling, upgrading and other processing costs and costs of international and internal transport and freight charges on the export of sugar for the 2019-20 sugar season (MAEQ Scheme).

Data

- o Brazil is the largest producer and exporter of sugar in the world.
- o India is the world's second largest sugar producer after Brazil.
- o Uttar Pradesh is the highest producer of sugarcane in India.

Dispute and settlement at WTO

- According to WTO rules, a WTO member or members can file a case in the Geneva-based multilateral body if they feel that a particular trade measure is against the norms of the WTO.

- Bilateral consultation is the first step to resolve a dispute. If both the sides are not able to resolve the matter through consultation, either can approach for the establishment of a dispute settlement panel. The panel's ruling or report can be challenged at the World Trade Organization's Appellate Body.
- Interestingly, the appellate body of the WTO is not functioning because of differences among member countries to appoint members in this body. The US has been blocking the appointment of the members.
- According to trade experts, if the appellate body also passes a ruling against India's support measures, New Delhi has to abide by that and make appropriate changes in the way it provides those measures.

WTO subsidy measures and different boxes:

- The subsidy provided by the government to the agricultural sector (i.e. domestic support) is termed by the WTO as **Aggregate Measure of Support (AMS)**. This domestic support category captures policies, such as market price support measures, direct production subsidies or input subsidies.
- WTO allows subsidies up to 5% of the value of production for developed nations and 10% for developing nations. This is called the **de-minimis ceiling**.
- In WTO terminology, subsidies in general are identified by “boxes” which are given the colours of traffic lights: green (permitted), amber (slow down - i.e. need to be reduced), red (forbidden).
- In agriculture, things are, as usual, more complicated. The Agriculture Agreement has no red box, although domestic support exceeding the reduction commitment levels in the amber box is prohibited; and there is a blue box for subsidies that are tied to programmes that limit production.
- There are also exemptions for developing countries (sometimes called an **“S&D box”** or **“development box”**).

Way forward

- As with everything else, there are arguments for and against subsidies. Proponents believe that the government can make use of subsidies to incentivise global companies to ‘Make in India’ and transform India into a manufacturing hub that would ultimately create more jobs.
- However, critics say that the burden of subsidies falls on taxpayers, who may complain against rising taxes at a time when the economy isn’t doing too well.
- Another set of economists believe that while subsidies may help in attracting some companies to set up a manufacturing base in India, the long-term sustainability of such operations would depend more on the ‘ease of doing business’ here. If a country can provide a conducive business environment for corporations, then perhaps, the need for extending subsidies wouldn’t be felt.

Amber Box:

- Nearly all domestic support measures considered to distort production and trade (with some exceptions) fall into the amber box.
- These include measures to support prices, or subsidies directly related to production quantities.
- These supports are subject to limits. “De minimis” minimal supports for both product-specific and non-product-specific support are allowed, defined as a share of the value of agricultural production.
- This threshold is generally 5% of the value of agricultural production for developed countries, 10% for most developing countries.

Blue Box:

- This is the “amber box with conditions” — conditions designed to reduce distortion. Any support that would normally be in the amber box, is placed in the blue box if the support also requires farmers to limit production.
- At present there are no limits on spending on blue box subsidies.

Green Box:

- Green box subsidies must not distort trade, or at most cause minimal distortion.
- They have to be government-funded (not by charging consumers higher prices) and must not involve price support.
- They tend to be programmes that are not targeted at particular products, and include direct income supports for farmers that are not related to current production levels or prices.
- They also include environmental protection and regional development programmes.
- Green box subsidies are therefore allowed without limits.

Development Box:

- The Agriculture Agreement allows developing countries additional flexibilities in providing domestic support.
- The type of **support that fits into the developmental category** are measures of assistance, whether direct or indirect, designed to encourage agricultural and rural development and that are an integral part of the development programmes of developing countries.
- These conditions revolve around human development issues such as poverty, minimum social welfare, health support etc. especially for the segment of population living below the poverty line.

Start-up Mission

News Excerpt

46 Startups were announced winners of the National Startup Awards 2021 along with 1 incubator and 1 accelerator. On this occasion Minister of Commerce & Industry has said Startup India is about realising millions of dreams and the Startup Mission is a symbol of Self-Reliant & Self-Confident India.

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Start-up India

It is a flagship initiative of the Government of India, intended to **build a strong eco-system for nurturing innovation and Startups** in the country that will drive sustainable economic growth and generate large scale employment opportunities. The Government through this initiative aims to empower Startups to grow through innovation and design.

In order to meet the objectives of the initiative, Government of India has announced **the Action Plan** that addresses all aspects of the Startup ecosystem. With this Action Plan the Government hopes to accelerate spreading of the Startup movement:

- From digital/ technology sector to a wide array of sectors including agriculture, manufacturing, social sector, healthcare, education, etc.; and
- From existing tier 1 cities to tier 2 and tier 3 cities including semi-urban and rural areas.

The Action Plan is divided across the following areas:

- Simplification and Handholding:

- Compliance Regime based on Self-Certification - Startups shall be allowed to self-certify compliance (through the Startup mobile app) with 9 labour and environment laws.

- Startup India Hub - To create a single point of contact for the entire Startup ecosystem and enable knowledge exchange and access to funding.

- Rolling-out of Mobile App and Portal - To serve as the single platform for Startups for interacting with Government and Regulatory Institutions for all business needs and information exchange among various stakeholders.

- Legal Support and Fast-tracking Patent Examination at Lower Costs

- Relaxed Norms of Public Procurement for Startups

- Faster Exit for Startups

- Funding Support and Incentives:

- ✓ Providing Funding Support through a Fund of Funds with a Corpus of INR 10,000 crore

- ✓ Credit Guarantee Fund for Startups

- ✓ Tax Exemption on Capital Gains

- ✓ Tax Exemption to Startups for 3 years

- ✓ Tax Exemption on Investments above Fair Market Value

- Industry-Academia Partnership and Incubation:

- Organizing Startup Fests for Showcasing Innovation and Providing a Collaboration Platform

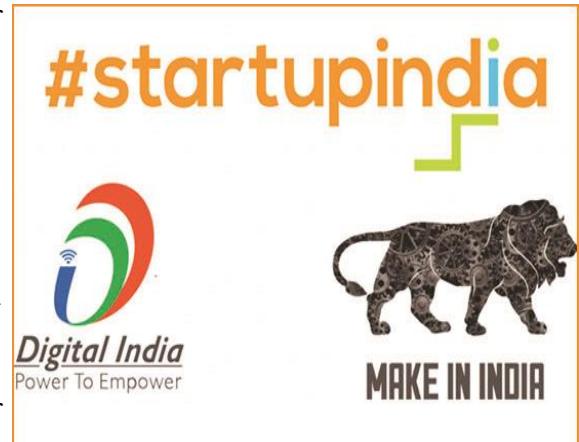
- Launch of Atal Innovation Mission (AIM) with Self-Employment and Talent Utilization (SETU) Program

- Harnessing Private Sector Expertise for Incubator Setup

- Building Innovation Centres at National Institutes

- Promoting Startups in the Biotechnology Sector

- Annual Incubator Grand Challenge.








PEPPER IT WITH

Make in India, Atal Innovation Mission (AIM), Digital India, Stand-up India scheme.

Progress of Start-up India and the ecosystem

- India has the 3rd largest startup ecosystem in the world; expected to witness YoY growth of a consistent annual growth of 12-15%

Definition of Start-up in India:

				
Company Age	Company Type	Annual Turnover	Original Entity	Innovative & Scalable
Period of existence and operations should not be exceeding 10 years from the Date of Incorporation	Incorporated as a Private Limited Company, a Registered Partnership Firm or a Limited Liability Partnership	Should have an annual turnover not exceeding Rs. 100 crore for any of the financial years since its Incorporation	Entity should not have been formed by splitting up or reconstructing an already existing business	Should work towards development or improvement of a product, process or service and/or have scalable business model with high potential for creation of wealth & employment

- India has about 50,000 startups in India in 2018; around 8,900 – 9,300 of these are technology led startups 1300 new tech startups were born in 2019 alone implying there are 2-3 tech startups born every day.

Indicators of growth in the start-up ecosystem:

- > The pace of growth in the startup ecosystem has increased to 15% year-on-year in 2018, while the growth of the number of incubators and accelerators has grown to 11%
- > Significantly, the number of women entrepreneurs stood at 14%, up from 10% and 11% in the previous two years.
- > Startups in the country have been able to create an estimated 40,000 new jobs over the year, taking the total jobs in the start-up ecosystem to 1.6-1.7 lakh
- > Bangalore has been listed within the world's 20 leading startup cities in the 2019 Startup Genome Project ranking. It is also ranked as one of the world's five fastest growing startup cities
- > 9X increase in the number of investors.



JOURNEY OF STARTUP INDIA COMPLETES 5 YEARS

Modi Govt Continues to Advance India's Tryst with Startups

Make in India for the World

- 3rd Largest & Fastest Growing Startup Ecosystem in the World
- 41,000 Startups Across 590 Districts, Creating 4,60,000 Jobs
- 44% Startups Have a Woman Entrepreneur

Celebrating 5 Years of Startup India with 'Prarambh'

15-16 January, 2021 | Startup India International Summit

Prarambh

- 7X increase in the total funding of startups.
- 7X increase in the number of incubators.
- As of 28th January 2022, India is home to **85 unicorns** with a total valuation of \$ 287.89 Bn.

Unicorn: Unicorn is a term used in the venture capital industry to describe a privately held startup company with a value of over \$1 billion.

Start-up awards:

The Department for Promotion of Industry and Internal Trade (DPIIT) conceived the National Startup Awards to recognize and reward outstanding Startups and ecosystem enablers that are building innovative products or solutions and scalable enterprises, with high potential of employment generation or wealth creation, demonstrating measurable social impact. The measure of success is not only the financial gains for the investors, but also the contribution to social good.



National Technical Textiles Mission (NTTM)

News Excerpt

Ministry of Textiles cleared 20 strategic research projects worth INR 30 crores in the areas of Specialty fibres and Geotextiles. These strategic research projects fall under the Flagship Programme National Technical Textiles Mission (NTTM).

National Technical Textiles Mission (NTTM)

To increase the penetration level of technical textiles in India while leveraging the extraordinary growth rate of the sector, the Ministry of Textiles has launched the National Technical Textiles Mission.

- Aim of the mission: to position India as a global leader in Technical Textiles.
- It also supports the 'Make in India' initiative promoting domestic manufacturing of related machinery and equipment.
- The mission will comprise of the following four components:
 - ✓ Research, Innovation and Development.
 - ✓ Promotion and Market Development.
 - ✓ Export Promotion.
 - ✓ Education, Training, Skill Development.

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Cabinet Committee on Economic Affairs (CCEA) approves

National Technical Textiles Mission
at an outlay of Rs. 1480 crore

Components:

- Research, Innovation & Development
- Promotion & Market Development
- Export Promotion
- Education, Training, Skill Development

Objectives:

- Encourage technological Start-ups & Innovation
- Provide Skill Training to at least 50,000 people
- Develop higher technological education for technical textiles in higher educational institutes
- Encourage fundamental research in technical textiles (geo-textiles, agro-textiles, medical textiles) used in agriculture, infrastructure, defence equipments, space missions, etc.

Outcome: Indian Technical Textiles Market Size to increase from \$16 billion (2018-19) to \$40 billion by 2023-24
Register export growth of 10% per annum

- The mission aims to develop the technical textile sector in India through:

- Market development and promotion
- International technical collaborations
- Investment promotion
- 'Make in India' initiative

All the components of the National Technical Textiles Mission in turn also support the 'Make in India' initiative by promoting research activities for indigenous development of machineries and process equipment for technical textiles. This will reduce India's import dependence and promote domestic manufacturing of capital goods in the sector.

Government Initiatives to Boost Technical Textiles Market

- Harmonized System of Nomenclature (HSN) Codes for Technical Textile.
- Government of India allows **100% FDI** under automatic route in the sector.
- **Technotex India:** It is a flagship event organised by the Ministry of Textiles, in collaboration with Federation of Indian Chambers of Commerce & Industry (FICCI).
- National Technical Textiles Mission: With a view to position the country as a global leader in technical textiles.

Technical Textiles

○ Technical Textiles are textile products which are manufactured primarily for their functionality and use rather than the aesthetic appeal.

○ Technical textiles are engineered products with a **definite functionality**. They are manufactured using natural as well as man-made fibres such as Nomex, Kevlar, Spandex, Twaron that exhibit enhanced functional properties such as higher tenacity, excellent insulation, improved thermal resistance etc.

○ Technical textiles, a **sunrise sector**. Technical textiles is a fast-growing sub-segment that finds its usage in an array of sectors.

○ **Application:** This includes functional fabrics which find application in civil engineering, construction, defence, healthcare and automobile among other industries. The products are divided into 12 segments based on their usage.

➤ The Indian Technical Textiles Sector has an Annual Average Growth Rate (**AAGR**) of **12%** which is three times the world average of 4%.

➤ The market size of the sector in India is estimated to be more than \$15 Bn (in FY 2018).

➤ Moreover, with a Compound Annual Growth Rate (**CAGR**) of **20%**, the domestic market of technical textiles is projected to cross \$25 Bn by FY 2021.

PEPPER IT WITH

HSN code, CAGR,
FICCI, Sunrise
industries

USAGE OF TECHNICAL TEXTILES IN 12 SEGMENTS (BASED ON APPLICATION)

MEDITECH

Diapers, Sanitary
Napkins, Disposables,
Contact Lens, Artificial
Implants

MOBILTECH

Airbags, Helmets,
Nylon Tyre Cords,
Airline Disposables

OEKOTECH

Recycling,
Waste Disposal,
Environmental
Protection

PACKTECH

Wrapping Fabrics,
Polyolefin Woven
Sacks, Leno Bags,
Jute Sacks

PROTECH

Bullet Proof Jackets,
Fire Retardant
Apparels, High Visibility
Clothing

SPORTECH

Sports Net, Artificial
Turf, Parachute
Fabrics, Tents,
Swimwear

AGROTECH

Shadenets, Fishing
Nets, Mulch Mats, Ant
Hail Nets

BUILDTECH

Cotton Canvas
Tarpaulins, Floor and
Wall Coverings,
Canopies

CLOTHTECH

Zip Fasteners,
Garments, Umbrella
Cloth, Shoelaces

GEOTECH

Geogrids, Geonets,
Geocomposites

HOMECH

Mattress and Pillow
Fillings, Stuffed Toys,
Blinds, Carpets

GEOTECH

Conveyer Belts, Vehicle
Seat Belts, Bolting
Cloth

Opportunity and challenges in the sector

Strength	Weakness
1) Availability of educated technical officials 2) Huge Domestic market 3) India is one of the fastest growing economy 4) Self sufficiency of mostly all the fibres used in Technical Textiles 5) Substantial textile manufacturing network 6) Future growth in technical textile is expected at higher level. 7) Entrepreneur intelligence & mind set towards investment & growth	1) Fragmented / Limited production units. 2) Need to change existing infrastructure for more productivity 3) Poor R&D facility & also no/less research work in industry. 4) Lack of skilled work force. 5) Lack of knowledge / awareness / willingness on Environmental issues
Opportunity	Threats
1) One of the fastest growing economy 2) Massive developments in infrastructure & developments (Geo-tech) 3) Mega automobile manufacturing projects (Auto-tech) 4) Systematic way of agriculture production leads to use of Agro-Tech / Irrigation techniques 5) Educational institutes / sports authority is focused on sports activity – (Sport-Tech) 6) Real Estate - Building infrastructure is growing – (Build-Tech) 7) India growing as medical tourism – (Medi-tech)	1) Absence of vision towards future requirements in Technical Textile (eg. Geotech, meditech, etc...) 2) Hesitancy in acceptance of sizable scales for new technology 3) Mind-set of investors is moving towards out-sourcing & selling rather than producing in India & selling.

Way forward

- ✓ Technical textiles industry is **at a nascent stage in India** and hence, holds a vast potential for growth. With the government's aim to create world class infrastructure in the country, in addition to the implementation of several policies and schemes to boost the textile sector, technical textiles is poised for growth.
- ✓ Useful physical properties such as durability, elasticity and versatility make technical textiles even more useful in times of changing climate, global warming, and complex industrial processes. Presence of large and global and domestic players has influenced the growth in technical textiles and has helped build sector prominence.
- ✓ The overall development of the infrastructure, coupled with the availability of skilled and low-cost labour, focus of research and development activities and strong manufacturing capabilities make India increasingly preferable as an attractive investment destination.
- ✓ With a favourable policy ecosystem in place, India is already on its way to capitalise the fullest potential of this sector.

Global Investment Trend Monitor Report

News Excerpt

The United Nations Conference on Trade and Development (UNCTAD) has published its Global Investment Trend Monitor report for the year 2021. According to the report, Global FDI rebounds strongly in 2021, but the recovery is highly uneven.

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 PATNA: 7463950774 | INDORE: 7314977441 | RANCHI: 9939982007 | www.ksgindia.com

Pre-Connect

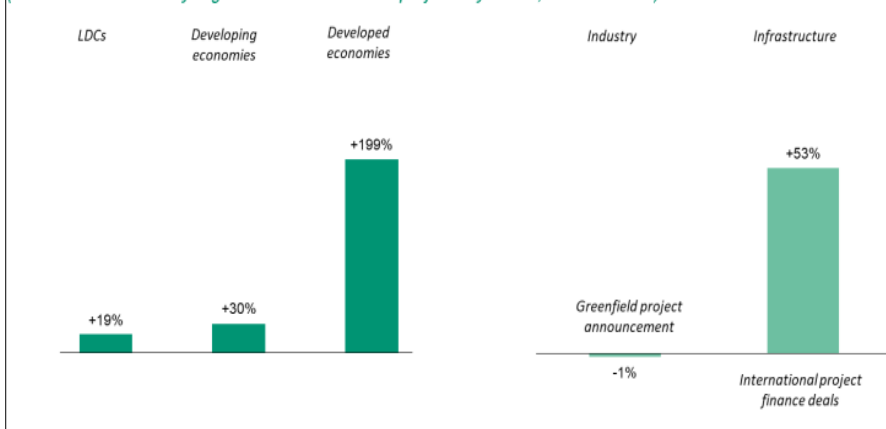
- ✓ FDI is a major driver of economic growth and **a source of non-debt finance** for the economic development of the country.
- ✓ Government has put in place **an investor friendly policy on FDI**, under which FDI up to 100% is permitted on the automatic route in most sectors/ activities.
- ✓ FDI policy provisions have been progressively liberalized across various sectors in recent years to make India an attractive investment destination.
 - Some of the sectors include Defence, Construction Development, Trading, Pharmaceuticals, Power Exchanges, Insurance, Pension, Other Financial Services, Asset reconstruction Companies, Broadcasting and Civil Aviation.
 - India, today is a part of the top 100 clubs on Ease of Doing Business (EoDB).
 - FDI inflows in India stood at \$45.15 bn in 2014-15 and have **consistently increased since then**. Moreover, **total FDI inflow grew by 65.3%**, i.e. from \$266.21 bn in 2007-14 to \$440.01bn in 2014-21 and **FDI equity inflow also increased by 68.6%** from \$185.03 bn during 2007-14 to to \$312.05 bn (2014-21).
 - During **FY 2020-21**, total **FDI inflow** of \$58.37 bn, **22% higher** as compared to the first 8 months of 2019-20. **FDI equity** inflows received during April - November 2020 is \$43.85 bn which is **37% more** compared to April - November 2020 (\$32.11 bn).

Highlights of the report

- Global foreign direct investment (FDI) flows showed a strong rebound in 2021, up 77% to an estimated \$1.65 trillion, from \$929 billion in 2020, surpassing their pre-Covid-19 level.
- Developed economies saw the biggest rise by far, with FDI reaching an estimated \$777 billion in 2021 – three times the exceptionally low level in 2020.
- FDI flows in developing economies increased by 30% to nearly \$870 billion, with a growth acceleration in East and South-East Asia (+20%), a recovery to near pre-pandemic levels in Latin America and the Caribbean, and an uptick in West Asia. Inflows in Africa also rose.
- Of the total increase in global FDI flows in 2021 (\$718 billion), more than \$500 billion, or almost three quarters, was recorded in developed economies. Developing economies, especially the least developed countries (LDCs) saw more modest recovery growth.
- Investor confidence is strong in infrastructure sectors, supported by favourable long-term financing conditions, recovery stimulus packages, and overseas investment programmes.
- In contrast, investor confidence in industry and global value chains remains weak.
- FDI in the USA-the largest host economy-increased by 114% to \$323 billion.

Figure 1. Uneven recovery growth

(Growth rates for FDI by region and for investment projects by sector, 2021 vs 2020)



- FDI in the European Union was up 8%, flows in the largest economies remained well below pre-pandemic levels.

- China saw a record \$179 billion of inflows-a 20% increase-driven by strong services FDI.

- The report described the outlook for global FDI in 2022 as positive but added that the 2021 rebound growth rate is unlikely to be repeated.

- **FDI in India:**

FDI flows to India were 26% lower, mainly because large mergers and acquisitions (M&A) deals recorded in 2020 were not repeated.

- The report had noted that the second wave of the COVID-19 outbreak in India weighed heavily on the country's overall economic activities.

- Announced greenfield projects in India had contracted by 19 per cent to USD 24 billion, and the second wave in April 2021 affected economic activities, "which could lead to a larger contraction in 2021"

Others reports and information about India:

- The World Investment Report by UNCTAD released in June last year had said that amid the pandemic, India received USD 64 billion in foreign direct investment in 2020, the fifth-largest recipient of inflows in the world.

- FDI to India increased 27 per cent to USD 64 billion in 2020

from USD 51 billion in 2019, pushed up by acquisitions in the information and communication technology (ICT) industry.

Recent Government initiatives to liberalise FDI in India:

- In September 2021, India and the UK agreed for an investment boost to strengthen bilateral ties for an 'Enhanced Trade Partnership'.

- In June 2021, the Finance Ministers of G-7 countries including the US, the UK, Japan, Italy, Germany, France and Canada attained a historic contract on taxing multinational firms; under

United Nations Conference on Trade and Development (UNCTAD)

- Established in 1964 as an intergovernmental organization intended to promote the interests of developing states in world trade.
- It is the part of the United Nations Secretariat dealing with trade, investment, and development issues.
- It reports to the UN General Assembly and United Nations Economic and Social Council (ECOSOC).
- **Headquarters at:** Geneva, Switzerland.
- **Goals:** maximize the trade, investment and development opportunities of developing countries and assist them in their efforts to integrate into the world economy on an equitable basis.

According to the Ministry of Commerce & Industry for the year 2020-2021:

- India has attracted highest ever total FDI inflow of \$ 81.72 billion during the financial year 2020-21 and it is 10% higher as compared to the last financial year 2019-20 (US\$ 74.39 billion).
- Top investor countries, **'Singapore' is at the apex** with 29%, followed by the U.S.A (23%) and Mauritius (9%) for the F.Y. 2020-21.
- **'Computer Software & Hardware' has emerged as the top sector** during F.Y. 2020-21 with around 44% share of the total FDI Equity inflow followed by Construction (Infrastructure) Activities (13%) and Services Sector (8%) respectively.
- **Gujarat is the top recipient state** during the F.Y. 2020-21 with 37% share of the total FDI Equity inflows followed by Maharashtra (27%) and Karnataka (13%).

this, the minimum global tax rate would be at least 15%. The move is expected to further boost foreign direct investments in the country.

- In September 2021, the Union Cabinet announced to allow 100% foreign direct investment (FDI) via the automatic route, from the previous 49% in the telecom sector in India, to boost the sector.
- In August 2021, the government amended the Foreign Exchange Management (non-debt instruments) Rules, 2019, to allow the 74% increase in foreign direct investment limit in the insurance sector.

Way forward

- ✓ India is expected to attract foreign direct investments (FDI) of US\$ 120-160 billion per year by 2025, according to CII and EY report. Over the past 10 years, the country witnessed a 6.8% rise in GDP with FDI increasing to GDP at 1.8%.
- ✓ To ensure the revival doesn't fade, the government must undertake the following steps:
- ✓ Provide more benefits and incentives, and easier processes to seek larger foreign investments. While the improvement in the ease of doing business ranking is a big positive, the government has to maintain a consistent upward learning curve and communicate new evolutionary developments to the world.
- ✓ Widen investment avenues by bringing the benefits of organisation to more real estate sub-asset classes such as rental housing development, student housing and senior citizen living.
- ✓ So far, India has not been able to take advantage of this ongoing relocation of production facilities out of China. But it should gradually facilitate foreign firms setting up manufacturing bases in India, providing a boost to both employment and exports.

PEPPER IT WITH

Ease of doing business (EoDB) report, FDI VS FPI, ECOSOC.

International Relation

India-China Trade

News Excerpt:

India's trade with China in 2021 crossed \$125 billion, with imports from China nearing a record \$100 billion. The country's bilateral trade with China has grown 44 per cent in 2021 imports grew over a record 46 per cent while exports were up 35 per cent.

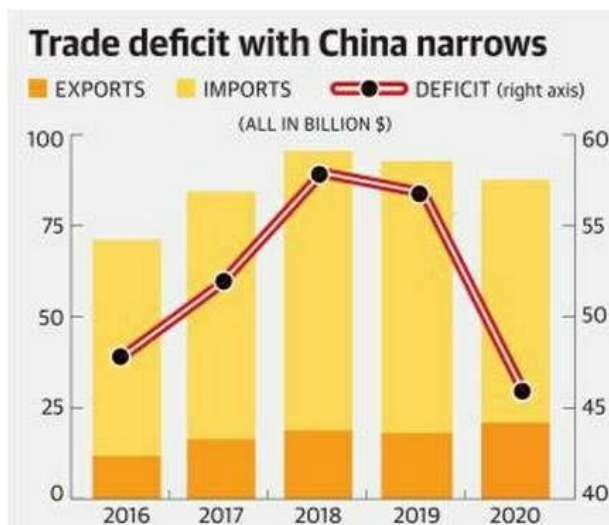
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Key Points:

- Due to the pandemic, India imported more goods from China in the past 12 months than the total bilateral trade in 2019. Sino-Indian trade fell from \$92.8 billion in 2019 to \$87.6 billion in 2020.
- A recovery in demand and higher imports of certain goods such as medical supplies led to a boom in bilateral trade in 2021. Bilateral trade was \$125.6 billion in 2021, with \$97.5 billion of India's imports coming from China.

Highlights:

- The 43% year-on-year growth in bilateral trade with India was among the highest that China recorded with its major trading partners.
- Trade figures with China's top three trading partners showed growth of 28.1% with ASEAN, 27.5% with the European Union, and 28.7% with the United States.
- Data from India's Commerce Ministry shows that China surpassed the United States as India's second largest trading partner in April-November. The UAE, Saudi Arabia, Iraq, and Hong Kong were also among the top trading partners during this period.
- Despite a lack of data on the breakdown of imports and exports, iron ore, cotton, and other raw material-based commodities have been India's biggest exports to China in recent years.
- The country has imported great quantities of electrical and mechanical machinery, active pharmaceutical ingredients (APIs), auto parts, and over the past two years has imported a variety of medical supplies, including oxygen concentrators and personal protective equipment.
- Experts have noted that players in the Indian electronic goods space are still largely focused on the assembly of products and did not have much discretion in sourcing of components.



Government's steps to reduce import dependence:

- ✓ Chinese investments have been scrutinized in many sectors, and the government is considering whether to exclude Chinese companies from 5G trials.
- ✓ As part of its efforts to make India a global supplier and reduce its import bill, the Ministry of Commerce and Industry identified 12 areas - food processing, organic farming, iron, aluminium, copper, electronics, and industrial machinery etc.

- ✓ As part of a package of four schemes approved by the government in March 2020, the government approved a total allocation of Rs. 13,760 crores with a view to boosting domestic production of bulk drugs and medical devices for export.
- ✓ In order to sustain India's economy, it is important not to sever all economic links with China, the world's second-largest economy. Chinese finance may be of great help to India's nascent economy.

PEPPER IT WITH

Trade relations of India with the US, ASEAN, EU, Trade deficit with major economies

Asian Infrastructure Investment Bank (AIIB)

News Excerpt

Former Reserve Bank of India (RBI) governor Urjit Patel has been appointed vice-president of the Beijing-based Asian Infrastructure Investment Bank (AIIB). He will serve a three-year term as one of the multilateral development bank's five vice-presidents.

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Pre-connect:

- The Asian Infrastructure Investment Bank (AIIB) is a multilateral development bank with the mission to facilitate economic and social development in Asia.
- Its headquarters are in Beijing and it began operating in 2016. It is established by the AIIB Articles of Agreement.
- The US and Japan are not members of the AIIB.
- AIIB members include 14 of the G-20 countries, including France, Germany, Italy, and the United Kingdom.

Key Points:

- Urjit Patel will lead the AIIB's investment operations and all sovereign and non-sovereign lending in South and Southeast Asia.
- India received more AIIB loans than any other member of the bank since its establishment in Beijing in 2015. China is the bank's largest shareholder while India is second-largest.
- The AIIB has funded 28 projects in India amounting to \$6.7 billion. The bank had "a very strong pipeline of projects" with regard to India.
- Bank has transitioned away from predominantly co-financing projects with either World Bank or Asian Development Bank (ADB). Initially, 70-80% of projects involved the World Bank or ADB, but now the bank has started to fund its own projects.
- It has recently emphasised green projects and supporting public health initiatives during the COVID-19 pandemic, besides infrastructure.
- India has applied for loans from the AIIB and ADB to procure 667 million doses of COVID-19 vaccines with the ADB expected to lend \$1.5 billion and the AIIB around \$500 million, under the ADB's Asia Pacific Vaccine Access Facility (APVAX) initiative.

PEPPER IT WITH

ADB, ASEAN, WORLD BANK, IMF

Political Crisis in Sudan

News Excerpt

Sudan's civilian Prime Minister Abdalla Hamdok resigned on Sunday, plunging the country into further turmoil. Mr. Hamdok, who was sacked by the military in

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October and reinstated a few weeks later as part of a deal, stepped down as anti-military protests continued to rock the country.

Key Points:

- Sudan has entered a state of political chaos following the resignation of civilian Prime Minister Abdalla Hamdok.
- During the transition from a military-led council to a Sovereignty Council composed of 11 military and civilian leaders, PM Hamdok was appointed to the position.
- The military was unable to settle for an equal sharing of powers and took steps to try to take back the country's political power.
- In 2021, the military disbanded the council, declared an emergency and arrested all civilian leaders, including Mr. Hamdok, resulting in massive protests.
- In an attempt to deal with the rising protests, the military reinstated Hamdok but without the Sovereignty Council, leaving him powerless.
- This was not acceptable to the people, and they protested against the military coup that led to Hamdok stepping down.



Highlights:

- Mass protests broke out in late 2018, and the military has tried everything it can to preserve its privileges. It dissolved Mr. Bashir's rule and implemented the transition council. Following direct rule ceasing to work, the Generals agreed to share power.
- Although the generals were upset by the civilians' consolidation of social support and political authority, an agreement was made whereby the acting Prime Minister (Mr. Hamdok) would run day-to-day affairs, while the military chief would remain the leader of the Sovereignty Council for two years.
- UN estimates that at least a third of the country's 43 million people will need humanitarian assistance by 2022.

PEPPER IT WITH

African Continental Free Trade Area (AfCFTA), African Union

What Sudan needs is a stable, responsive government that can address the country's many challenges. The Sudanese parties need to enter into a meaningful dialogue in order to reach a more inclusive, peaceful, and lasting outcome. A real transition should also prevent the military from continuing its hold on power.

Nuclear Pledge

News Excerpt

Five global nuclear powers China, Russia, U.S., U.K., France, pledged to prevent spreading of atomic weapons and nuclear conflict, in a rare joint statement issued after review of Non-Proliferation Treaty (NPT) was postponed due to COVID-19.

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Pre-connect:

- Non-Proliferation Treaty (NPT) is an international treaty aimed at preventing nuclear weapons and weapons technology from spreading, promoting peaceful uses of nuclear energy, and advancing the goal of nuclear disarmament.
- The treaty was signed in 1968 and entered into force in 1970. It has 190 member states.
- India is not a member and considered the NPT as unfair and unjust and had refused to sign it.
- The NPT has failed to achieve its purpose of creating a pathway towards an international disarmament process, largely because it dates from the Cold War era.

Key points of joint statement:

- The five major powers emphasized that their top priority was avoiding nuclear war between nuclear-weapon states and reducing strategic risks, despite current tensions between China and Russia and their Western counterparts.
- They added: "We each intend to maintain and further strengthen our national measures to prevent unauthorised or unintended use of nuclear weapons."
- The statement comes at a time when tensions between Russia and the United States have reached heights rarely seen since the Cold War over a troop build-up by Moscow close to the Ukrainian border.

Nuclear energy is becoming increasingly popular as a method of obtaining sustainable and reliable domestic energy, as more and more countries seek energy independence. The Treaty on the Prohibition of Nuclear Weapons is a positive step in the direction of nuclear disarmament. The development of clean energy, peaceful coexistence, and development of human potential is vital for all countries.

United Nation Security Council

News Excerpt:

Albania, Brazil, Gabon, Ghana, and the United Arab Emirates officially started their term as members of the U.N. Security Council as they took up their posts in a June election.

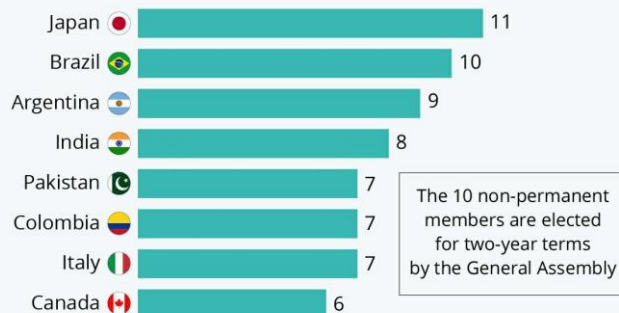
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Key Points:

- Albania is joining for the first time while Brazil is taking an 11th turn. Gabon and Ghana each have been on the council three times before and the UAE once.
- Many countries fight for seats for years. Winning allows them to participate in peacekeeping missions and the council's other approaches to conflict hotspots, plus they'll have a strong voice regarding international issues of peace and security.
- Furthermore, Council members get the chance to convene meetings on security topics that are of particular interest to them, and smaller countries have a platform to interact with world powers.

The Most Frequently Elected UN Security Council Members

Non-permanent UN Security Council members with the most terms since 1946*



* Including members already elected to serve their two-year terms in 2021. Belgium, Germany, the Netherlands and Poland have also been elected 6 times. Source: United Nations

Highlights:

- The 15 member council is the UN's most powerful body. China, France, Russia, the United Kingdom and the United States are its permanent members with veto power.
- More than 50 of the UN's 193 member countries have never been elected to the council since it was formed in 1946.
- Other members are elected by the 193 member General Assembly for staggered, two-year terms that are allocated by global regions.
- Estonia, Niger, St Vincent and the Grenadines, Tunisia and Vietnam finished their terms.

Issues and India's role:

- ✓ A non-permanent member of the UN Security Council for seven times, India entered the UNSC for the eighth time in 2021. India has been advocating a permanent seat in the UNSC for some time now.
- ✓ A leading role was played by India in the formulation of the Universal Declaration of Human Rights (UDHR).
- ✓ India is the third largest troop contributor in the United Nations peacekeeping force.
- ✓ The main problem with the current system is that a group of countries holds all of the governing power in international security relations.

In order to make the UNSC more democratic and legitimize its governance, the imbalances between P5 and the rest of the world need to be corrected urgently. This will ensure that the principles of international peace, security, and order are observed.

PEPPER IT WITH
G4, P5, G77

India-US Homeland Security Dialogue

News Excerpt:

The meeting of the India-US Homeland Security Dialogue was co-chaired by Union Home Secretary and US Under Secretary for Strategy, Policy and Plans. India and the US reviewed the ongoing cooperation in counterterrorism, cyber security and many other issues.

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Key Points:

- The meeting discussed how to secure critical infrastructure and global supply chains, maritime security, aviation security, customs enforcement and trade security, among other issues.
- Under the homeland security dialogue, there are several existing subgroups focusing on law enforcement engagement, supply chain security, aviation security, investigative cooperation, and capacity building and training that will work together.
- As a follow-up to the signing of the India-US counterterrorism initiative, the Indo-US homeland security dialogue was launched in 2010.
- The first Homeland Security Dialogue occurred in 2011.

India-US relations:

- The bilateral relations between India and the United States have evolved into a "global strategic partnership".
- Delhi Declaration of Friendship and the Joint Strategic Vision for Asia-Pacific and the Indian Ocean Region were adopted by both countries in 2015.

- A high point in Indo-US strategic ties, the Malabar exercise in November 2020 represented the first time in 13 years that all four countries of QUAD participated at the same time.
- During 2020-21, the US replaced Mauritius as the second largest source of foreign direct investment in India. The US is also a major destination for India's exports of goods and services. It is India's second largest trading partner.

PEPPER IT WITH

Malabar exercise, NISAR, QUAD, Four foundational defence agreements

Houthi's UAE attacks

News Excerpt

According to reports, explosions caused by the suspected drone attack in Abu Dhabi, the capital of the United Arab Emirates (UAE), killed three people. It was claimed that this attack was conducted by the Shia Houthi rebels of Yemen, who have controlled parts of the northern part of the country, including the capital Sana'a, for almost seven years.

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About Houthis

- In the early 1990s, Hussein al-Houthi and his father, Badr al-Din al-Houthi, founded a Zaydi revivalist group called "Believing Youth" (Muntada al-Shahabal-Mu'min).
- Inspired by the Iranian revolution of 1979 and the rise of Hezbollah in southern Lebanon in the 1980s, Badr al-Din and his sons started building vast social and religious networks among the Zaydis of Yemen, who make up roughly one-third of the Sunni-majority country's population.
- The Zaydis were a powerful sect in Yemen. After the collapse of the Ottoman Empire in 1918, they would establish a monarchy (the Mutawakkilite Kingdom) in the country.
- But their dominance would come to an end in 1962 when the Egypt-backed republicans overthrew the monarchy.

The rise of the Houthis:

- During the 2010 and 2011 Arab Spring protests that overthrew the dictatorships of Tunisia and Egypt, the Houthis supported the Yemeni opposition, a position now bolstered by their military victories and their support within Sadah.
- Yemen, under the tutelage of Saudi Arabia and the UAE, started a national dialogue to resolve internal differences. The Houthis were part of the dialogue.
- They soon got back to insurgency. Saleh, who was sidelined by the interim government and its backers, joined hands with his former rivals and launched a joint military operation.
- By January 2015, the Houthi-Saleh alliance had captured Sana'a and much of northern Yemen, including the vital Red Sea coast.



Highlights:

- The rapid rise of the Houthis in Yemen set off alarm bells in Riyadh which saw them as Iranian proxies. Saudi Arabia started a military campaign in 2015,
- With no effective allies on the ground and no way-out plan, the Saudi-led campaign went on with no tangible result.
- In the past six years, the Houthis have launched multiple attacks on Saudi cities from northern Yemen in retaliation for Saudi air strikes. In 2019, the Houthis claimed the attack on two Saudi oil installations that knocked out, briefly, half of the kingdom's oil output.
- This is not the first time the Houthis attacked the UAE. In 2018, when the UAE-backed forces were making advances in Yemen, the Houthis claimed attacks against the Emirates.
- Since then, the UAE pulled out its troops from Yemen and offered tactical support to the Southern Transitional Council, a group of rebels based in Aden was also fighting the Saudi-backed government forces of President Hadi.
- Abu Dhabi, the second-most populous city in the tiny UAE, has been attacked as a result of Houthi drone attacks, which appear to be a clear message to the Emiratis to stay out of Yemen.



ENVIRONMENT

India State of Forest Report 2021

News Excerpt

Recently, the Ministry of Environment, Forests and Climate Change (MoEFCC) released the 17th India State of Forest Report (ISFR) 2021. The report exhibited a continuing upsurge in forest cover across the country.

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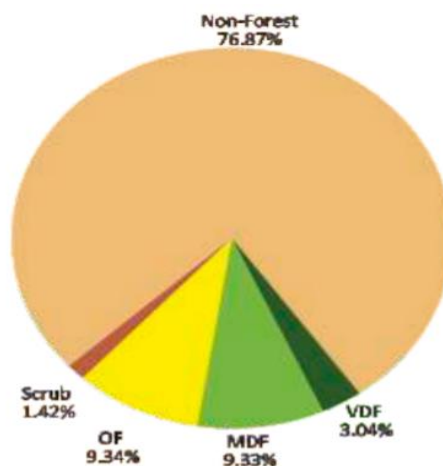
Pre-Connect

- The National Forest Policy of India 1988 envisions a goal of attaining 33 percent of the geographical area of the country under forest & tree cover.
- Forest Cover refers to the extent of land area that is covered by trees.
- Forest Survey of India (FSI) initiated an assessment of the Forest Cover of the country for the first time in the year 1987.
- All lands more than 1 hectare in area, with a tree canopy density of more than 10 percent, including tree orchards, bamboo, palms etc., occurring within the recorded forest and another government land, private community, or institutional lands, are included in the assessment of Forest Cover.

Class	Description
Very Dense Forest	All lands with tree canopy density of 70 percent and above.
Moderately Dense Forest	All lands with tree canopy density of 40 percent and more but less than 70 percent.
Open Forest	All lands with tree canopy density of 10 percent and more but less than 40 percent.
Scrub	Forest lands with canopy density less than 10 percent.
Non-forest	Lands not included in any of the above classes. (includes water)

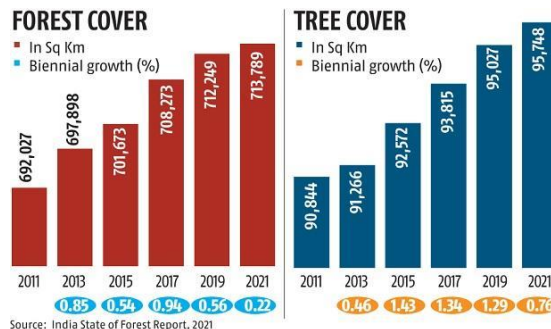
Key highlights of the report

- The Forest Cover of the country, as per the current assessment is 7,13,789 sq km which is 21.71 percent of the total geographic area of the country.
- The 17th assessment illustrates an increase of 1,540 sq km (0.22%) of forest cover, 721 sq km (0.76%) of tree cover and 2,261 sq km (0.28 %) of forest and tree cover put together, at the national level.
- The top five States in terms of increase in forest cover are-
 - Andhra Pradesh (647 sq km)
 - Telangana 32 sq km),
 - Odisha (537 sq km),
 - Karnataka (155 sq km)
 - Jharkhand (110 sq km).
- Forest cover in the hill districts of the country is 2,83,104 sq km, which is 40.17% of the total geographical area of these districts. The current assessment shows a decrease of 902 sq km (0.32%) in 140 hill districts of the country.
- The total forest cover in the tribal districts is 4,22,296 sq km, which is 37.53% of the geographical area of these districts.
- Total forest cover in the North Eastern region is 1,69,521 sq km, which is 64.66% of its geographical area. The current assessment shows a decrease of forest cover.



OF-Open Forest, MDF-Medium dense forest, VDF-Very Dense forest

- Mangrove cover in the country has increased by 17 sq km (0.34%) as compared to the previous assessment.
- The total growing stock of wood in the country is estimated as 6,167.50 million cum comprising 4388.15 million cum inside forest areas and 1779.35 million cum outside recorded forest areas (TOF). The average growing stock per hectare in the forest has been estimated as 56.60 cum.
- The total bamboo bearing area of the country is estimated at 1,49,443 sq km. There is a decrease of 10,594 sq km in the bamboo bearing area.
- In the present assessment, the total carbon stock in the forest is estimated as 7,204.0 million tonnes. There is an increase of 79.4 million tonnes in the carbon stock of the country as compared to the last assessment of 2019.
- The forest cover is being assessed by using the Remote sensing method which utilizes satellites.
- For the first time forest cover in protected areas like tiger reserves, tiger corridors and the Gir forest was assessed. The forest cover in tiger corridors has increased by 37.15 sq km (0.32%) between 2011-2021. Buxa (West Bengal), Anamalai (Tamil Nadu) and Indravati reserves (Chhattisgarh) have shown an increase in forest cover while the highest losses have been found in Kawal (Telangana), Bhadra (Karnataka) and the Sunderbans reserves (West Bengal). Pakke Tiger Reserve in Arunachal Pradesh has the highest forest cover, at nearly 97%.



Limitation

- ✓ The Remote sensing data has certain inherent limitations that affect the accuracy of the forest cover Mapping. For instance- Species-wise data is not represented completely.
- ✓ Land cover having geometric dimensions on the ground less than 23.5 m is not discernible. Therefore, Remote sensing has its own limitation that it may not provide the complete information regarding scrub. For instance- Tea estates are being captured by remote sensing and falsely represented under forest cover.
- ✓ There are discrepancies in the methodology. The report is counting plantations on the road, rubber, coffee or tea plantations and even patches of trees as forest cover.
- ✓ Considerable ground details may sometimes be obscured due to clouds and shadow.
- ✓ Non-availability of appropriate season data sometimes leads to misinterpretation of the features owing to poor reflectance of data.
- ✓ Young plantations and tree species with less chlorophyll or poor foliage, many a times are not discernable on satellite images due to low leaf index and transmittance.
- ✓ Recorded forest areas cannot be delineated if their boundaries are unavailable. Species composition is not identifiable with the images.

India's Initiative

- Under the intended nationally determined contribution in accordance with CoP-21, India plans to create carbon sinks of 2.5 to 3 billion tonnes of carbon dioxide equivalents by increasing its forest and tree cover to 33% of its land area.
- The effort to increase tree cover up to 33% sits within the National Mission for a Green India (GIM), one of eight Missions under the National Action Plan on Climate Change (NAPCC) as well as earlier national forest policy goals.

- To increase forest resources in the country, Ministry of Environment, Forest and Climate Change is implementing a number of Schemes under which financial assistance is provided to State/UT Governments.
- Some of major schemes of the Ministry are National Afforestation Programme (NAP) and Green India Mission (GIM), Integrated Development of Wildlife Habitat (IDWH), Intensification of Forest Management Scheme (IFMS), Project Tiger and Project Elephant including funds under Compensatory Afforestation Fund Management and Planning Authority (CAMPA).

Conclusion

- ✓ India is lacking in adequate forest cover, as of now only around 22%. In fact, in the last 3 years alone, we've lost forest land the size of Kolkata, to development projects.
- ✓ A strong start is required in barren land and wasteland with public participation. By using Seed Bomb mechanism and Miyawaki method forest regeneration has to be increased. Moreover, adequate steps have to be geared up for the conservation of biodiversity and forest cover including tree cover.

2021: Sixth Warmest Year

- ❖ According to scientists from the United States National Oceanic and Atmospheric Administration (NOAA), the global surface temperature for 2021 was the sixth-highest since record keeping began in 1880.
- ❖ The average temperature across global surfaces was 0.84 degrees Celsius (°C) above the 20th century average.
- ❖ This was the sixth highest among all years in the 1880-2021 record.
- ❖ The 2021 global land and ocean temperature was 1.04°C above the average for the 21-year span (1880-1900 that is considered a reasonable surrogate for pre-industrial conditions).
- ❖ The year 2021 began in the midst of a cold phase El Niño Southern Oscillation (ENSO) episode across the central and eastern tropical Pacific Ocean, which developed in August 2020.

PEPPER IT WITH

Afforestation, REDD+, Global Forest Form, New York Declaration on Forests

Dam Safety in India

News Excerpt

Recently, the Comptroller and Auditor General of India (CAG) released a report and raise an issue regarding dam repairs in India.

Pre-Connect

- Central Water Commission is a premier Technical Organization of India in the field of Water Resources.
- CWC (erstwhile Central Waterways, Irrigation and Navigation Commission) was established in 1945 by the Government on the advice of Dr. B.R. Ambedkar, Member (Labour) in Viceroy's Executive Council.
- The Commission is entrusted with the general responsibilities of initiating, coordinating and furthering in consultation of the State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country, for purpose of Flood Control, Irrigation, Navigation, Drinking Water.

Key Pointers of Report

- Gandhi Sagar Dam on Chambal River in Madhya Pradesh is in need of immediate repair. It is one of the five water reservoirs of national importance.
- Absence of regular checks, non-functional instruments and choked drains are the major problems plaguing the dam for years, the report by the Comptroller and Auditor General of India (CAG).

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- Dams with major deficiencies, may lead to complete or partial failure and need attention at once, fall under Category I.
- Those with minor to medium deficiencies, which are rectifiable but need immediate attention fall under Category II.
- As many as 27 other smaller dams of MP were in Category II, according to the report.
- The state dam safety organisation (SDSO), the department responsible for its maintenance, did not comply with recommendations by the Central Water Commission (CWC) and Dam Safety Inspection Panel (DSIP) on remedial measure.

National Water Awards

- ❖ 3rd National Water Awards-2020 was announced.
- ❖ In the Best State category, Uttar Pradesh has been awarded first prize, followed by Rajasthan and Tamil Nadu.
- ❖ The first National Water Award was launched by the Jal Shakti Ministry in 2018.
- ❖ National Water Awards have provided a good opportunity to start-ups as well as leading organizations to engage and deliberate with senior policymakers on how to adopt the best water resources management practices in India.

Issue of Ageing of Dams

- ✓ India is the third largest dam owning country. There are 5,745 reservoirs in the country of which 293 are more than 100 years old.
- ✓ There are a number of challenges to the dam safety and some are mainly due to the age of the dams. As the dams become old, their design, hydrology and everything else do not remain at par with the latest understanding and practices. Huge siltation is taking place as a result of which the water holding capacity of dams is getting reduced.
- ✓ As per the UN Report on Dam Infrastructure, In India, over 1,115 large dams will be at around 50 years mark by 2025.
- ✓ Over 4,250 large dams would pass 50-years of age, with 64 large dams being 150 years old at 2050.
- ✓ India's ageing dams may threaten farmers' income, increase instances of flooding and may aggravate the issue of water security. Dams and reservoirs are believed to secure water needs for the future.

Challenges associated with Dams

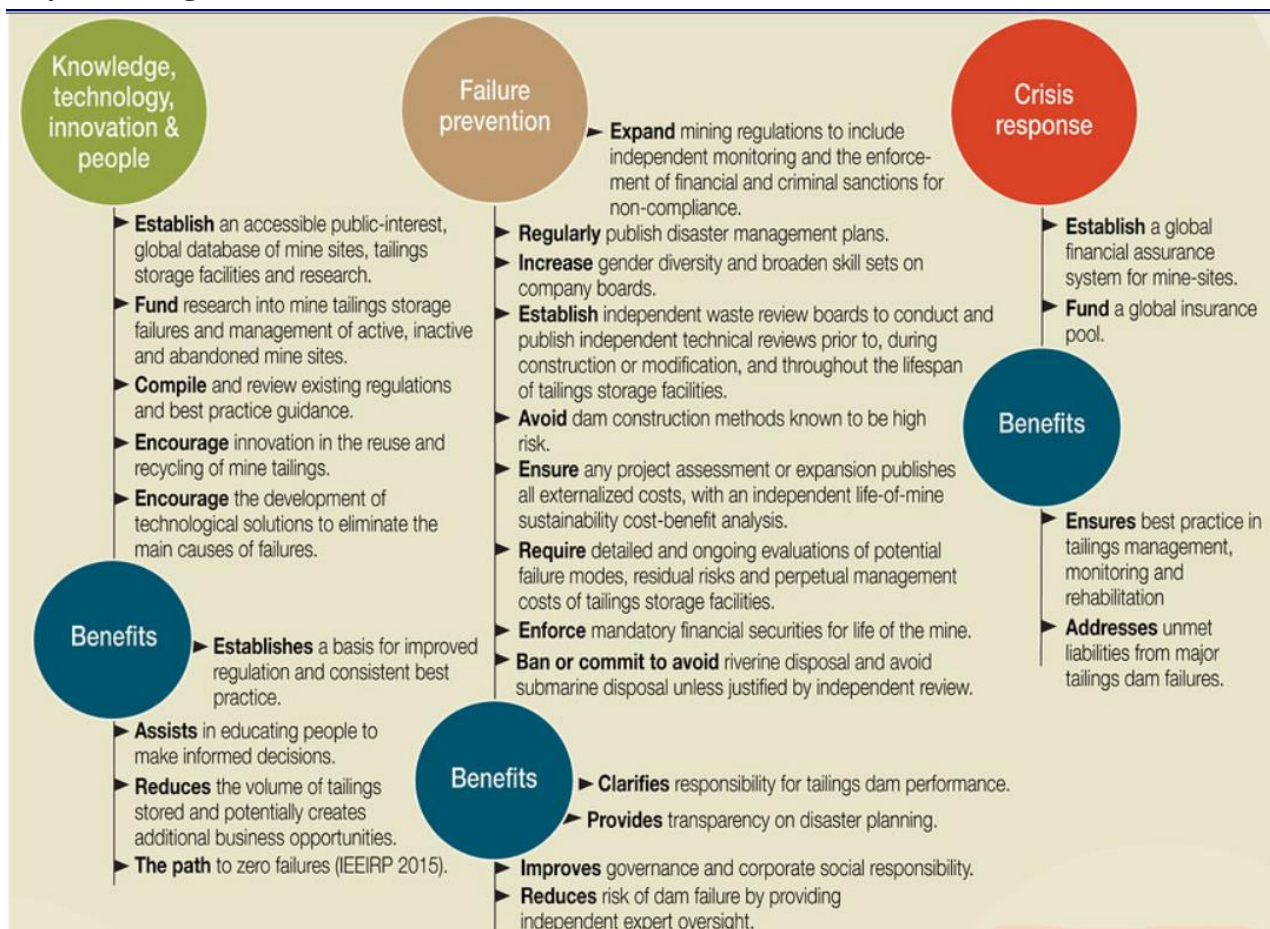
- India's current water requirement is estimated to be around 1,100 billion cubic meters per year, projected to go up to 1,447 billion cubic meters by 2050. To meet with the demand there is dire need to develop adequate dams and carry out constant repairs. Therefore finance is the challenge.
- Indian dams are very old and built according to the rainfall pattern of the past decades.
- Erratic rainfall in recent years has left them vulnerable, because of which these problems are happening.
- The Dam Safety Bill 2021 passed in the Rajya Sabha with much fanfare earlier this month doesn't elicit much hope. The act will be implemented by current authorities. So, essentially the idea of accountability being fixed to change the scenario will hardly be addressed.
- Dam safety has been in a bad shape. So, these problems prevail and have come out in the report. They can result in two kinds of disasters: One, when the structure fails, and second when the operation is not proper. Both can cause disasters in the downstream area. Non-compliance of recommendations make the inspections merely a routine exercise with no consequential benefit.

Dam Safety initiatives taken by India

- ✚ A dam safety organization was formed within the Central Water Commission (CWC) in 1979. CWC has developed web-based asset management tools named DHARMA and SHAISYS.

- ✚ National Committee on Dam Safety (NCDS) is an advisory body which suggests ways to bring dam safety activities in line with the latest advancements in the field.
- ✚ Ministry of Jal Shakti initiated World Bank assisted Dam Rehabilitation and Improvement Project (DRIP).
- ✚ The Dam Safety Bill 2019 provides for the surveillance, inspection, operation, and maintenance of all specified dams across the country. The Bill is likely to be introduced in Rajya Sabha in near future.

Ways to mitigate



Way Forward

- ✓ India must conduct a cost-benefit analysis of its ageing dams, and conduct timely safety reviews in order to ensure their operational and ecological safety, as well as the safety of those who inhabit the areas downstream.
- ✓ A risk-based approach is necessary for making sound decisions on dam safety.
- ✓ Dam failure analysis is fundamental to a risk-based approach to dam safety. Some of the technological and institutional foundations for building a robust risk-based decision-making system for this sector have to be scale up.
- ✓ A few policy changes can enable India to build better and safer dam sector.

PEPPER IT WITH
DRIP Project, ICOLD Symposium, EIA, Dam Safety Act

Emission norms for thermal power plant

News Excerpt

As per the Centre for Science and Environment (CSE) report, (CSE is a Delhi-based non-profit organisation) 61 per cent of coal thermal power capacity in Category A will not be able to meet the deadlines in 2022.

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Pre-Connect

- In 2015, the Ministry of Environment, Forest and Climate Change (MoEF&CC) set new emission norms and fixed a deadline to meet it.
- Initially, MoEF&CC had set a 2017 deadline to comply with emissions standards in thermal power plants.
- The Union ministry releases list of coal thermal power plants and their categorisation in line with its April 2021 notification.

Key Points of report

- The analysis showed that 61 per cent coal thermal power capacity in Category A, 35 per cent capacity in Category B and 32 per cent capacity in Category C will not be able to meet deadlines even in 2022.

Category	Criteria	Deadline for compliance
A	Within 10 km radius of the National Capital Region (NCR) or cities having million-plus population	2022
B	Within 10 km radius of critically polluted areas or non-attainment cities	2023
C	Remaining plants	2024

- Nearly 78 per cent of the coal power capacity in India is not liable to meet emission norms before 2024.
- The major defaulters are from Maharashtra, Tamil Nadu, Madhya Pradesh, Chhattisgarh and Andhra Pradesh. These defaulting stations are run largely by the respective state governments.
- Except for Assam (AS), none of the other states among these 17 will 100 per cent comply with the stipulated deadlines. This state has a 750-megawatt power station that makes it an insignificant per cent of total coal capacity.
- In Bihar (BR), Jharkhand (JH), Chhattisgarh (CH), Punjab (PB), Uttar Pradesh (UP) and Gujarat (GJ), the capacity of plants that will meet the deadline to surpasses the capacity that will miss it.
- Most of the capacity is either centrally or privately owned in these states.
- Haryana (HR), Karnataka (KA) and West Bengal (WB) are the only states where despite a higher state ownership ratio, the capacity that will meet the deadline is higher than those that will miss it. The state sector seems to be more on track in these states as compared to other states.
- In Madhya Pradesh (MP), Maharashtra (MH), Odisha (OD), Telangana (TS) and Rajasthan (RJ), the coal thermal capacity that will meet the deadline is similar to the capacity that will miss it. In most of these places, the capacity is either private or state-owned with the exception of Odisha, where the majority of plants are centrally owned.

- Andhra Pradesh (AP) and Tamil Nadu (TN) are the only two states where the ratio of coal power capacity missing the deadline is more than the capacity that will meet it. Data shows that in case of both these states, the capacity belonging to the state sector can be attributed to this skewed outcome.

Way Forward

Government should support India's energy transition and check pollution from crop-stubble burning by converting them into pellets and facilitating their sale. Polluter pays principle instead of acting as a deterrent, is being misused by some industries to 'pay their way through' despite repeated non-compliance. The policymakers need to initiate the strict norms for the compliance of coal emission.

PEPPER IT WITH

Energy Transition and Decarbonisation Forum, World Coal Association, Kyoto Protocol, carbon border adjustment mechanism, Carbon credit, carbon offsetting

Green Energy Corridor

News Excerpt

The Cabinet Committee on Economic Affairs approved the scheme on Green Energy Corridor (GEC) Phase-II for Intra-State Transmission System (InSTS).

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Pre-Connect

- The Green Energy Corridor (GEC) Project aims at synchronizing electricity produced from renewable sources such as solar and wind with conventional power stations in the grid.
- This project is being implemented by eight renewable-rich states of Tamil Nadu, Rajasthan, Karnataka, Andhra Pradesh, Maharashtra, Gujarat, Himachal Pradesh, and Madhya Pradesh. Under this phase, the target is to install 9700 circuit km of transmission lines.

Objectives

- The objective of the GEC is to evacuate approx. 20,000 MW of large-scale renewable power and improvement of the grid in implementing states.
- GEC-II aims to achieve the target of 450 GW installed RE capacity by 2030.
- GEC-II will facilitate grid integration and power evacuation of approximately 20 GW of Renewable Energy (RE) power projects in seven States namely, Gujarat, Himachal Pradesh, Karnataka, Kerala, Rajasthan, Tamil Nadu and Uttar Pradesh.
- The transmission systems will be created over a period of five year from Financial Year 2021-22 to 2025-26.
- It is targeted to be set up with a total estimated cost of Rs. 12, 031 crores, and the Central Finance Assistance (CFA) will be 33% of the project cost.
- The CFA will help in offsetting the Intra-State transmission charges and thus keep the power costs down.

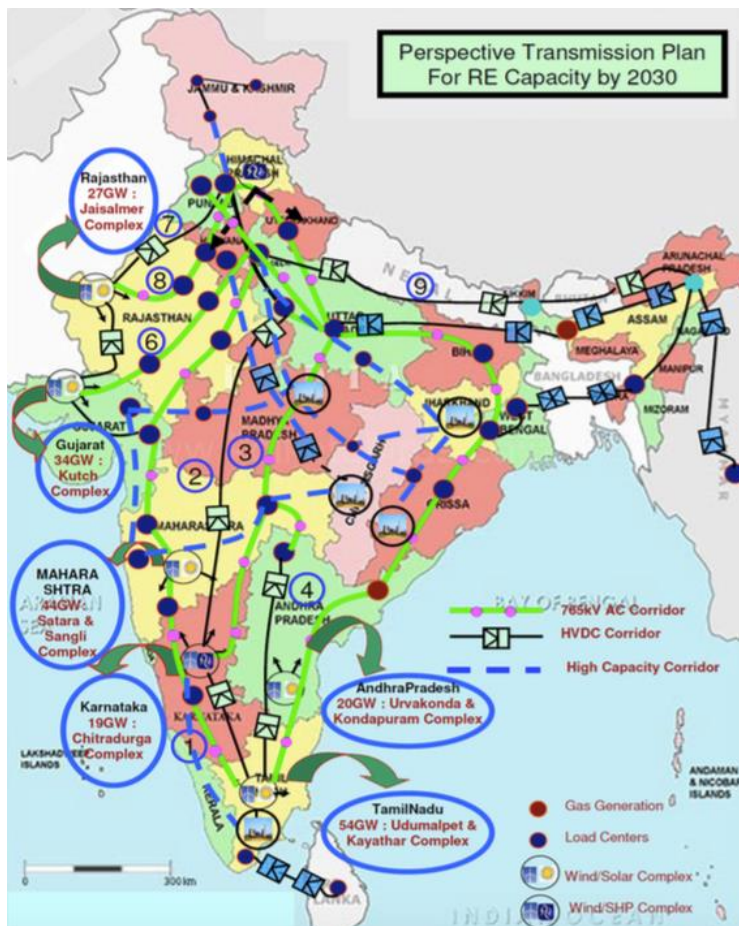
Importance of Green Energy Corridor

- ✓ The investment in the infrastructure to synchronise the electricity produced from RE sources with that from conventional power stations will contribute to energy security, ensure ecologically sustainable growth, and spur employment generation.
- ✓ India has pledged to increase the country's non-fossil fuel power generation capacity to 500GW and meet 50% of its energy requirements from renewable sources by the end of this decade.

- ✓ This scheme will help in achieving the target of 450 GW installed RE capacity by 2030.
- ✓ GEC-II will contribute to long-term energy security of the country and promote ecologically sustainable growth by reducing the carbon footprint.
- ✓ The GEC-II would foster in offsetting the intra-state transmission charges and keep the power costs down. Thus, the government support will ultimately benefit the end users.

Key Initiatives related to Green Energy

- International Solar Alliance
- One Sun, One World, One Grid (OSOWOG).
- Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM)
- Atal Jyoti Yojana
- Suryamitra Skill Development Programme
- Solar Park Scheme and Grid Connected Solar Rooftop Scheme
- National Wind-Solar Hybrid Policy 2018
- Hydrogen Based Fuel Cells Vehicles



PEPPER IT WITH
ISA, OSOWOG,
National Solar
Mission, INDC, CoP-26

Conclusion

GEC-II is a correct steps towards the clean electricity generation. It will strengthen the renewable energy sector. Renewable energy forms an integral part of India's current and future energy policy. If India follows the ambitious plan it has volunteered for, it can accomplish the dual goal of economic development and green-energy production, which is certainly within the realms of possibility.

Bioenergy crops

News Excerpt

Recently, A study has concluded that converting annual crops to perennial bioenergy crops can induce a cooling effect on the areas where they are cultivated.

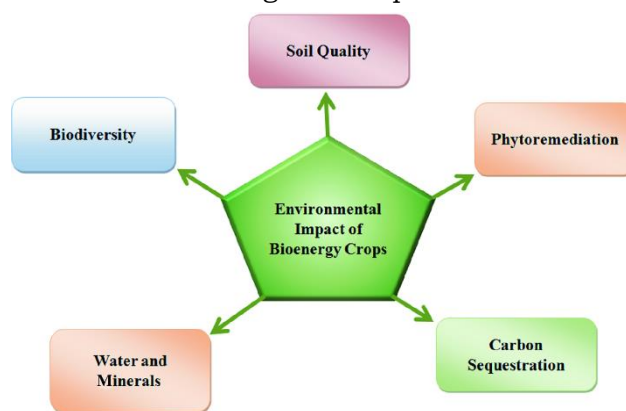
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About Bio energy crops

- Bioenergy crops are defined as any plant material used to produce bioenergy. These crops have the capacity to produce large volumes of biomass, high energy potential and can be grown in marginal soils.
- Bioenergy is the energy derived from recently living material such as wood, crops, or animal waste.

Key Insights of the study

- Currently, cultivation area under bioenergy crops occupies $3.8\% \pm 0.5\%$ of the global total land area.
- These crops exert strong regional biophysical effects, leading to a global net change in air temperature of $-0.08\text{ }^{\circ}\text{C} \sim +0.05\text{ }^{\circ}\text{C}$.
- After 50 years of large-scale bio-energy crop production, researchers discovered that global air temperature drops by $0.03\text{--}0.08\text{ }^{\circ}\text{C}$, with considerable regional disparities and inter-annual variability.
- Depending on the cultivation map and the bio-energy crop type, the biophysical cooling or warming impacts of bioenergy crop cultivation can greatly strengthen or reduce the effectiveness of Bio-energy Crop Cultivation with Carbon Capture and Storage (BECCS) in controlling temperature rises.
- The researchers looked at the biophysical climate consequences of large-scale bio-energy crops to thoroughly assess their contribution in climate mitigation.
- Moreover, researchers also demonstrated the importance of the bioenergy crop type choice.
- Further, the magnitude of changes in the biophysical effects also depends on the total Bioenergy crop area under cultivation.
- On the global scale, large-scale bio-energy crop cultivation has a biophysical cooling effect, but the air temperature change has considerable geographical and inter-annual variability.



Issue of Solar Waste

News Excerpt

As per the report of the National Solar Energy Federation of India (NSEFI), India could generate over 34,600 tonnes of cumulative solar waste by 2030.

Pre-Connect

- NSEFI is an umbrella organisation of all solar energy stakeholders of India. It works in the area of policy advocacy and is a National Platform for addressing all issues connected with solar energy growth in India.

Key Points

- The report gives emphasis on India does not have a solar waste management policy, but it does have ambitious solar power installation targets.
- According to the report of NSEFI, Solar wastes are the electronic waste generated by discarded solar panels.

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- They are sold as scrap in the country. Solar waste can increase by at least four-five-fold by the next decade.
- The report highlighted that India will be faced with solar waste problems by the end of this decade, and solar waste will end up being the most prevalent form of waste in landfills. Solar panels have a life of 20-25 years, so the problem of waste seems distant.
- Photovoltaics generate only about 3 % of global electricity, they consume 40 % of the world's tellurium, 15 % of the world's silver, a substantial chunk of semiconductor-grade quartz and lesser but still significant amounts of indium, zinc, tin and gallium.
- Globally, it is expected that the End-of-Life (EoL) of solar panels will drive the solar panel recycling business in the next 10-20 years.

Rooftop solar (RTS)

- ❖ Rooftop solar in India needs easy financing, unrestricted net metering, and an easy regulatory process to make it attractive to developers.
- ❖ At least 40 gigawatt was earmarked for rooftop solar by 2022 and 60 GW for utility-scale or ground-mounted projects as part of the nationwide revamped target for renewable energy installations in 2014.
- ❖ The Union Ministry of New and Renewable Energy (MNRE) indicates that of the 40 GW of installed solar capacity, only 6,111 MW (15 per cent of the target) was RTS, as of November 2021.
- ❖ During 2020-21, RTS accounted for 1.9 GW, compared to 3.5 GW utility-scale solar.
- ❖ Industrial RTS installations grew by 50-60 per cent from 2014-15 to 2018; however, in the last couple of years, they have remained at 1-1.5 GW annually due to many factors, including the COVID-19 pandemic.

Ways to Minimise the Impact of Solar Waste

- ✓ Strong e-waste or Renewable Energy Waste Laws have to be enacted for the manufacturer and developers to take responsibility for end-of-life the solar panel.
- ✓ To bring down the cost of recycling infrastructure investment is required, coordination between the energy and waste sector to efficiently handle the renewable energy waste and build more recycling plants to avoid solar panels ending up in landfills.
- ✓ Solar panel waste is harmful to the environment as it contains toxic metals and minerals that may seep into the ground. New business models, incentives or issues of green certificates to be provided to encourage the recycling industry to participate more.
- ✓ Innovation in design may have an impact on the type of waste they generate; technology advancements will be significant in reducing the impact of renewable energy waste. New panels, for example, use less silicon and produce less waste during the manufacturing process.

Indian Renewable Energy Development Agency Limited (IREDA)

- ❖ The Cabinet Committee on Economic Affairs approved the equity infusion of Rs.1500 crore in IREDA.
- ❖ This equity infusion will help in employment generation of approximately 10200 jobs-year and CO2 equivalent emission reduction of approximately 7.49 Million Tonnes CO2/year.
- ❖ IREDA is a mini ratna (Category-1) company, set up in 1987 to work as a specialised non-banking finance agency for the Renewable Energy (RE) sector.
- ❖ IREDA with more than 34 years of techno-commercial expertise, plays a catalytic role in the RE project financing which gives confidence to the FIs/banks to lend in the sector.

Socio-Economic Impacts

Social/Economic		
Impacts	Positive	Negative
Land use and landscape	<ul style="list-style-type: none"> Decreased land use compared to conventional energy resources Reuse of degraded sites Use of unused sites (such as in deserts) Multi-purpose and integrated use on existing developments or buildings (like rooftops, façades) 	<ul style="list-style-type: none"> Unavailable land/ high competition with other land uses (such as agriculture) Degradation of vegetation and soil erosion Higher up-front costs Visual/landscape experience Microclimatic change Glare risk by reflection
Infrastructure	<ul style="list-style-type: none"> Reduced transmission lines/grids Energy supply for decentralized, low-density off-grid areas, also in developing countries 	<ul style="list-style-type: none"> Requirement for energy storage for continuous supply
Political	<ul style="list-style-type: none"> National energy independency from import Lower military expenses (less conflicts in the oil rich countries) 	<ul style="list-style-type: none"> Economically detrimental subsidies such as uncontrolled and miscalculated fee-in-tariff mechanisms
Energy market	<ul style="list-style-type: none"> Diversification Deregulation 	<ul style="list-style-type: none"> Intermittent supply issues
Industry, R&D, education	<ul style="list-style-type: none"> Jobs creation Higher development and education level 	<ul style="list-style-type: none"> Health hazards and risks during manufacturing phase

Conclusion

India is yet to have a dedicated PV waste management and recycling policy. At present, solar module and battery waste is treated as general electronic waste and fall under the Ministry of Environment, Forest and Climate Change. However, given the distinct nature of this waste and the economic value of components, it is necessary to have a separate regulation in place. At present, India's PV module manufacturing industry is underdeveloped and the majority of the modules are imported from countries like China. Having a module recycling policy in place can make India self-reliant by ensuring a sustainable supply of raw materials and creating employment opportunities.

PEPPER IT WITH
E-waste Rules, CPCB,
Minamata Convention

Star rating system for Environmental Clearance

News Excerpt

The Union Ministry of Environment, Forests and Climate Change (MOEFCC) has decided to incentivise states by ranking them on the basis of efficiency and timelines in grant of environmental clearances.

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About Star System

- MOEFCC announced the implementation of a new system of rating each State Environment Impact Assessment Authority (SEIAA).
- The process is based on the speed with which they grant environmental clearance (EC) to projects such as mining operations and construction work.
- In order to be rated highly, the state authorities must satisfactorily fulfil seven criteria that can earn them a maximum of eight points (and a rating of five stars).

- According to the new system, state environment impact assessment authorities can earn up to one point each for six of the criteria and up to two points for the remaining one. The SEIAAs will be rated every six months in what the ministry calls a “dynamic process”.
- The first criterion is the “average number of days for granting EC”.
- The second criterion is the percentage of terms of reference proposals that have been disposed of 30 days after receiving them.
- The latest rating system follows a slew of other measures that the ministry of environment has proposed to loosen environmental compliance norms.

About environmental clearance process

- The environmental clearance process is warranted for 39 types of projects listed in the Environmental Impact Assessment notification of 2006. These include the mining of minerals, the building of airports and townships, and the installation of thermal power plants, to name a few.
- These projects are categorised based on the kind of environmental clearance they would require. Category A projects require mandatory environmental clearance at the central level, and category B projects are reviewed at the state level by the SEIAAs.
- The SEIAAs further categorise these projects into B1 and B2, with the latter not requiring an environmental impact assessment to be carried out in order for clearance to be granted. Those in the B2 category have to meet a separate set of parameters for clearance.
- Project proponents who have to carry out environmental impact assessments can either do so directly or hire a consultant to carry it out. Typically, environmental clearance has four stages: screening, scoping, public consultation, and appraisal.
- Screening is undertaken by the SEIAAs for category B projects, to determine whether further studies are needed before an environmental impact assessment for a particular project is carried out. Scoping is for category A and B1 projects, and includes the drafting of TORs for environmental impact assessment.
- The next step for these projects is public consultation, which involves a public hearing of the environmental impact assessment report, so it can be scrutinised and the voices of those affected by the project are taken into account.
- Finally, at the appraisal stage, the environmental impact assessment is scrutinised by an expert appraisal committee (EAC) at the central level, or its state equivalent, which grants the final clearance.
- In 2020, the environment ministry proposed to amend the EIA notification to allow the grant of ex-post facto clearance for several projects, as well as exempting others from the purview

Indian Environment Service

- ❖ The Supreme Court asked to the government about the creation of an independent Indian Environment Service in the “All India Service cadre”.
- ❖ The Committee constituted by the Environment Ministry, had categorically recorded that the necessary institutional framework needs to be created, building on the existing systems, to meet future ecological demands.
- ❖ India has a strong environmental policy and legislative framework, much of the problem relates to weak implementation of the various acts and the rules thereunder.
- ❖ The constant environmental degradation, ecological imbalance, climate change, water scarcity, etc. are a great concern for India.
- ❖ One of the major causes of environmental degradation is the flaw of the existing system that lies in the enforcement capabilities of environmental institutions at various levels.

of an assessment and public consultation. Some of these include irrigation projects, the expansion of national highways, and projects concerning national defence and security.

Challenges faced in Environmental Impact Assessment

- ✓ One of the biggest concerns with the environmental clearance process is related to the quality of EIA reports that are being carried out.
- ✓ There are several projects with significant environmental impacts that are exempted from the notifications. For instance- sand mining.
- ✓ In many countries like Nepal, Argentina and Australia, public involvement is mandatory at various stages of the EIA process (i.e., screening, scoping, report preparation and decision-making), but in India, public consultation occurs only once during the entire process.
- ✓ Monitoring is not done through an independent agency. Environment management plans of strategic industries like nuclear energy are not put into the public domain.

Associated concerns regarding Star system

- ✓ This move could result in states granting ECs hurriedly and without thorough review, it could lead to oversight by the SEIAAs in granting environmental clearance.
- ✓ This move would create a situation in which there is inadequate time to make rational or environmentally sound decisions. This new system would result into artificial competition between states, which may result in industries locating in states that offer environmental clearance quicker.

Way Forward

Entire EIA process right from screening to monitoring should be done by independent agencies and the government must establish a National Accreditation Body for agencies carrying out EIA. Further, a centralized baseline data bank should also be created. The centre should take steps to increase trust in the system and ensure that all States have competent experts who can conduct appraisals without fear or favour.

Domestic hazardous waste

News Excerpt

In absence of robust framework and policy, segregation of domestic waste is becoming a rising environmental problem in India.

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Solid Waste Management Rules 2016:

- These rules replace the Municipal Solid Wastes (Management and Handling) Rules, 2000. These rules are now applicable beyond municipal areas and have included urban agglomerations, census towns, notified industrial townships etc.
- Rules focus on segregation of waste at source, responsibility on the manufacturer to dispose of sanitary and packaging wastes, user fees for collection, disposal and processing from the bulk generator.
- It has also been advised that the bio-degradable waste should be processed, treated and disposed of through composting or bio-methanation within the premises as far as possible and the residual waste shall be given to the waste collectors or agency as directed by the local authority.
- The rules promote the use of compost, conversion of waste into energy, revision of parameters for landfills location and capacity.
- The government has also constituted a Central Monitoring Committee under the chairmanship of Secretary, MoEF&CC to monitor the overall implementation of the rules.

- The Rules for the Safe Treatment of Legacy Waste prescribe bio-remediation and bio-mining in all open dumpsites and existing operational dumpsites in India.

Apart from this, Article 51 A (g) of the Constitution of India makes it a fundamental duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers, and wildlife, and to have compassion for living creatures.

About Domestic waste

- As per the study of IIT-Delhi and IIT-Bombay, In 2020, a significant level of toxic heavy metals and persistent organic contaminants like pesticides have been found at different sites in the country.
- Domestic Hazardous Waste is any chemical or product that can cause serious illness or pose an environmental or health threat if improperly stored, transported or disposed of.
- When hazardous waste is disposed of in the trash, down the drain, or on the ground, our water and soils can be contaminated or trash collectors can be harmed.
- Most products labeled dangerous, flammable, poison, combustible and corrosive are considered hazardous waste. Examples: Auto batteries, Fertilizers, Batteries (non-alkaline), Paint.

Key Challenges

- ✓ Countrywide, there is a lack of disposal Facilities. Even if waste is segregated and collected due to the lack of such facility the effort would result into zero sum game.
- ✓ As per the Ministry of Environment, Forest and Climate Change Currently, there are only 45 of these facilities.
- ✓ According to the rules, Households must segregate waste into wet, dry and domestic hazardous categories.
- ✓ Local government bodies must collect the hazardous waste, and / or set up collection centres every 20 km so households can deposit it on their own, but in reality there is huge lack on the development of infrastructure.

Way Forward

Household hazardous product ingredients and concentrations must be listed on the label along with warnings of potential human health and environment harm. India should include household hazardous products as a separate act/regulation under municipal waste rules. Manufacturers of household hazardous products must be held accountable for products at the end of their life through legislation. Residents must become aware of the risks and choose wisely when purchasing and reading labels carefully. Municipalities need to set up programs so that unwanted HHP can be collected and properly disposed.

Conference on Tiger Conservation

News Excerpt

In the first month of 2022, the 4th Asia Ministerial Conference on tiger conservation was organised.

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- India is home to over 70% of the tiger population globally. India is home to 53 tiger reserves spread across more than 15 states. (according to the last tiger census).
- India has achieved the remarkable feat of doubling the tiger population in 2018 itself, 4 years ahead of the targeted year 2022 of the St. Petersburg Declaration on tiger conservation.
- Tiger is listed under Schedule I of Indian Wildlife (Protection) Act, 1972.
- It is listed in 'RED LIST' of International Union for Conservation of Nature and entitled as Endangered.
- In the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) tiger is under Appendix I.
- India is one of the Founding members of the intergovernmental platform of Tiger Range Countries.

National Tiger Conservation Authority

- ❖ National Tiger Conservation Authority (NTCA) is a statutory body under the Ministry of Environment, Forests and Climate Change.
- ❖ It was established in 2005 following the recommendations of the Tiger Task Force.
- ❖ It was constituted under enabling provisions of the Wildlife (Protection) Act, 1972, as amended in 2006, for strengthening tiger conservation, as per powers and functions assigned to it.

Swamp Deer

- ❖ The population of the vulnerable eastern swamp deer has dipped in the Kaziranga National Park and Tiger Reserve (Assam).
- ❖ The eastern swamp deer is extinct elsewhere in South Asia.
- ❖ The population is declined due to the constant instances of flood.
- ❖ There are three subspecies of swamp deer found in the Indian Subcontinent.
 - The western swamp deer found in Nepal.
 - Southern swamp deer or Hard Ground Barasingha found in central and north India.
 - Eastern swamp deer (*Rucervus duvaucelii ranjitsinhi*) found in the Kaziranga and Dudhwa National Parks.
- ❖ Protection Status:
 - IUCN Red List: Vulnerable
 - CITES: Appendix I
 - Wildlife Protection Act, 1972: Schedule I

Key takeaways of Conference

- The Government of Malaysia and Global Tiger Forum (GTF) has organized the 4th Asia Ministerial Conference on tiger conservation.
- The 4th Asia Ministerial Conference (AMC) on Tiger Conservation culminated with the adoption of the Kuala Lumpur Joint Statement, listing a number of actions that will need to be taken in order to effectively recover the species across Asia.
- India will facilitate Tiger Range Countries towards finalisation of New Delhi declaration for the Global Tiger Summit to be held in Russia later this year (2022).

Importance of Tiger conservation

- ✓ Tiger is a top level predators in the ecosystem. It's presence is vital in regulating and perpetuating ecological processes.
- ✓ Tiger as predator keep check on the population of wild ungulates (primarily large mammals) in check. Tiger helps in maintaining the balance between prey herbivores and the vegetation upon which they feed.

PEPPER IT WITH
Project Tiger, M-Stripes

Red Sanders

News Excerpt

Red Sanders has fallen back into the 'endangered' category in the International Union for Conservation of Nature's (IUCN) Red List.

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- Red Sanders (*Pterocarpus santalinus*) is an endangered tree species endemic to the southern Eastern Ghats. Red Sanders is regarded as the 'Pride of Andhra Pradesh'.
- Red Sanders is found in the forests with climate forest type in the tropical forests in India.
- The natural habitat of Red Sanders is a hilly region with a hot, dry climate.
- Red Sanders is also granted protection as it is enlisted in Appendix II of the CITES. This means that a certificate is required to export it.
- Red Sanders is registered under Schedule II of Wildlife (Protection) Act 1972.

Key Concerns

- India is the main and lucrative market for smugglers, and many incidents are reported every year. As exporting sandalwood is banned in India, smugglers find ways and cause harm to the forests with the presence of Red Sanders.
- Red Sanders is smuggled from India mainly to China, Japan, UAE, Malaysia and Singapore. Smuggling to China is mostly done by road via Nepal, and to Malaysia and Singapore from the Chennai port. For UAE, the Mumbai port acts as the transit point. Smuggling to Japan and China also takes place from Manipur and Mizoram.
- In recent years, it has been found that the species population is depleting at an alarming rate, so much so that it is under threat of losing its existence.
- Red Sanders face problem of Illicit felling, Recurrent forest fires and Mutated regeneration in vulnerable pockets of distribution.

Red Sanders usage

- ✓ Red sanders yield a hard fragrant timber and are prized for cabinet works, musical instruments, house posts and agricultural implements.
- ✓ The dark red heartwood is used as a dyewood.
- ✓ The wood enriched in 'Santalin' is also ground and used for dyeing cotton, wool, and leather.
- ✓ The bark extract is used in the treatment of diabetes.
- ✓ The felling of trees and depletion of the species (*Pterocarpus santalinus*) is due to its usage in one of India's Critically Endangered medicinal species.

Way Forward

- Remote Sensing and Geographical Information System can be effectively utilized to understand Red Sanders bearing forest for objectives of conservation, tree improvement and legal commerce.
- Areas with rich repositories of the species should be identified, and habitats must be protected in situ conservation. Likewise, the gene sanctuaries must be granted protection and constant surveillance.
- Local communities and village people should be sensitized about their importance and existence for the sustainable forest as they grow in climax forest type, a highly stable forest. Any disruption and overexploitation related to one species may lead to a succession of the local ecology.

SCIENCE & TECHNOLOGY

Semiconductor Shortage

News Excerpt

Many of the automakers in India affirms the widespread shortage of semiconductors. The key industries are facing supply issues on diverse products.

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- Semiconductors are materials that have a conductivity between conductors (generally metals) and nonconductors or insulators (such as most ceramics). Semiconductors can be pure elements, such as silicon or germanium, or compounds such as gallium arsenide or cadmium selenide.

Reasons for the shortage

Several reports indicate that the chip shortage may not end before 2022 as supply disruptions due Covid restrictions.

- **COVID-19 as an immediate factor:** Due to the increase in Work from Home culture during Lockdowns the sales and demand of electronic goods had increased. Moreover, supply side constraints due to stopping of transportation create demand supply mismatch.
- **The popularity of cryptocurrencies:** During the lockdown the mining of crypto currencies was increased. The sudden popularity of cryptocurrencies has also led more mining operations to come up across the world, requiring more processing units. Although demand has increased, supply has dropped.
- This added in the chip industry and cause imbalance the supply demand. from supply constraints to a structural shortage of high-end chips. The squeeze should last through the end of the year.
- Automakers that cut back drastically early in the pandemic underestimated how quickly car sales would rebound. They rushed to re-up orders late in 2020, only to get turned away because chipmakers were stretched supplying computing and smartphone giants.
- Manufacturing advanced logic chips requires extraordinary precision, along with huge long-term bets in a field subject to rapid change.



Semiconductor related initiatives in India

- ✓ The government, in December 2021, rolled out an incentive scheme worth Rs 76,000 crore (roughly \$10 billion) to attract international semiconductor and display manufacturers in a bid to establish the country as a global chip manufacturing hub.
- ✓ India announced the Semicon India Program on December 15, 2021 and has been receiving proposals from companies for semiconductor and display manufacturing.
- ✓ In Jan 2022, the MeitY announced it is seeking applications from 100 domestic companies, start-ups and MSMEs under its Design Linked Incentive (DLI) Scheme, which is part of the Program for Development of Semiconductors and Display Manufacturing Ecosystem in India.

Implications of Supply Shortage

- Countless industries have been affected as global demand for semiconductor chips continue to outstrip supply.

- Globally, vehicles makers have been worst hit by the chip shortage with major car manufacturers like Volkswagen, Ford, Renault, Nissan and Jaguar Land Rover are feeling the heat.
- All these companies are likely to lose billions due to the shortage of chips, which are used in many car components such as digital speedometers, infotainment systems, computerised management of engines and driver assistance systems.
- Consumer goods and smartphone manufacturers are also under pressure to meet the rising demand for products. The chip shortage directly impacts consumers as prices of everyday appliances and electronic goods — from TV to smartphones — have increased due to the global supply chain disruption. Meanwhile, the shortage of semiconductor chips has forced carmakers to increase the prices of vehicles.

Chip Crisis and Geo-Politics

- ✚ The global chip crisis and geopolitical tensions with China have shifted focus back on semiconductors. The US, which was once a leader in chip manufacturing, wants the crown back.
- ✚ Presently, the US is looking to bring manufacturing back to America and reduce its dependency on a handful of chipmakers mostly concentrated in Taiwan and South Korea.
- ✚ China's renewed aggression on Taiwan is also being seen in the light of the chip crisis.
- ✚ American chipmaker Intel now plans to spend \$20 billion to build two new chip factories in Chandler, Arizona. These new fabs will also manufacture chips designed by Amazon, Qualcomm, and other customers.
- ✚ The crisis is expected to cost the global automotive industry \$210 billion in revenue in 2021, according to consulting firm AlixPartners.

DLI Scheme from domestic semiconductor

- ❖ Design Linked Incentive (DLI) scheme was announced by the Ministry of Electronics and Information (MeitY).
- ❖ Under the Scheme, financial incentives and design infrastructure support will be extended to domestic companies, startups and MSMEs.
- ❖ DLI will be given for the semiconductor design, Integrated Circuits (ICs), Chipsets, System on Chips (SoCs), Systems & IP Cores for over a period of 5 years.
- ❖ The scheme has three components – Chip Design infrastructure support, Product Design Linked Incentive and Deployment Linked Incentive. The scheme has ₹76,000 crore (\$10 billion) package.
- ❖ It aims to nurture at least 20 domestic companies involved in semiconductor design and facilitating them to achieve turnover of more than ₹1500 Crore in the next 5 years.
- ❖ C-DAC (Centre for Development of Advanced Computing), a scientific society operating under MeitY, will serve as the nodal agency for implementation of the DLI scheme.
- ❖ The DLI Scheme will take a graded and pre-emptive approach to Identify the Products of national priorities and implement strategies for their complete or near complete indigenisation & deployment thereby taking steps towards the import substitution & value addition in strategic & societal sectors.

Conclusion

India is finalizing plans to manufacture semiconductor chips in a big way, as a part of its 'Make in India' initiative. It is evident that semiconductors are shaping the new modern and fast-moving world. Therefore India should give semiconductors the status of "critical infrastructure" in most countries, shortly. This is all being done to achieve self-sufficiency in the manufacturing of

semiconductors, to ensure better control over data security and prevent countries in the world from being held to ransom by specific members of the existing semiconductor supply chain. This crisis may result in an opportunity and with the support of the Government India may attend self-sufficiency in production in semiconductor-laden chips.

Open-source software: GitHub

News Excerpt

GitHub (an open-source software) platform was misused to create and share an offensive app in India. An app was built and used to sell a woman online.

About

- GitHub is the world's largest open-source developer community platform where users upload their projects and code for others to view, edit, and tweak.
- The term open source refers to something people can modify and share because its design is publicly accessible.
- An app was built and used to sell a woman online. The app used pictures of the women stolen from their social media handles and invited "users" to bid for them.
- Under Git hub platform, any developer can upload whatever software code or app code or software idea they have on the platform and have others collaborate with them to help improve it, find errors, and fix problems.
- Any public project can be viewed by others on the platform. Most of the features of the platform are free for users.

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Activities prohibited on GitHub

- Posting gratuitously violent content, misinformation or fake news, active malware or exploits on the platform is prohibited.
- It does not allow doxxing — revealing personal information with malicious intent — and the invasion of privacy.
- It claims sexually obscene and pornographic content is not allowed on the platform, even though this does not mean "all nudity or all code and content related to sexuality is prohibited".
- If a user is reported as violating the rules of the platform, GitHub can remove or block their content, and suspend or terminate the account. But it is not clear how long a suspension can last.

Advantages of Open Source Software

- ✓ The source code in open source software is available to all the users. According to the needs user can edit, modify or share the source code. This ability comes from the license it is equipped with. The license grants permission for the users to alter the software. Although open-source software helps businesses in many ways, it isn't flawless.
- ✓ Advantages of Open Source Software are-
 - Generally an open-source software is free to use. The users do not require to pay for the usage. It can be installed free of cost without any upfront expenses. Nevertheless, the quality is not compromised. Especially for businesses with tight budgets, using open-source software can lead to a significant amount of cost savings.
 - High reliability can be ensured by using an open source software. The open source software is created by expert developers and guided by them.
 - An open source software can be scaled easily. According to the needs, an open source software can be scaled up and down so that businesses could achieve their desired results.

- Open source software offers convenient license schemes. Thus, the users do not need to worry about monitoring and tracking.
- ✓ Disadvantages-
 - Not all the open source applications are easy to use. The Graphical User Interface may not be user friendly for the users to understand. Only tech savvy people will be able to understand this interface.
 - The fundamental problem in open source software is security. The problem comes when someone misuses the code for their benefit. While many of them use it for improving the software, others could invite vulnerabilities such as identity theft and malicious transfers.
 - Some applications cannot support both open source software and proprietary software. If proprietary hardware needs to run on an open source machine, it requires third party drivers. However, that cannot guarantee that the hardware will work on the host machine. Therefore, compatibility would remain an issue in open-source software.

Way Forward

The government should take appropriate action against the perpetrators. Apart from taking down the culprit's app, the culprit himself has to be busted and without imposing costs on such criminal behavior, will lead to encouragement of impunity.

Robust policy level and institutional arrangement is required to address the potential challenge in the age of digital India.

Code of Practice for securing consumer Internet of Things (IoT)

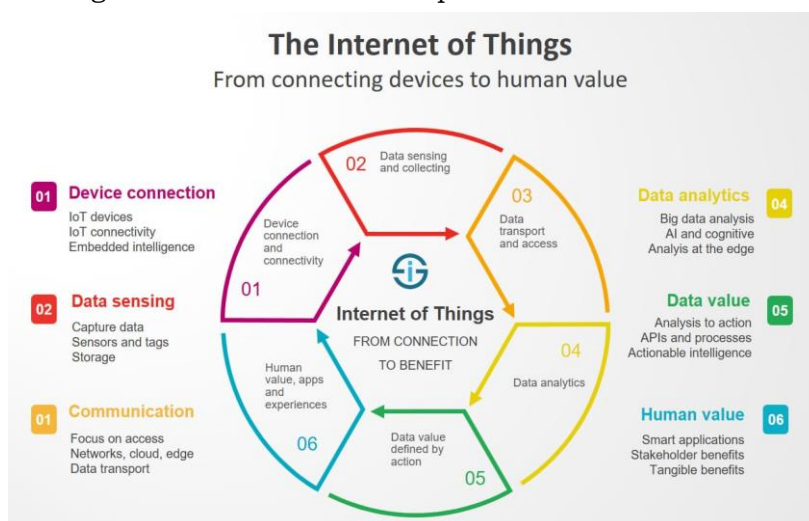
News Excerpt

Department of Telecommunications has released a report "Code of Practice for Securing Consumer Internet of Things(IoT)".

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Key points of the report

- In order to secure consumer internet of things (IoT) devices, ministry of communications, has released a report "Code of Practice for Securing Consumer Internet of Things (IoT)" as a baseline requirement aligned with global standards and best practices.
- Given the anticipated growth of IoT devices, it is critical to ensure that the endpoints comply with the safety and security standards and guidelines to protect the users and the networks that connect these devices.
- The guidelines will help in securing consumer IoT devices and ecosystems as well as managing vulnerabilities.
- This report is intended for use by IoT device manufacturers, Service providers/ system integrators and application developers etc.



Advantages & Disadvantages of IoT

Advantages	Disadvantages
Minimizes the human work and effort	Increased privacy concerns
Saves time and effort	Increased unemployment rates
Good for personal safety and security	Highly dependent on the internet
Useful in traffic and other tracking or monitoring systems	Lack of mental and physical activity by humans leading to health issues.
Beneficial for the healthcare industry	Complex system for maintenance
Improved security in homes and offices	Lack of security
Reduced use of many electronic devices as one device does the job of a lot of other devices	Absence of international standards for better communication

Way forward

IoT is clearly of significant advantage to citizens globally, along with superior advantage comes a latent risk to privacy. Therefore, data protection law is the need of the hour, and would have to be addressed and IoT manufacturers will have to build and sustain consumer trust in their devices. Around the world, legislators, device manufacturers, and law enforcement agencies should come together to figure out how to benefit from IoT while mitigating risks.

Web 3**News Excerpt**

The concept of Web 3.0 is used to describe a potential next phase of the internet.

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Pre-Connect

Web 1.0	<ul style="list-style-type: none"> Web 1.0 is the world wide web or the internet that was invented in 1989. The internet in the Web 1.0 days was mostly static web pages where users would go to a website and then read and interact with the static information. Even though there were e-commerce websites in the initial days it was still a closed environment and the users themselves could not create any content or post reviews on the internet.
Web 2.0	<ul style="list-style-type: none"> Web 2.0 started in some form in the late 1990s itself though 2004 was when most of its features were fully available. The differentiating characteristic of Web 2.0 compared to Web 1.0 is that users can create content. Users can interact and contribute in the form of comments, registering likes, sharing and uploading their photos or videos and perform other such activities. Primarily, a social media kind of interaction is the differentiating trait of Web 2.0.

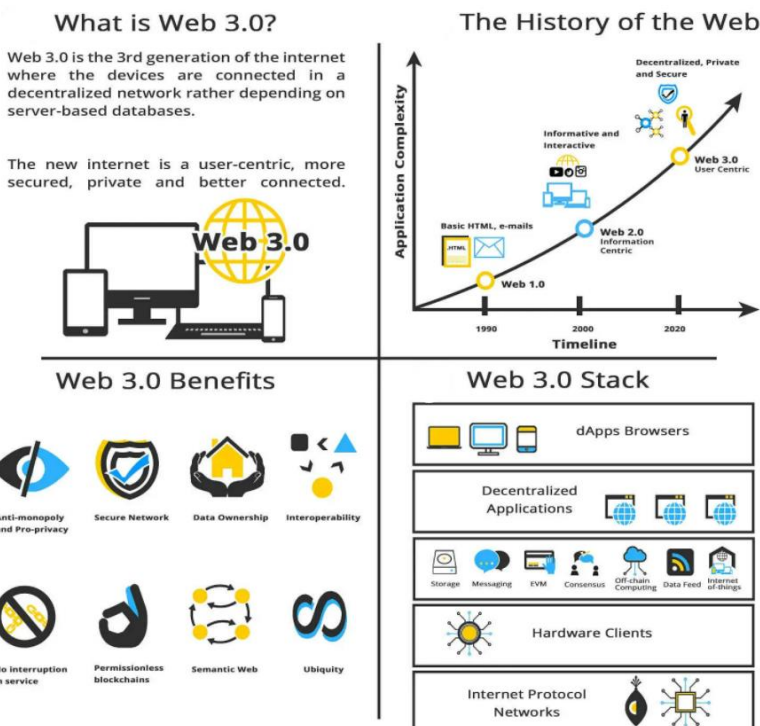
Need of Web 3.0

- In the previous versions of web, most of the data in the internet and the internet traffic are owned or handled by very few companies.

- This has created issues related to data privacy, data security and abuse of such data.
- There is a sense of disappointment that the original purpose of the internet has been distorted.

About Web 3.0

- This model is a decentralised internet to be run on blockchain technology, would be different from the versions in use, Web 1.0 and Web 2.0. In web3, users will have ownership stakes in platforms and applications unlike now where tech giants control the platforms.
- Web 3.0 is all about a more transparent and fairer network where everyone can participate without fearing a loss of privacy and security.
- The shift from Web 2.0 to 3.0 is evident with the evolution of technology around us. Technologies such as artificial intelligence, big data, and others will make it easy to provide a more personalized web experience than ever.
- Also, web apps will be more intuitive and will make them more accessible for people to use in their daily lives.



Benefits of web 3.0

- ✓ Web 3.0 will bring a pro-privacy and anti-monopoly structure to the network. It will not incentivize centralized platforms.
- ✓ In short, a complete turnaround would be seen and the central theme will be privacy and decentralization.
- ✓ This move will be facilitated with the help of blockchains such as Ethereum, Hyperledger, Corda, and others.
- ✓ The government, on the other hand, will also see decentralization. For the best interest, it is wise for corporations to adapt to new standards of Web 3.0 by providing decentralized services that focus on privacy and security rather than control.
- ✓ Web 3.0 features will be more secure than its predecessors. This is made possible by two factors, including distributed nature and decentralization. Hackers or exploiters will find it difficult to penetrate the network. Also, if they are able to do so, each of their operations can be tracked and retracted within the network.
- ✓ Without centralization, it will also become hard for hackers to take full control of an organization. However, blockchain platforms do suffer from some form of exploits such as 51% attack, but most of the blockchain apps and platforms can quickly be patched to protect these types of threats.

Conclusion

At the present moment, Web 3.0 concepts may suffer from quite a number of limitations while centralised platforms seem to promise a pain-free way for organisations to become Industry 4.0 compliant. However, it is important to look at these concepts as ongoing endeavors that will soon grow exponentially until a tipping point is reached. And the proponents of centralised platforms will look back at the squandered opportunities not through ignorance but because it was easier to avoid commitment to a new way of building reliable systems.

5G Telecoms and Airline safety

News Excerpt

Recently, in USA during the 5G testing interference took place and disruptions occurred in sensitive navigation equipment.

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Pre-Connect

- 5G is the 5th generation mobile network. It enables a new kind of network that is designed to connect virtually everyone and everything together including machines, objects, and devices.
- Internet speeds in the high-band spectrum of 5G has been tested to be as high as 20 Gbps (gigabits per second), while, in most cases, the maximum internet data speed in 4G has been recorded at 1 Gbps.
- In India, Satcom Industry Association-India (SIA) has voiced concerns over the Government's plan to include the Millimetre Wave (mm Wave) bands in the 5G spectrum auction.

Utility of Higher Frequency in 5G and Issues

- The higher the frequency in the spectrum, the faster the service. So in order to get full value from 5G, operators want to operate at higher frequencies.
- Some of the C band (a radio frequency band between 3.7 and 4.2 GHz) spectrum auctioned had been used for satellite radio but the transition to 5G means there will be much more traffic.
- The new C band 5G service could render a significant number of aircraft unusable, causing chaos for US flights and potentially stranding tens of thousands of Americans overseas.

Key Issues

- ✓ The United States auctioned mid-range 5G bandwidth to mobile phone companies in early 2021 in the C band, for about USD 80 billion.
- ✓ The functioning of Altimeters, which measure how far above the ground an aeroplane is travelling, operating in the 4.2-4.4 GHz range which sits too close to the frequency of C range, may get hampered.
- ✓ In addition to altitude, altimeter readouts are also used to facilitate automated landings and to help detect dangerous currents called wind shear.
- ✓ Companies have argued that C band 5G has been deployed in about 40 other countries without aviation interference issues. They have agreed to buffer zones around 50 airports in the United States, similar to those used in France, for six months to reduce interference risks.

For More on 5G rollout refer [KSG's CURRENT CONNECT DECEMBER 2021, Page no-73.](#)

Security

Prohibition of Attacks against Nuclear Installations between India and Pakistan

News Excerpt

India and Pakistan exchange list of nuclear installations.

About

- India and Pakistan exchanged a list of their nuclear installations that cannot be attacked in case of an escalation in hostilities, as part of an annual ritual that has been in practice between the two neighbours for more than three decades.
- The two countries also exchanged lists of prisoners held in each other's prisons, which include civilians, defence personnel and fishermen.
- The lists of nuclear installation and facilities were exchanged as per the provisions of the Article-II of the Agreement on Prohibition of Attacks against Nuclear Installations and Facilities, signed on December 31, 1988 and ratified on 27 January 1991.
- This step is consistent with clause (i) of the Consular Access Agreement between Pakistan and India, signed on 21 May 2008, under which both countries are required to exchange lists of prisoners in each other's custody twice a year, on 01 January and 01 July, respectively."
- According to this agreement, both countries have to inform each other of the nuclear facilities. The exchange of the lists came amid strain in ties between the two countries over the Kashmir issue as well as cross-border terrorism.

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Analytica

- The agreement contains the provision that both countries inform each other of their nuclear installations and facilities on January 1 every year.
- This has been done consecutively since January 1, 1992, according to the FO.
- The exchange of information comes despite the ongoing tensions between India and Pakistan.
- The relationship dipped after India's war planes pounded a terrorist training camp deep inside Pakistan on February 26, 2019 in response to the Pulwama terror attack carried out by Pakistan-based Jaish-e-Mohammed terror group in which 40 CRPF jawans were killed.
- Tensions between the two nations spiked further after New Delhi abrogated provisions of Article 370 of the Constitution to withdraw Jammu and Kashmir's special status and bifurcated it into two Union Territories.
- Pakistan downgraded its diplomatic relations with India and expelled the Indian high commissioner following the revocation of Article 370 in Jammu and Kashmir on August 5, 2019.
- Asserting that the abrogation of Article 370 was its "internal matter", India has defended the imposition of restrictions in the Kashmir Valley on the grounds that they were put to prevent Pakistan from creating more mischief through proxies and terrorists.

Hostile situations

- ✓ The FATF, which evaluates countries on efforts to check terror financing and money laundering found that Pakistan had cleared 30 of a total of 34 tasks assigned in two batches, and would face another review in February 2022.
- ✓ In particular, the FATF said that Pakistan had failed to resolve the single task that remains from the first batch, of demonstrating that effective investigations and prosecutions are being pursued against the senior leadership of United Nations-designated terror groups.

- ✓ Terrorism has undermined every effort at peace in the last two decades and continues to create insecurity. Not to forget the longstanding suffering of the Kashmiri Pandits, a Hindu community driven from their Kashmiri homeland in the early years of the insurgency at the beginning of the 1990s.
- ✓ Pakistani terror outfits randomly carried out daring attacks on the Pathankot Air Force base, an Army brigade headquarters in Uri, and an Army base in Nagrota. The JeM carried out its most audacious attack to date, targeting a Central Reserve Police Force convoy, in which 40 personnel were killed, the highest casualty figure for security forces personnel in Jammu and Kashmir. The use of a suicide bomber, driving a vehicle containing a few hundred kilograms of explosives to strike a high-profile target, represents a new pinnacle in terrorist violence.
- ✓ It is representative of the newer breed of terrorists, as also the transmutation in the nature of terror.
- ✓ The strike across the LoC was reportedly carried out by Para Commandos and Ghatak platoons of the Indian Army. These are members of the Special Forces under the Parachute regiment who are trained specifically for such operations, and specialised teams part of infantry units. They are trained to parachute in to enemy territory and conduct precise missions, or to sneak in quietly across enemy lines.

China's border law and India

New Excerpt

China's new law on land borders has come into effect recently.

Pre-Connect

- Proposed a year into the crisis along the Line of Actual Control, the border law, which took effect on January 1, 2022, lists various responsibilities for civilian and military authorities in China to take steps to "safeguard national sovereignty".
- The law has 62 articles in seven chapters, covering delineation and border defence to immigration, border management and trade. The issuing of new names is related to Article 7, which calls for promoting border education at all levels of government. Article 22 calls for the Chinese military to carry out border drills and to "resolutely prevent, stop and combat" what it calls "invasions, encroachments and provocations".
- China's Ministry of Civil Affairs said it had issued "standardised" names for 15 places in the Indian State of Arunachal Pradesh. The names are to be used henceforth on all official Chinese documents and maps, which show Arunachal as "south Tibet".

Analytica

- India responded to the move saying that "assigning invented names" will not alter the facts on the ground or Arunachal Pradesh's status as an integral part of India. The issuing of the names came ahead of a new land border law taking into effect on January 1, 2022, which India has
- as also voiced concern about.
- In 2017, Chinese authorities first issued six "official" names for places in Arunachal Pradesh. The new list is more extensive. It has 15 names, including eight towns, four mountains, two rivers and one mountain pass, covering 11 districts in Arunachal from Tawang in the west to Anjaw in the east. Following the issuing of the names, all official Chinese maps will have to mark the locations using the Ministry of Civil Affairs list.
- The naming is a largely symbolic gesture that will not change facts on the ground. It is, however, indicative of a broader new Chinese approach to territorial disputes. Motive is to

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better maintain national security and manage border-related matters at the legal level amid regional tensions, including frictions with India.”

Impact of the Border Law

- ✓ The border law appears to give fresh impetus to civilian agencies in China to continue carrying out the construction of infrastructure, including “frontier villages”, in border areas, including some in disputed territories along the border with India and Bhutan, the only two countries with which China has unsettled land boundaries.
- ✓ Under the border village construction plan, launched in 2017, China is building 628 “first line and second line villages” in border areas and moving residents, mainly herders, to live in the new dwellings along the borders with India, Bhutan and Nepal as well.

Precursors

- A violent face-off between Chinese and Indian troops at the Line of Actual Control (LAC), causing casualties on both sides, came as a big jolt to India as well as China.
- It brought the national focus back on an otherwise not-so-popular topic of China-India relations. The development took China’s strategic community by storm, while the intense debate and discussions that followed, rather than generating a consensus, brought out China’s many dilemmas vis-à-vis India.

Defence ministry’s digital survey

News Excerpt

Ministry of Defence surveys 17.78 lakh acres of Defence Land in a little over three years using modern surveying technologies.

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Pre-Connect

- One of the largest such land surveys and Initiative of Digital India helps in quick decision making.
- As per the records maintained by Defence Estates Offices, the Ministry of Defence owns large tracts of land admeasuring about 17.99 lakh acres out of which approximately 1.61 lakh acres is situated within the 62 notified Cantonments. About 16.38 lakh acres is spread across many pockets outside the Cantonments. Out of 16.38 lakh acres land, about 18,000 acres is either state hired land or is proposed for deletion from records on account of transfer to other Govt. Depts.
- Clear demarcation and boundary survey of defence lands and fixing of the boundaries is necessary for protection of the defence land, safeguarding of the title of MOD, updation of land records, maps and prevention of encroachments. Towards this end, the Directorate General Defence Estates, Ministry of Defence commenced the Survey of defence land from October 2018.

Analytica

- The entire exercise of survey of about 1.61 lakh acres of defence land inside cantonments and 16.17 lakh acres outside cantonments (total 17.78 lakh acres) survey has been completed. It is a remarkable achievement since for the first time after independence, entire defence land has been surveyed by using latest survey technology and in a large number of pockets in association with the Revenue authorities of various State Governments. The magnitude of land holding, location of land in approximately 4,900 pockets across the country, inaccessible terrain in many places and association of various stakeholders makes this survey one of the largest land surveys in the country.
- Modern survey technologies like Electronic Total Station (ETS) and Differential Global Positioning System (DGPS) were used in the survey. To further speed up the process, Drone

imagery and Satellite imagery based survey were leveraged for reliable, robust and time bound outcomes.

- For the first time, Drone imagery based survey technology was used for survey of lakhs of acres of defence land in Rajasthan. The entire area was surveyed with the help of Surveyor General of India in a matter of weeks, which earlier used to take years.
- Besides this, Satellite Imagery based survey was done for the first time for many defence land pockets, especially for certain pockets again measuring lakhs acres of defence land.
- 3D Modelling techniques for better visualisation of defence land in hilly area have also been introduced by utilising Digital Elevation Model (DEM) in association with Bhabha Atomic Research Centre (BARC).
- Geo-referenced and digitised shape files are made available to enable quick decision making by officials of DGDE & MoD.
- Completion of such a humongous survey has been made possible due to Capacity Building of technical personnel and officers of Defence Estates Organisation in latest technologies for Land survey over the years in association with premier institutes like National Remote Sensing Centre and National Institute for Geo-Informatics Science and Technology.

Sea Dragon 22 + PASSEX

News Excerpt

India is among the six Indo-Pacific nations participating in a multi-lateral anti-submarine warfare exercise in the Pacific Ocean. The Sea Dragon 22 exercise began along with the navies of India, Australia, Canada, Japan and South Korea.

Indian Navy's indigenously designed and built guided missile destroyer, INS Kochi, exercised with Russian Federation Navy's RFS Admiral Tributs in the Arabian Sea.

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Significance

- India, Japan, Australia and America are also part of the Quad, and also participate in the Malabar exercise.
- Two US Navy P-8A Poseidon aircraft from the Golden Swordsmen and The Tridents will join the forces from the five other nations. The P-8 Poseidon Maritime Patrol and Reconnaissance Aircraft with Patrol Squadron (VP) Forty-Seven and Twenty-Six travelled to Andersen Air Force Base in Guam.
- Sea Dragon 22 primarily centering on anti-submarine warfare training and excellence, culminates in over 270 hours of in-flight training, ranging from tracking simulated targets to the final problem of tracking a live US Navy submarine.
- Each event will be graded and the nation scoring the highest total points will receive the coveted Dragon Belt award, which the Royal Canadian Air Force won last year.
- Indian Navy's indigenously designed and built guided missile destroyer, INS Kochi, exercised with Russian Federation Navy's RFS Admiral Tributs on 14 January 2022 in the Arabian Sea. The exercise showcased cohesiveness and interoperability between the two navies and included tactical manoeuvres, cross-deck helicopter operations and seamanship activities.

BrahMos advanced variant

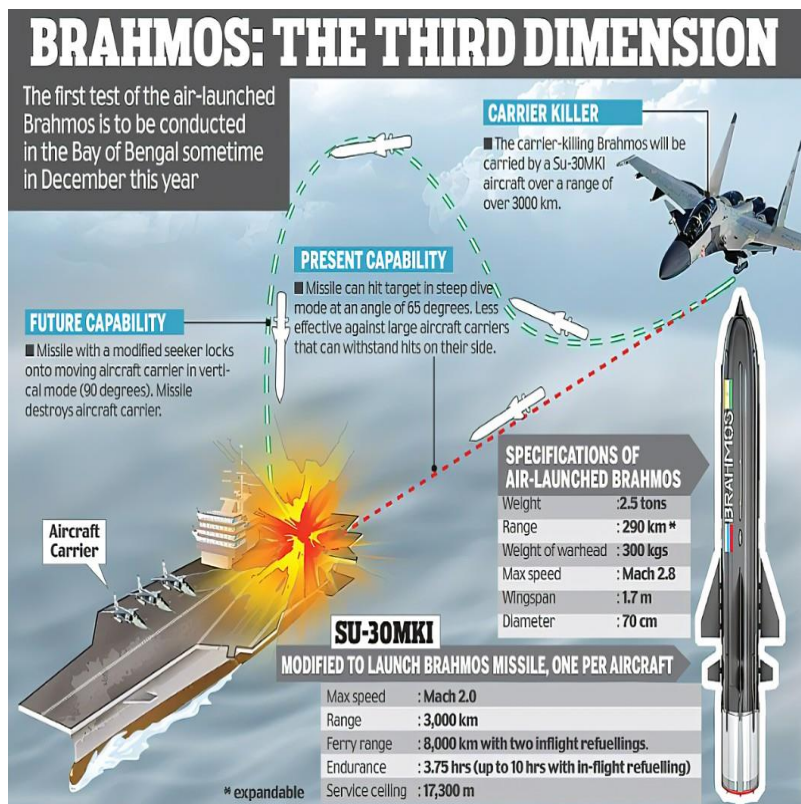
News Excerpt

Advanced sea-to-sea variant of BrahMos supersonic cruise missile was tested from INS Visakhapatnam.

Salient Features

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- The successful test-firing certifies the accuracy of the ship's combat system and armament complex and also validates a new capability the missile provides the Navy and the nation, It augurs very well for Aatma Nirbhar Bharat and provides the Navy yet another shot in the arm.
- Notably, INS Visakhapatnam is the first of four ingeniously designed and built Project-15B class stealth-guided missile destroyers, which was commissioned recently.
- The air version of supersonic cruise missile 'BrahMos' was also successfully test-fired from the supersonic fighter jet Sukhoi 30 MK-I from Integrated Test Range, Chandipur in Odisha.
- The missile launched from Sukhoi 30 MK-I followed the pre-planned trajectory, meeting all targeted objectives.
- An amalgamation of the names of Brahmaputra River and Moskva River, BrahMos missiles are designed, developed, and produced by BrahMos Aerospace, a joint venture company set up by the Defence Research and Development Organisation (DRDO) and Mashinostroyeniya of Russia.
- The BrahMos is a medium-range supersonic missile that can be launched from submarines, ships, aircraft, or land-based platforms. It is considered to be the fastest supersonic missile in the world that can achieve a speed 2.8 times the speed of sound.



- The land-attack version of BrahMos has the capability of cruising at 2.8 Mach speed and with the upgraded capability, the missile can hit targets at a range of upto 400 kilometers with precision. Advanced versions of the range above 1,000 kilometers and speed upto 5 Mach are said to be under development.
- The range of the missile was originally capped at 290 km as per obligations of the Missile Technology Control Regime (MTCR). Following India's entry into the club in June 2016, officials said the range would be extended to 450 km and to 600km at a later stage. An extended range missile had been tested earlier.

Art and culture

Saint Ravidas

News Excerpt

The postponement of the Assembly elections in Punjab underlines the importance of the Ravidassia community in the state. Guru Ravidas Jayanti, an annual occasion during which Ravidassias travel to Varanasi in large numbers. Many of them take a special train organised by the Dera Sachkhand Ballan in Jalandhar, the largest dera of the Ravidassias.

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About

- Guru Sant Ravidas was a great Saint, philosopher, poet, social reformer, and follower of God in India during the 15th century.
- He was one of the most famous and leading stars of the nirguna sampradaya (sant parampara) and was one of the prominent leaders of the North Indian Bhakti movement.
- He is loved and respected all over the world however the most respected regions were Uttar Pradesh, Punjab, and Maharashtra for his Bhakti movement and devotional songs.
- Guru Ravidas was born in Harijan caste in Varanasi to Kalsa Devi and Santokh Dass in the Seer Goverdhanpur village, Varanasi, U.P., India in the 15th century.
- His father was working as a Sarpanch at Raja Nagar Mal's Kingdom and has his own business of shoemaking and repairing.
- During the early days of his teachings, his popularity was prohibited by the conservative Brahmins living in Kashi as he was also an untouchable guru.

Perspective

- Guru Ravidas had envisaged a society which is based on equality and free from any kind of discrimination.
- He gave it the name 'Be-gampura' - the city where there is no place for any kind of grief or fear. Such an ideal city would be bereft of fear, vulnerability or scarcity.
- The philosophy and values of Guru Ravidasji like social justice, equality and fraternity have been imbued in our constitutional values.

Legacy

- ✓ Sant Guru Ravidas Ji is considered as a spiritual Guru of Meera Bai who was the queen of Chittoor.
- ✓ The Chief Architect of our Constitution, Dr B.R. Ambedkar embodied the Constitutional principles around the values expressed by Guru Ravidasji.

Maya Civilization

News Excerpt

The mystery behind Maya civilisation's sudden fall from glory still eludes us. Scientists have long suspected that drought pushed its people towards starvation.

Pre-Connect

- The Maya civilisation originated in the Yucatan Peninsula.
- Known for its monumental architecture and an advanced understanding of mathematics and astronomy, it flourished between 600 and 800 AD.
- The rise of the Maya began about 250 CE, and what is known to archaeologists as the Classic Period of Mayan culture lasted until about 900 CE.

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- At its height, Mayan civilization consisted of more than 40 cities, each with a population between 5,000 and 50,000.
- The peak Mayan population may have reached two million people, most of whom were settled in the lowlands of what is now Guatemala.
- But then, suddenly, between 800 and 950 AD, many of the southern cities were abandoned. This period is called the collapse of the Classic Maya civilisations, puzzling modern-day scientists.
- After 900 CE, the Classic Maya civilization declined precipitously, leaving the great cities and ceremonial centres vacant and overgrown with jungle vegetation.



Speculations and discoveries

- Some scholars have suggested that armed conflicts and the exhaustion of agricultural land were responsible for the sudden decline.
- Discoveries in the 21st century led scholars to posit a number of additional reasons for the destruction of Mayan civilization.
- One cause was probably the war-related disruption of river and land trade routes. Other contributors may have been deforestation and drought. Under extreme drought conditions, stems such as hearts of palm and cactus pads would remain available for multiple years, the study found.
- Chaya, a shrub whose leaves are high in protein, iron, potassium and calcium, could have also been available.
- The Maya people could have turned to chaya and cassava to meet their carbohydrates and protein needs.

Literature and architecture


- ✓ The Maya made paper from the inner bark of wild fig trees and wrote their hieroglyphs on books made from this paper. Those books are called codices. The Maya also developed an elaborate and beautiful tradition of sculpture and relief carving.
- ✓ Architectural works and stone inscriptions and reliefs are the chief sources of knowledge about the early Maya.
- ✓ Mayan astronomy underlay a complex calendric system involving an accurately determined solar year (18 months of 20 days each, plus a 5-day period considered unlucky by the Mayans), a sacred calendar of 260 days (13 cycles of 20 named days), and a variety of longer cycles culminating in the Long Count, a continuous marking of time, based on a zero date in 3113 BCE.
- ✓ Mayan astronomers compiled precise tables of positions for the Moon and Venus and were able to accurately predict solar eclipses.
- ✓ Early Mayan culture showed the influence of the earlier Olmec civilization. The Mayans were probably the most advanced astronomers during their time.
- ✓ Many of their amazing structures, such as the temple of Kukulcan, were built solely to depict astronomical events. During equinoxes, a shadow called the serpent slithers in a snake-like motion along with one of the temple's staircases.
- ✓ Chichén was founded about the 6th century CE, presumably by Maya peoples of the Yucatán Peninsula who had occupied the region since the Pre-Classic, or Formative, Period (1500 BCE–300 CE). T

- ✓ The principal early buildings are in an architectural style known as Puuc, which shows a number of divergences from the styles of the southern lowlands.
- ✓ The major extant Mayan cities and ceremonial centres feature a variety of pyramidal temples or palaces overlain with limestone blocks and richly ornamented with narrative, ceremonial, and astronomical reliefs and inscriptions that have ensured the stature of Mayan art as premier among Native American cultures.
- ✓ But the true nature of Mayan society, the meaning of its hieroglyphics, and the chronicle of its history remained unknown to scholars for centuries after the Spaniards discovered the ancient Mayan building sites.

Present status

- The present-day Mayan peoples can be divided on linguistic and geographic grounds into the following groups: the Yucatec Maya, inhabiting Mexico's Yucatán Peninsula and extending into northern Belize and northeastern Guatemala; the Lacandón, very few in number, occupying a territory in southern Mexico between the Usumacinta River and the Guatemalan border, with small numbers in Guatemala and Belize; the Kichean-speaking peoples of the eastern and central highlands of Guatemala. Contemporary Maya are basically agricultural, raising crops of corn, beans, and squash.

Miscellaneous

Person in news	Accomplishments
Maharaja Bir Bikram	<ul style="list-style-type: none"> The Union Cabinet named the Agartala airport in Tripura after Maharaja Bir Bikram Manikya Kishore, the erstwhile ruler of the state belonged to Manikya Dynasty. The maharaja, who ascended the throne of the erstwhile Tripura princely state in 1923, was an enlightened and benevolent ruler. He ruled till 1947. He was a visionary ruler, who had travelled across the globe, he took several steps for the all-round development of Tripura. 
Subhas Chandra Bose	<ul style="list-style-type: none"> Subhash Chandra Bose was one of the most celebrated freedom fighters of India. Netaji was born on 23 January, 1897 in Cuttack (Orissa). He was deeply influenced by Swami Vivekananda's teachings. The differences between Gandhi and Subhash Chandra Bose swelled to irreconcilable proportions and Bose decided to resign from the party in 1939. He went on to form the Forward Bloc the same year. Bose vehemently opposed the Congress decision to support the British during the Second World War. With the aim to initiate a mass movement, Bose called out to Indians for their whole-hearted participation. In January, 1941, Subhash made a planned escape and reached Berlin, Germany via a detour through Peshawar. Germans assured him their full support in his endeavours and he gained allegiance of Japan as well. He took a perilous journey back east and reached Japan where he assumed command over 40,000 soldiers recruited from Singapore and other south East Asian regions. He called his army the 'Indian National Army' (INA). A provisional "Azad Hind Government" started functioning in the captured territories. The INA or the Azad Hind Fauj stared for India and crossed Burma Border, and stood on Indian soil on March 18, 1944.

Swami Vivekananda	<ul style="list-style-type: none"> Swami Vivekananda, known in his pre-monastic life as Narendra Nath Datta, was born in an affluent family in Kolkata on 12 January 1863. At the threshold of youth Narendra had to pass through a period of spiritual crisis. It was at that time he first heard about Sri Ramakrishna from one of his English professors at college. Apart from removing doubts from the mind of Narendra, Sri Ramakrishna won him over through his pure, unselfish love. Thus began a guru-disciple relationship which is quite unique in the history of spiritual masters. After establishing the new monastic order, Vivekananda heard the inner call for a greater mission in his life. He wanted “to set in motion a machinery which will bring noblest ideas to the doorstep of even the poorest and the meanest.” It was to serve as this ‘machinery’ that Swamiji founded the Ramakrishna Mission a few years later. His speeches at the World’s Parliament of Religions held in September 1893 made him famous as an ‘orator by divine right’ and as a ‘Messenger of Indian wisdom to the Western world’.
Great Thiruvalluvar	<ul style="list-style-type: none"> Thiruvalluvar is fondly referred to as Valluvar by Tamils. His ‘Thirukkural’, a collection of 1,330 couplets (‘kurals’ in Tamil), are an essential part of every Tamil household — in the same way as, say, the Bhagavad Gita or the Ramayana are in traditional North Indian Hindu households. Thiruvalluvar is revered as an ancient saint, poet, and a philosopher by Tamils, irrespective of their religion. He is an essential anchor for Tamils in tracing their cultural roots; Tamils are taught to learn his couplets word-for-word, and to follow his teachings in their day-to-day living. The Thirukkural, a set of 1,330 couplets thematically divided into three books and 133 chapters, is widely regarded as a secular tome. Its message is best seen in the first book on virtue, while the two others deal with wealth and love. Dated variously between the last three centuries BCE and the first five of the Common Era, the work does not venture to propound the tenets of any particular religion or godhead.
Guru Gobind Singh	<ul style="list-style-type: none"> Gobind Singh, original name Gobind Rai, (born 1666, Patna, Bihar, India—died October 7, 1708, Nanded, Maharashtra), 10th and last of the personal Sikh Gurus, known chiefly for his creation of the Khalsa (Punjabi: the Pure), the military brotherhood of the Sikhs. He was the son of the ninth Guru, Tegh Bahadur, who suffered martyrdom at the hands of the Mughal emperor Aurangzeb. Gobind Singh was a man of great intellectual attainments. He was a linguist familiar with Persian, Arabic, and Sanskrit as well as his native Punjabi. He further codified Sikh law, wrote martial poetry and music, and was the reputed author of the Sikh work called the Dasam Granth (“Tenth Volume”).

Amar Jawan Jyoti

- Established in 1972, it was to mark India’s victory over Pakistan in the 1971 War, which resulted in the creation of Bangladesh.

- The then Prime Minister had inaugurated it on Republic Day 1972, after India defeated Pakistan in December 1971.
- The eternal flame at the Amar Jawan Jyoti underneath India Gate in central Delhi was an iconic symbol of the nation's tributes to the soldiers who have died for the country in various wars and conflicts since Independence.
- The key elements of the Amar Jawan Jyoti included a black marble plinth, a cenotaph, which acted as a tomb of the Unknown Soldier.
- The plinth had an inverted L1A1 self-loading rifle with a bayonet, on top of which was a soldier's war helmet.
- The installation had four urns on it, with four burners. On normal days one of the four burners were kept alive, but on important days like the Republic Day, all four burners were lit.
- These burners were what is called the eternal flame, and it was never allowed to be extinguished.

Ayush Ahaar

- The ministry is promoting Ayush-based diet and lifestyle and is working in convergence with the women and child development ministry in the Poshan Abhiyaan (nutrition campaign) to realise the ultimate goal of 'Suposhit Bharat' (nourished India).
- The Food Safety and Standards Authority of India (FSSAI) in convergence with the Ayush ministry has also released draft guidelines on 'Ayush Ahaar', which will facilitate standardisation.
- Union Minister for Ayush said that the ministry should promote Ayush Ahaar throughout the country to save the youth from the ills of junk food.

Veer Baal Diwas

- Veer Baal Diwas is to be observed on the same day Sahibzada Zorawar Singhji and Sahibzada Fateh Singhji attained martyrdom after being sealed alive in a wall.
- December 26 shall be marked as 'Veer Baal Diwas.' as a fitting tribute to the courage of the Sahibzades and their quest for justice.
- These two greats preferred death instead of deviating from the noble principles of Dharma.
- The bravery and ideals of Mata Gujri, Sri Guru Gobind Singhji and the four Sahibzades give strength to millions of people.
- They never bowed to injustice. They envisioned a world that is inclusive and harmonious. It is the need of the hour for more people to know about them.

Open Data Week

- The Event will see participation from all 100 Smart Cities that will be publishing high quality datasets and data blogs on the Smart Cities Open Data Portal.
- Presently, more than 3,800 datasets and more than 60 data stories are already available on the Portal to various stakeholders to analyse this data and uncover actionable insights.
- The Event aims to show the benefits of open data such as increased efficiency, transparency, a spur in innovation, and economic growth.
- It is divided into two segments – first, uploading of datasets, visualizations, APIs and data blogs on the Smart Cities Open Data Portal from 17th January 2022 to 20th January 2022 and second, celebration of a Data Day by all smart cities on 21st January 2022.
- The Data Day will take place nationally across all smart cities and will include talks, seminars, hackathons, demonstrations, and trainings on different data tracks identified by the cities.

- The Day will see engagement of people from different backgrounds including government agencies, private sector enterprises, scientific and academic institutions, businesses, start-ups, civil society etc.
- The Event has been designed to promote the use of and spread awareness about data.
- This can help governments in solving some of the most common problems faced by the citizens of any city and replicating the successful ideas in other cities.

Volcanic eruption in Tonga

- The volcano consists of two small uninhabited islands, Hunga-Ha'apai and Hunga-Tonga, poking about 100m above sea level 65km north of Tonga's capital Nuku'alofa.
- But hiding below the waves is a massive volcano, around 1800m high and 20 kilometres wide.
- If magma rises into sea water slowly, even at temperatures of about 1200 degrees Celsius, a thin film of steam forms between the magma and water. This provides a layer of insulation to allow the outer surface of the magma to cool.
- Volcano researchers call this 'fuel-coolant interaction' and it is akin to weapons-grade chemical explosions. Extremely violent blasts tear the magma apart.
- This demonstrates a huge explosive power, one that cannot be explained by magma-water interaction alone. It shows instead that large amounts of fresh, gas-charged magma have erupted from the caldera.
- The eruption also produced a tsunami throughout Tonga and neighbouring Fiji and Samoa. Shock waves traversed many thousands of kilometres, were seen from space, and recorded in New Zealand some 2000km away.
- Soon after the eruption started, the sky was blocked out on Tongatapu, with ash beginning to fall.

Concept Clearing Assignment

1. Comment upon the various factor responsible for unemployment in India. Highlight the steps taken to address the problem in India?
2. Give an account of the features of Deshke Mentor programme. Analyse the concerns raised by the National commission for protection of child rights regarding this process?
3. Comment upon the various Socio-Economic Impacts of solar waste? Discuss the measures to minimize the Impact of Solar Waste.
4. Give an account of the key highlights of India state of forest report 2021. What are the various limitations of the report?
5. To what extent India's ageing dams may threaten farmers 'income, increase instances of flooding and may aggravate the issue of water security. Explain the initiatives taken by India to enhance dam safety.
6. Assess the Importance of Green Energy Corridor. Briefly explain the key initiatives related to Green Energy?
7. Terrorism has undermined every effort at peace in the last two decades and continues to create insecurity. Discuss the statement in the context of Jammu and Kashmir?
8. Lok Adalat as a people's court has not achieved its designated objectives. Critically analyze.
9. How does marital rape effect a woman in India? Why is there an exception for marital rape in Indian law?
10. Recent states boarder disputes are rooted in the idea of cultural identity. Discuss.
11. Formation of national Safai Karmachari commission as means of correcting historical injustice has proved futile. Critically analyze.
12. Technology has been proved as double-edged sword. Critically analyse the statement with reference to 'GitHub' issues.
13. Highlight the significance of semiconductors. How it has evolved as means to secure strategic interests?
14. Analyze the state of India-US defense relations in the current climate of geopolitical uncertainty.
15. Non-Proliferation Treaty has failed to achieve its purpose of creating a pathway towards an international disarmament process. Do you agree? Justify.

PT ORIENTED QUESTIONS

1. Consider the following statements regarding 'vulnerable witness':
 1. According to Supreme Court person with mental illness is not included in the list vulnerable witness.
 2. The definition of "vulnerable witness" shall not be limited to child witnesses, who have not attained the age of 18 years.

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

2. With reference to the Lok Adalats, consider the following statements:
 1. The Lok Adalat is a forum where only cases (or disputes) which are pending in a court are compromised.
 2. In Lok Adalat proceedings, there are no victors and vanquished and, thus, no rancour.

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. Recently, Assam-Meghalaya border disputes is seen in news, which of the following areas are there in dispute?
 1. Gazang Reserve Forest
 2. Boklappar
 3. Nongwah
 4. Khanapara-Pilangkata

Select the correct answer using the given below:

 - (a) 1 and 2 only
 - (b) 1, 2 and 3 only
 - (c) 3 and 4 only
 - (d) 1, 2, 3 and 4

4. Consider the following statements regarding the recent unemployment data of Centre for Monitoring Indian Economy (CMIE):
 1. According to CMIE Rural unemployment is more in percentage than urban unemployment.
 2. Unemployment among women is higher than men, both in urban as well as rural areas.
 3. CMIE provides services to the entire spectrum of business information consumers including governments and academia.

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

5. Consider the following statements regarding the Ujala Programme:
 1. Under the programme, the government has ensured transparency and encouraged competition by e-procurement of goods and services.
 2. With UJALA, the cost of LED bulb has come by down by 85 percent.

Which of the statements given above is/are correct?

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

6. With reference to the World economic forum's annual risks report, consider the following statements:
 1. The reports show climate change as the number one danger.
 2. Erosion of social cohesion were identified as risks which had

increased the most since the start of the COVID-19 pandemic.

Which of the statements given above is/are correct?

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

7. Consider the following statements regarding the National Education Alliance for Technology (NEAT) initiative recently seen in news:

- 1. It aims to act as a bridge between edtech companies, academic institutions and students.
- 2. The initiative is in alignment with the National Education Policy (NEP) 2020.

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 states show increase in forest cover in recently released 17th India State of Forest Report (ISFR) 2021:

- 1. Andhra Pradesh
- 2. Uttar Pradesh
- 3. Jharkhand
- 4. Odisha

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 1, 3 and 4 only
- (c) 1, 2 and 3 only
- (d) 1, 2, 3 and 4

9. With reference to the Emission norms for thermal power plant shows by Centre for Science and Environment

(CSE) report, consider the following statements:

- 1. The report show that all the coal power capacity in India is not liable to meet emission norms before 2024.
- 2. Andhra Pradesh (AP) is the only two states where the ratio of coal power capacity missing the deadline is more than the capacity that will meet it.

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

10. Consider the following statements regarding the Green Energy Corridor (GEC) Phase-II:

- 1. The project aims at synchronizing electricity produced from renewable sources such as solar and wind with conventional power stations.
- 2. The objective of the GEC is to evacuate approx. 20,000 MW of large-scale renewable power and improvement of the grid in implementing states.

Which of the statements given above is/are correct?

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

11. With reference to Bioenergy crops, consider the following statement:

- 1. These crops have the capacity to produce large volumes of biomass, high energy potential and can be grown in marginal soils.
- 2. These crops exert strong regional biophysical effects, leading to a

- global net change in air temperature.
3. Bioenergy is the energy derived from recently living material such as wood, crops, or animal waste.
- Which of the following statements given above are correct?
- (a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1, 2 and 3
12. Which of the following products are the best examples of Domestic Hazardous Waste?
1. Auto batteries
2. Fertilizers
3. Paint
- 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
13. Consider the following statements regarding the Red Sanders:
1. Red Sanders is found in the forests with climate forest type in the tropical forests in India.
2. The natural habitat of Red Sanders is a hilly region with moist deciduous.
3. Red Sanders is registered under Schedule II of Wildlife (Protection) Act 1972.
- 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
14. Consider the following statements regarding the Asian Infrastructure Investment Bank (AIIB):
1. All the G-20 countries are the members of Asian Infrastructure Investment Bank (AIIB).
2. The US and Japan are not members of the AIIB.
- 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
15. Consider the following statements regarding Non-Proliferation Treaty (NPT):
1. It is an international treaty aimed at preventing nuclear weapons and weapons technology from spreading.
2. India is an active member of treaty and consider the NPT as fair treaty.
3. The agreement contains no test ban or a freeze on production of fissile materials.
- 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
16. Consider the following statements regarding the Maya Civilization recently seen in news:
1. The Maya civilisation originated in the Yucatan Peninsula.
2. The Maya made paper from the inner bark of wild fig trees and wrote their hieroglyphs on books made from this paper.
- 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 statement regarding the BrahMos supersonic cruise missile:
1. The BrahMos is a medium-range supersonic missile that can be launched only from submarines.
 2. Recently, Advanced sea-to-sea variant of BrahMos supersonic cruise missile was tested from INS Visakhapatnam.
- 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
18. Which of the following is/are the objectives of Pradhan Mantri Formalisation of Micro food processing Enterprises Scheme?
1. Capacity building through skill training
 2. Hand holding support for preparation of DPR.
 3. Support to self-help groups for capital investment.
- 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
19. Consider the following statements regarding Global Investment Trend Monitor Report:
1. This report is published by the United Nations Conference on Trade and Development.
2. It published that developed economies saw the biggest rise by far with respect to FDI in 2021 than 2020.
- Which of the statements given above is/are correct?
- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
20. Which of the following is the fourth stage of the economic integration under Free Trade Agreement?
- (a) Free Trade Area
(b) A common market
(c) Economic Union
(d) Political Union
21. Consider the following statements regarding Design Linked Incentive (DLI) scheme:
1. It will be given for the semiconductor design, Integrated Circuits and Chipsets.
 2. It has only one component of Product Design Linked Incentive.
 3. The financial assistance or increment will be valid for five years.
- Which of the statements given above is/are correct?
- (a) 1 only
(b) 1 and 2 only
(c) 2 and 3 only
(d) 1, 2 and 3
22. Consider the following statements regarding Goods and services tax (GST):
1. GST was introduced through 101st Amendment Act.
 2. GST (Compensation to States) Act, 2017 prescribes that the financial year 2015-16 shall be taken as the base year for the purpose of

- calculating compensation for states.
- 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
23. Consider the following statements regarding Web 3.0:
1. This model is a decentralised internet to be run on blockchain technology.
 2. It provides fairer network without fearing loss of privacy and security.
 3. It will bring anti-monopoly structure and incentivize centralized platforms.
- Which of the statements given above is/are correct?
- (a) 1 only
(b) 1 and 2 only
(c) 1, 2 and 3
(d) None of these
24. Which of the following statement regarding "Github" is incorrect?
- (a) It is world's largest open-source developer community platform.
(b) It offers convenient license schemes.
(c) It provides a secure network protecting identity theft and malicious transfers.
(d) It can be open-source software can be scaled up and down to achieve desired results.
25. Which of the following statements is/are correct regarding Design Linked Incentive (DLI) Scheme for semiconductor manufacturers?
1. The scheme will be implemented by the Ministry of Electronics and Information.
 2. Design Linked Incentive (DLI) will be provided for over a period of 5 years.
 3. It aims to nurture at least 20 domestics as well as foreign companies involved in semiconductor design.
- Select the correct answer using the code given below:
- (a) 1 and 2 only
(b) 1 and 3 only
(c) 2 and 3 only
(d) 1, 2 and 3
26. 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.
27. With reference to the period of Gupta dynasty in ancient India, the towns Ghantasala, Kadura and Chaul were well known as (UPSC 2020)
- (a) ports handling foreign trade
(b) capital of powerful kingdoms
(c) places of exquisite stone art and architecture
(d) important Buddhist pilgrimage centres
28. Consider the following: (UPSC 2016)
1. Calcutta Unitarian Committee
 2. Tabernacle of New Dispensation
 3. Indian Reform Association
- Keshab Chandra Sen is associated with the establishment of which of the above?

- | | |
|--|---|
| <p>(a) 1 and 3 only
(b) 2 and 3 only
(c) 3 only
(d) 1, 2 and 3</p> <p>29. In the context of Indian history, the principle of “Dyarchy (diarchy)” refers to (UPSC 2017)</p> <p>(a) Division of the central legislature into two houses.
(b) Introduction of double government i.e., Central and State governments.
(c) Having two sets of rulers; one in London and another in Delhi.</p> | <p>(d) Division of the subjects delegated to the provinces into two categories.</p> <p>30. ‘Doctors Without Borders (Medecins Sans Frontieres)’, often in the news, is</p> <p>(a) a division of World Health Organization
(b) a non-governmental international organization
(c) an inter-governmental agency sponsored by European Union
(d) a specialized agency of the United Nations</p> |
|--|---|

ANSWERS

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