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Weekly Compilation for the 3rd Week

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1. Polity & International Relations

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1.1. Supreme Court's Ruling On Farm Laws

- Context: The issues in the farm bills are complex. But how the Supreme Court is interpreting its function is something to ponder upon.
- The apex court has suspended the implementation of the farm laws, and created a committee to ascertain the various grievances. But it is not clear what the legal basis of this suspension is.
- The court's action is seen as a violation of separation of powers.
- It also gives the misleading impression that a distributive conflict can be resolved by technical or judicial means.
- It is also not a court's job to mediate a political dispute.
- Its job is to determine unconstitutionality or illegality.
- Even in suspending laws there needs to be some prima facie case that these lapses might have taken place.
- But instead of doing a hearing on the substance it has simply decided to create a committee to hear farmers' grievances and wade into political territory.
- It has set a new precedent for putting on hold laws passed by Parliament without substantive hearings on the content of the laws
- It has muddied all the possible lines of judicial procedure, where it is not clear what the locus standi of different counsel are, what are the specific prayers that need to be addressed and how the court's remedies address them.
- It has not really heard the farmers, whose counsel were not fully heard before the passing of orders.
- The framework governing agriculture needs serious reform.
- The objective of reform must be to improve farmers' incomes and well-being, to increase crop diversification, make agriculture more environmentally sustainable, make subsidies less counterproductive, keep food inflation down, and ensure that nutrition reaches all.
- Achieving all these objectives is no easy task, especially in states like Punjab.
- The court has also positioned itself as an arbiter of national security by taking seriously the Attorney General's contention that farmers' protests may be the vehicle for the Khalistan movement.
- This is delegitimisation of protest by misdirection.
- It is preparing the ground for the protests on a significant scale being rendered illegal.
- What the farmers need is clarity of law where relevant, and the right to make their demands heard through the political process and civil society.
- It has set a bad precedent where implementation of laws can be suspended without legal basis

1.2. Jharkhand Combined Civil Services Examination Rules 2021

- Context: Jharkhand has for the first time framed rules pertaining to Jharkhand Civil Services.
- This will supersede The Bihar Civil Services (Executive Branch) and The Bihar Junior Civil Services Recruitment Rules of 1951, and will be applicable for appointment to direct quota vacancies in various services such as the Jharkhand Administrative Service, Jharkhand Police Service among others.

Why was the Jharkhand Combined Civil Services Examination Rules, 2021 needed?

- The Jharkhand Public Service Commission (JPSC), which conducts Combined Civil Service Examination, has conducted only six exams in 20 years.
- In 2010, an FIR was lodged against a former member for alleged irregularities in written exams and interviews.
- At least 204 petitions—related to confusion, corruption in the selection process and irregularities among others—were filed in the High Court with more than 30 per cent cases pending in the courts.
- In the last examination, the result of the Prelims examinations was declared thrice.
- In the first instance, around 5,000 candidates qualified for the Mains, but the result was cancelled because the reservation rule for OBC candidates was not taken into account.
- In the second revised result, 6,103 candidates qualified, but SC/ST students were ignored leading to cancellation of the results.
- The new rules aim to avoid any such confusion.

What do the new rules state?

- A calendar of vacancies will be published at the start of each year which wasn't done until the last exam.
- The cadre-controlling department shall calculate the number of vacancies each year on January 1 with respect to the service to be filled in that particular year by direct recruitment and shall provide requisition for appointment to the Commission after roster clearance through the Department of Personnel, Administrative Reforms and Rajbhasha.
- Marks obtained in Main (Written Test) Language Paper which is only qualifying in nature will not be added to the aggregate marks for calculation of percentage of marks, or for preparation of merit list for Main (Interview Test), or for preparation of final merit list.
- This is a huge relief for candidates as earlier it was up to the whims and fancies of officers to decide whether to add those marks or not in preparation of merit list.
- The government has made it clear that those marks will be considered as qualifying.
- While making service allocation, the reserved category candidates—who have not availed any relaxation—recommended against unreserved vacancies may be adjusted against unreserved vacancies by the Commission, and if he cannot, then he shall be adjusted in reserved category if they get a service of higher choice in the order of their preference.

- The rules state that the candidates who obtain minimum qualifying marks of 40 in 'aggregate' shall only be considered by the Commission while preparing the selection list for Main Examination and for preparing the merit list for the purpose of Main (Interview) Test.
- However, the minimum qualifying marks will be relaxed for Scheduled Castes/ Scheduled Tribes and Females to 32%; Extremely Backward Classes to 34%; Backward Classes to 36.5%; and Primitive Tribal Group to 30%.
- Confusion arose in the 6th JPSC exam where it was not clear whether the minimum qualifying marks were calculated subject wise or in aggregate.
- For each vacancy, 15 candidates will be selected for Main (Examination).
- In 2016, for 326 posts, a total of 34,634 applicants were eligible for the Mains exam.
- The candidates to job ratio was more than 100.

Rules that experts say may create controversy

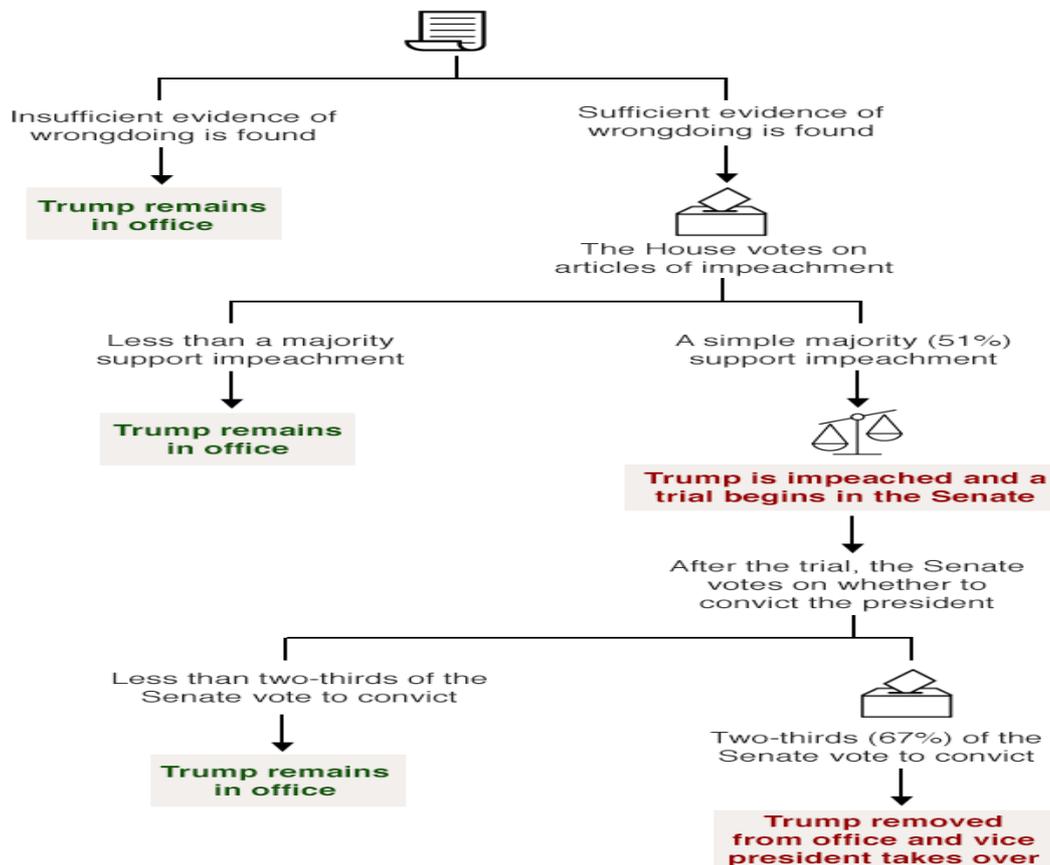
- The new rules say that the number of candidates to be admitted to the Main (Written) Examination will be approximately 15 times the total number of advertised vacancies.
- Further, irrespective of category, the '15-times' number will be selected in the Prelims and in case of inadequate representation from reserved category then the commission may at their discretion keep the cut-off marks up to eight percent less than that it was for the 'last selected candidate', but it shall not be less than the minimum marks. So, technically there is no reservation in Prelims
- For example: If there are 100 vacancies, the first 1,500 candidates will be selected for the Mains irrespective of which category they belong to.
- Later, if there are no adequate representation from reserved category/categories, then the Commission may reduce the cut-off marks—for those categories who did get enough representation—not more than 8% from the marks obtained by 1500th candidate—and that too it should be less than the minimum qualifying marks mentioned in the rules.
- This particular rule will affect many prospective students.
- Ideally the Commission should select 15 times the advertised vacancy in respective categories, rather than selecting 1500 candidates purely on merit.
- For example: if, there are 100 total vacancies, and 27 seats are reserved for OBCs, then 405(15 times 27) candidates from OBC community should be selected for Mains and likewise for other categories rather than selecting 1500 candidates for mains.
- There may be a possibility that some seats may remain vacant.
- There is no provision in the news rules for the graduation final year/appearing applicants.
- The UPSC, however, has a provision.
- The request for withdrawal of candidature received from a candidate after he has submitted his application will be not entertained by the Commission.
- The number of attempts of candidates may also get affected.
- Also, candidates would demand return of money paid for the application forms.

1.3. First U.S. President To Be Impeached Twice

- Context: President Trump was impeached by the U.S. House for a historic second time on January 13, charged with “incitement of insurrection” over the deadly mob siege of the Capitol in a swift and stunning collapse of his final days in office.
- Mr. Trump is the only U.S. President to be twice impeached.
- Impeachment is a provision that allows Congress to remove the President of the United States.
- The House of Representatives (Lower House) has the “the sole power of impeachment” while the Senate (Upper House) has “the sole power to try all impeachments”.
- The Chief Justice of the US Supreme Court has the duty of presiding over impeachment trials in the Senate.
- Grounds for impeachment:
 - ✓ The President can be removed from office for “treason, bribery, or other high crimes and misdemeanors”.
 - ✓ It means an abuse of power by a high-level public official.
 - ✓ This does not necessarily have to be a violation of an ordinary criminal statute.
 - ✓ Historically, in the US, it has encompassed corruption and other abuses, including trying to obstruct judicial proceedings.

What happens next in impeachment process?

Six House committees investigating President Trump make submissions to the House Judiciary Committee, which considers the case for impeachment



1.4.8 Point Agenda To UN Security Council By India

- Context: Speaking at the United Nations Security Council open debate on the topic of Threats to International Peace and security caused by terrorist acts, India said the economic uncertainty caused due to the pandemic has made the radical extremist ideologies more susceptible towards terrorist activities.
- India has proposed an eight-point Action Plan to counter global terrorism and called upon world community to “walk the talk” and commit to the goal of “zero tolerance” with 'no ifs and buts' against the scourge.
- The eight points of the Action Plan are:
 - ✓ Summoning the political will to “unhesitatingly” combat terrorism. Member States should fulfill their obligations enshrined in international counter terrorism instruments and conventions.
 - ✓ Decrying “double standards” in the fight against terrorism. Terrorists are terrorists and there is no good or bad distinction. Those who propagate this only have an agenda. And those who cover up for them are just as culpable.
 - ✓ Reform of the working methods of the Committees dealing with Sanctions and Counter Terrorism. Transparency, accountability and effectiveness are the need of the day. The practice of placing blocks and holds on listing requests without any rhyme or reason must end. This only erodes our collective credibility.
 - ✓ Firmly discouraging exclusivist thinking that divides the world and harms social fabric. Such approaches facilitate radicalization and recruitment by breeding fear, mistrust and hatred among different communities. The Council should be on guard against new terminologies and false priorities that can dilute focus.
 - ✓ Enlisting and delisting individuals and entities under the UN sanctions regimes objectively not for political or religious considerations. Proposals in this regard merit due examination before circulation.
 - ✓ Fully recognizing and addressing the link between terrorism and transnational organized crime
 - ✓ Combating terrorist financing will only be as effective as the weakest jurisdiction. Financial Action Task Force (FATF) should continue to identify and remedy weaknesses in anti-money laundering and counter-terror can make a big difference.
 - ✓ Immediate attention to adequate funding to UN Counter Terrorism bodies from UN regular budget. The forthcoming 7th review of the UN's Global Counter Terrorism Strategy offers an important occasion to strengthen measures to prevent and combat terrorism and build capacities of member states.

1.5. Russia withdraws from Open Skies Treaty

- Context: Russia announced it is pulling out of the Open Skies treaty saying that the pact, had been seriously compromised by the withdrawal of the United States.
- The United States left the Open Skies arms control and verification treaty in November, accusing Russia of violating it, something Moscow denied.

- Russia has raised concerns that despite leaving the treaty Washington could potentially retain access to overflight intelligence gathered by allies who remain members in the treaty.
- Signed March 24, 1992, the Open Skies Treaty permits each state-party to conduct short-notice, unarmed, reconnaissance flights over the others' entire territories to collect data on military forces and activities.
- Observation aircraft used to fly the missions must be equipped with sensors that enable the observing party to identify significant military equipment, such as artillery, fighter aircraft, and armored combat vehicles.
- Though satellites can provide the same, and even more detailed, information, not all of the treaty states-parties have such capabilities.
- The treaty is also aimed at building confidence and familiarity among states-parties through their participation in the overflights.
- President Dwight Eisenhower first proposed that the United States and the Soviet Union allow aerial reconnaissance flights over each other's territory in July 1955.
- Claiming the initiative would be used for extensive spying, Moscow rejected Eisenhower's proposal.
- President George H.W. Bush revived the idea in May 1989 and negotiations between NATO and the Warsaw Pact started in February 1990.
- Treaty Status: The Open Skies Treaty entered into force on January 1, 2002, and 34 states are party to the treaty, though United States withdrew from the treaty in November 2020.
- Twenty-six of the treaty's initial 27 signatories have ratified the accord and are now states-parties.
- Since the treaty entered into force, Bosnia and Herzegovina, Croatia, Estonia, Finland, Latvia, Lithuania, Slovenia, and Sweden have become states-parties.
- Territory: All of a state-party's territory can be overflown. No territory can be declared off-limits by the host nation.
- Flight Quotas: Every state-party is obligated to accept a certain number of overflights each year, referred to as its passive quota, which is loosely determined by its geographic size. A state-party's active quota is the number of flights it may conduct over other states-parties. Each state-party has a right to conduct an equal number of flights over any other state-party that overflies it. A state-party's active quota cannot exceed its passive quota, and a single state-party cannot request more than half of another state-party's passive quota.
- The treaty allows for multiple states-parties to take part in an overflight. The flight will count as an active flight for each state-party participating. Regardless of the number of observing states-parties, however, the overflight will only count as one passive overflight for the observed state-party.
- Russia conducted the first observation flight under the treaty in August 2002, while the United States carried out its first official flight in December 2002.
- In 2008, states-parties celebrated the 500th overflight. Between 2002 and 2019, more than 1,500 flights have taken place.

- Process: An observing state-party must provide at least 72 hours' advance notice before arriving in the host country to conduct an overflight. The host country has 24 hours to acknowledge the request and to inform the observing party if it may use its own observation plane or if it must use a plane supplied by the host. At least 24 hours before the start of the flight, the observing party will supply its flight plan, which the host has four hours to review.
- The host may only request changes in flight plans for flight safety or logistical reasons. If it does so, the two states-parties have a total of eight hours after submission of the original flight plan to agree on changes, if they fail, the flight can be cancelled. The observation mission must be completed within 96 hours of the observing party's arrival unless otherwise agreed.
- Although state-parties are allowed to overfly all of a member's territory, the treaty determines specific points of entry and exit and refueling airfields.
- The treaty also establishes ground resolution thresholds for the onboard still and video cameras. The aircraft and its sensors must undergo a certification procedure before being allowed to be used for Open Skies in order to confirm that they do not exceed the allowed resolutions.
- Aircraft: The treaty lays out standards for aircraft used for observation flights. Aircraft may be equipped with four types of sensors: optical panoramic and framing cameras, video cameras with real-time display, infra-red line-scanning devices, and sideways-looking synthetic aperture radar. For the first three full years after the treaty entered into force, the observation aircraft had to be equipped with at least a single panoramic camera or a pair of optical framing cameras. The states-parties may now agree on outfitting the observation planes with additional sensors.
- Data: A copy of all data collected will be supplied to the host country. All states-parties will receive a mission report and have the option of purchasing the data collected by the observing state-party.
- Treaty Implementation: The Open Skies Consultative Commission (OSCC), comprised of representatives of all states-parties, is responsible for the implementation of the Open Skies Treaty. The OSCC considers matters of treaty compliance, decides on treaty membership, distributes active quotas, and deals with any questions that may arise during the implementation of the treaty.
- Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Turkey, Ukraine, the United Kingdom, and the United States (though US withdrew from the treaty in November 2020). Kyrgyzstan has signed, but not ratified the treaty.
- For example, Russia, which shares its quota with Belarus, and the United States both have quotas permitting 42 flights per year, while Portugal is only obligated to allow two flights annually.
- Countries are not required to exhaust their flight quotas. In 2009, the United States flew a total of thirteen flights, twelve over Russia and one over Ukraine.
- This limit can be extended by 24 hours if the host insists that the observing party use the host's aircraft and demonstration flight is conducted.

2. Economy

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2.1. Government floats PPP model for dredging projects at major port trusts

- Context: The Government has floated the concept of undertaking channel deepening and maintenance works at major port trusts through the public-private-partnership (PPP) mode.
- According to the draft dredging guidelines for major port trusts prepared by the ministry of ports, shipping and waterways a PPP model may be worked out for dredging projects with the hybrid model of combining the capital dredging with maintenance dredging for 10-20 years
- The revenue share between major ports and PPP operator may be the bidding parameter for floating the PPP projects.
- The existing PPP operators of the berth may share proportionate cost based on the volume of cargo handled along with the berths operated by the major ports themselves
- The increased depth translates into reduction in transportation cost due to economies of scale as the cargo movement is shifted from Panamax to Capesize vessels for bulk cargo handling.
- Given the high capital expenditure required for channel deepening works, the major ports may adopt the PPP mode to ensure funding from private agencies with support from the major ports.
- Significant capital dredging is required at major ports in 3-5 years to handle the anticipated container vessels of 20,000 twenty-foot equivalent units (TEUs) capacity and bulk cargo carrying Capesize vessels.
- Adopting the PPP model for capital dredging will ensure that dredging is taken up as a “service requirement” for the port with minimal operation burden with the Port Authority.

COAST TO COST

- Move to cut financial burden on port trusts
- Capital dredging costs up to Rs 1,500 cr
- Currently, ports fund dredging on their own
- Govt willing to give VGF for corporates

Shortcomings

- It is being argued that PPP in dredging will be very difficult as it is full of uncertainties; PPP is good for projects where certainty is there.
- The complex traffic structure to be developed by major ports for different berth operators with different category of cargo is a key risk.
- As per the plan, the revenue for the PPP dredging operator will depend on the increase in traffic.
- And, linking it to traffic will bring in more uncertainty.
- Stipulating measurable performance indicators including assured depth during the period of concession and adequate financial returns as per the financial viability structure also poses risk to the PPP model.

2.2. Second Cycle of Perform, Achieve and Trade (PAT) scheme

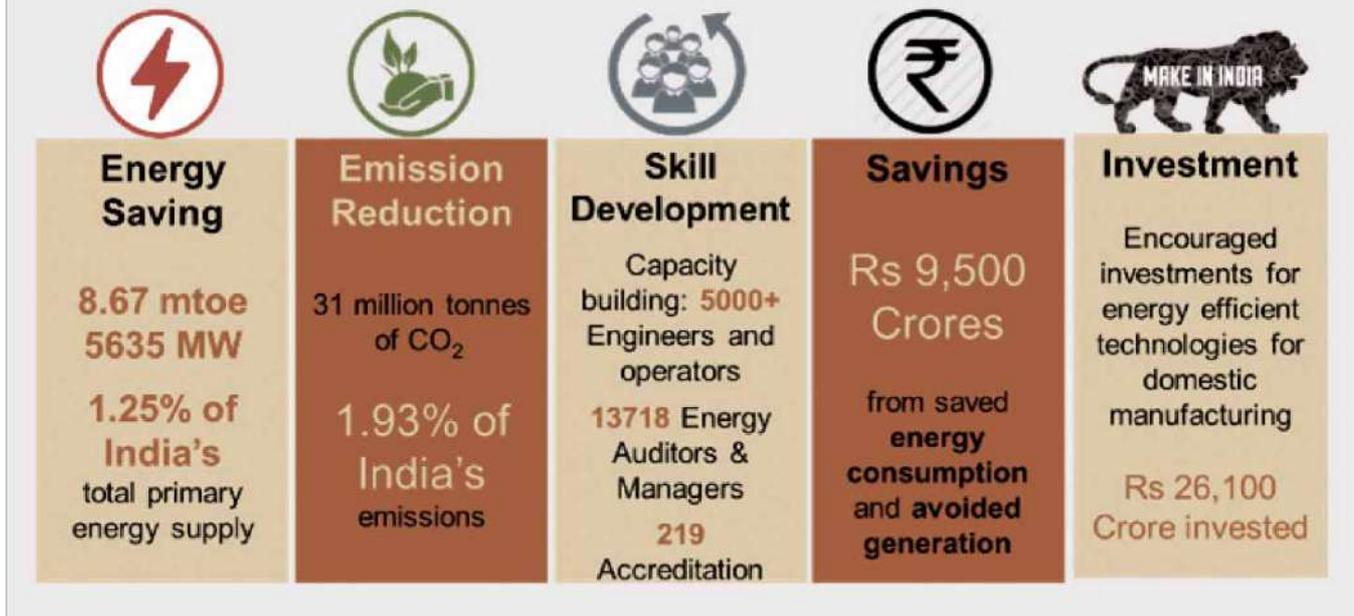
What is PAT

- Perform Achieve and Trade (PAT) scheme is a flagship programme of Bureau of Energy Efficiency under the National Mission for Enhanced Energy Efficiency (NMEEE).
 - Perform Achieve and Trade (PAT) scheme is a market based compliance mechanism to accelerate improvements in energy efficiency in energy intensive industries.
 - The energy savings achieved by notified industries is converted into tradable instruments called Energy Saving Certificates (ESCerts). The ESCerts after issuance by Bureau of Energy Efficiency are traded at Power Exchanges.
 - (NMEEE is one of the eight national missions under the National Action Plan on Climate Change (NAPCC) launched by the Government of India in the year 2008.)
- ✓ For compliance under Energy Consumption Norms and Standards of Designated Consumer notified under PAT scheme, price of one metric tonne of oil equivalent is calculated based on the fuel mix used by various notified Designated Consumer in a specified target year.
 - ✓ The Ministry of Power, notifies such price applicable for Designated Consumers of a specified cycle of PAT scheme for quantification of their compliance, in case of any default to meet the specified norms and standards.
 - ✓ The price of one metric tonne of oil equivalent discovered for the year 2018-2019 is based on the changes in corresponding energy mix due to addition of new sectors viz. Petroleum Refinery, Railways and Electricity Distribution companies under the Perform, Achieve and Trade Scheme and further streamlining of price calculation methodology.

The PAT Mechanism



Realised impacts – PAT 1 (2012-15)



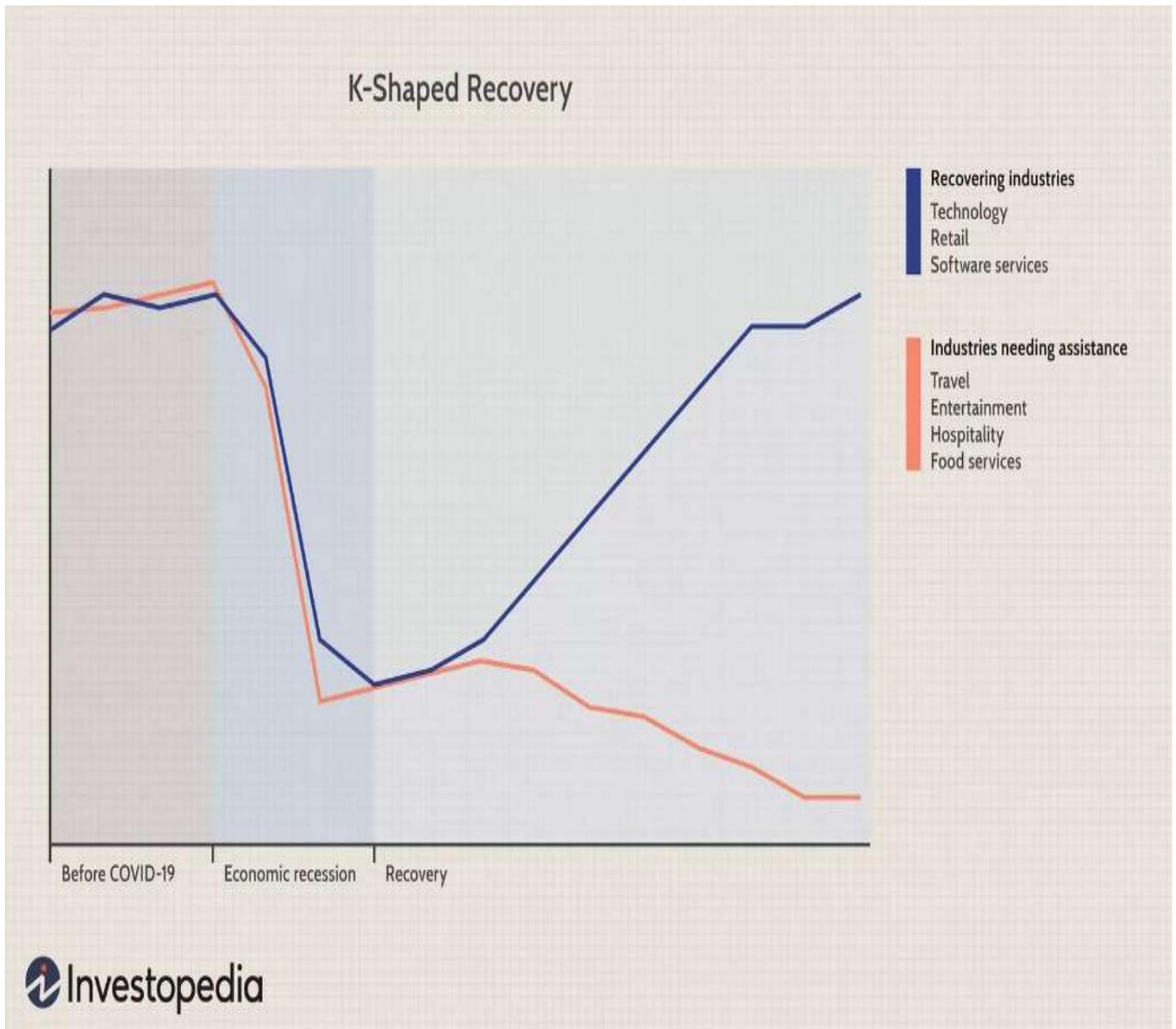
About BEE

- BEE is a statutory body under the Ministry of Power.
- It assists in developing policies and strategies on energy conservation and efficiency with the primary objective of reducing the energy intensity of the Indian economy.
- BEE coordinates with designated consumers, designated agencies of the states, and other related organization to identify and utilize the existing resources and infrastructure, in performing the functions assigned to it under the Energy Conservation Act, 2001.

Projected outcome – PAT cycle 2 (2016-2019)

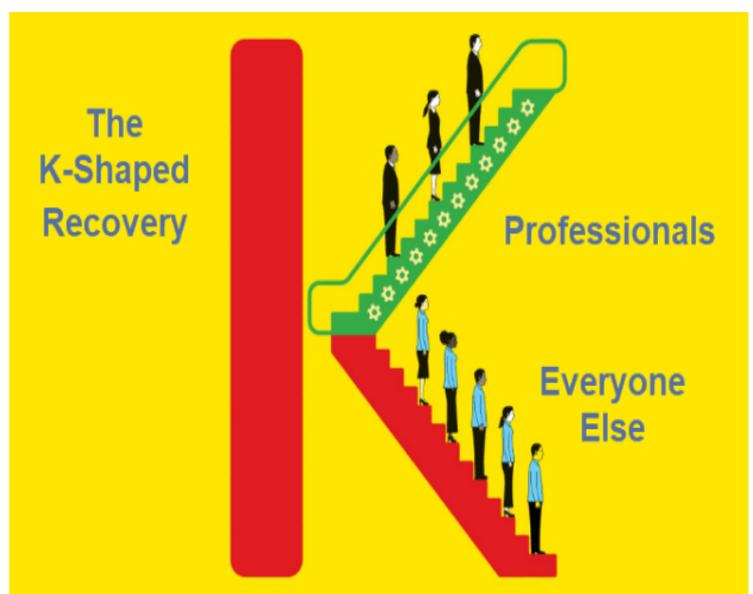


2.3.K-shaped economic recovery, and its implications



What is a K-shaped recovery?

- A K-shaped recovery happens when different sections of an economy recover at starkly different rates.
- Households at the top of the pyramid are likely to have seen their incomes largely protected, and savings rates forced up during the lockdown.
- Meanwhile, households at the bottom are likely to have witnessed permanent hits to jobs and incomes.
- These cleavages are already visible.



- Passenger vehicle registrations (proxying upper-end consumption) have grown about 4 per cent since October while two-wheelers have contracted 15 per cent.

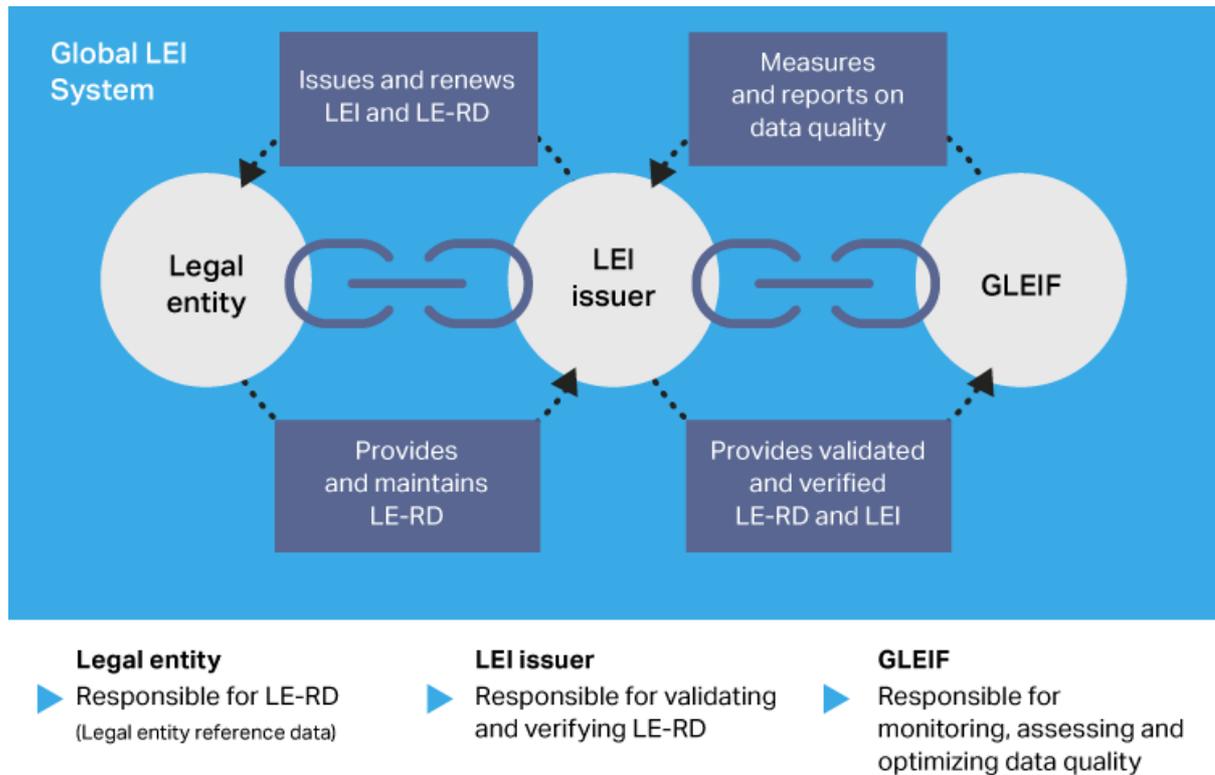
What are the macro implications of a K-shaped recovery?

- With the top 10 per cent of India's households responsible for 25-30 per cent of total consumption, one could argue consumption would get a boost as this pent-up demand expresses itself.
- But it's important not to conflate stocks with flows, and levels with changes.
- Upper-income households have benefitted from higher savings for two quarters. What we are currently witnessing is a rush from those savings being spent.
- This is, however, mostly a one-time effect.
- To the extent that households at the bottom have experienced a permanent loss of income in the forms of jobs and wage cuts, this will be a recurring drag on demand, if the labour market does not heal faster.
- Second, to the extent that COVID has triggered an effective income transfer from the poor to the rich, this will be demand-impeding because the poor have a higher marginal propensity to consume (ie they tend to spend (instead of saving) a much higher proportion of their income.
- Third, if COVID-19 reduces competition or increases the inequality of incomes and opportunities, it could impinge on trend growth in developing economies by hurting productivity and tightening political economy constraints.
- Policy will, therefore, need to look beyond the next few quarters and anticipate the state of the macroeconomy post the sugar rush

2.4.RBI, LEI and RTGS/NEFT

- Context: The Reserve Bank of India (RBI) has decided to introduce the Legal Entity Identifier (LEI) system for all payment transactions of value ₹50 crore and above undertaken by entities (non-individuals) using the Reserve Bank-run Centralised Payment Systems with effect from April 1.
- LEI is a 20-digit number used to uniquely identify parties to financial transactions worldwide.
- It was conceived as a key measure to improve the quality and accuracy of financial data systems for better risk management post the global financial crisis.
- In preparation for the wider introduction of LEI across all payment transactions, the RBI asked member banks participating in Real Time Gross Settlement (RTGS) and National Electronic Funds Transfer (NEFT) to advise entities who undertake large value transactions (₹50 crore and above) to obtain LEI in time, if they do not already have one.
- Member banks should include remitter and beneficiary LEI information in RTGS and NEFT payment messages.
- Entities can obtain LEI from any of the Local Operating Units (LOUs) accredited by the Global Legal Entity Identifier Foundation (GLEIF), the body tasked to support the implementation and use of LEI.
- In India, LEI can be obtained from Legal Entity Identifier India Ltd. (LEIL), which is also recognised as an issuer of LEI by the Reserve Bank under the Payment and Settlement Systems Act, 2007.

- LEI has been introduced by the Reserve Bank in a phased manner for participants in the over the counter (OTC) derivative and non-derivative markets as also for large corporate borrowers.



2.5.RBI to mandate risk-based internal audit for large UCBs, NBFCs

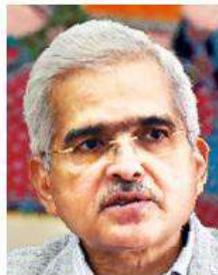
- Context: The Reserve Bank of India (RBI) has decided to bring large Urban Cooperative Banks (UCBs) and Non-Banking Finance Companies (NBFCs) within the Risk Based Internal Audit (RBIA) net.
- RBIA was mandated for commercial banks in 2002.
- This is expected to improve the quality of financial reporting of Supervised Entities.
- These changes are reflected in the Monetary Policy Review statement.
- The policy contemplates harmonisation with the frame work applicable for commercial banks, which are internationally benchmarked and robust.
- Since June 2020, UCBs are brought under the supervisory power of the RBI after the collapse of PMC Bank.
- The current approach of different frame work in supervisory mechanism for commercial banks, UCBs and NBFC is not prudent from financial and regulatory perspective, and is one of the reason for governance failure or frauds noticed in UCBs and NBFCs.

2.6.RBI Financial Stability Report

- If the macroeconomic environment worsens into a severe stress scenario, the Gross NPA ratio may escalate to 14.8%
- The stress tests indicate that the GNPA ratio of all scheduled commercial banks (SCBs) may increase from 7.5% in September 2020 to 13.5% by September 2021 under the baseline scenario
- Among the bank groups, public sector banks' (PSBs) GNPA ratio of 9.7% in September 2020 may rise to 16.2% by September 2021 under the baseline scenario
- These GNPA projections are indicative of the possible economic impairment latent in banks' portfolios, with implications for capital planning.

WARNING BELLS

- **Systemic capital-adequacy may fall to 14% in Sept 2021 from 15.6% in Sept 2020** under the baseline scenario, and to 12.5% under severe stress scenario
- **Four banks may fail to meet minimum capital level by Sept 2021 under the baseline scenario**, without factoring in any capital infusion by stakeholders.
- **In severe stress scenario**, this could rise to nine banks
- **Centre may have to fast-track** the recapitalisation of state-run banks
- **Credit by NBFCs grew by mere 4.4%**, as against 22% in 2018-19



"STRETCHED VALUATIONS OF FINANCIAL ASSETS POSE RISKS TO FINANCIAL STABILITY. BANKS AND FINANCIAL INTERMEDIARIES NEED TO BE COGNISANT OF THESE RISKS"

Shaktikanta Das, RBI governor

2.7.The North East Venture Fund (NEVF)

- The North East Venture Fund (NEVF), which is the first and the only dedicated Venture Fund for the North Eastern Region is gaining popularity among Start-Ups and young entrepreneurs.
- The Venture Fund Scheme launched by the Ministry of Development of North Eastern Region (DoNER) intended to promote growth of business ventures and skill development in the region.
- Ministry of DoNER had joined with North Eastern Development Finance Corporation Ltd (NEDFi) to set up the North East Venture Fund, the first and the only Venture Fund for Northeast with an initial corpus of Rs. 100 crores.
- The main focus of North East Venture Fund (NEVF) is for mostly the enterprises involved in Food Processing, Healthcare, Tourism, segregation of services, IT, etc.
- Ministry of North Eastern Region has started the series "Destination North East ", wherein the different facets of Northeast including the entrepreneurship avenues are replicated at different locations across the country.
- During these events also, an exclusive arrangement is made for offering counselling and assistance to potential entrepreneurs and business Start-Ups.

2.8. Four labour codes may get implemented ahead of schedule

- Context: The Union government indicated that it is accelerating labour reforms and looking for an early implementation of the four labour codes, and the rules to this effect will be ready by the end of January.
- The four labour codes are being seen as a big reform aimed at reducing bureaucratic hurdles, improving ease of doing business, simplifying labour laws, streamlining the definition of labour market components, and expanding social security coverage.
- At least 29 central labour laws have been merged into four broad codes on industrial relations, occupational safety and health, wages, and social security.
- The government has been holding tripartite meetings involving its officials, and employees' and employers' representatives.
- Rules are ready for wage and industrial relations codes. A committee has been formed for formulating minimum floor wages after due deliberations.
- The employer organizations, authorities said, have sought to expand the scope of gig workers and include those who are not working with any aggregator and are seeking clarity on the salary component on which Employees' Provident Fund will be calculated.
- The ministry said it is appointing legal consultants to study state labour legislations and ensure that all are on the same page with regard to "the new central legislations".

Key Provisions
LABOUR CODE ON WAGES
Uniform minimum wage to be notified under the bill

This will be statutory; all states will have to follow

All 500 m workers will benefit; currently it is applicable to only 40% workers

Payment of wages will be exclusively via digital mode

Minimum wage no longer based on employment

It will be based on geography and skills

2.9. Sugarcane farmers demand timely payment of FRP, SAP from mills

- Context: Even as farmers in Maharashtra and Uttar Pradesh are gearing up to agitate against mills demanding timely payment of Fair and Remunerative Price (FRP) and State Advised Price (SAP), sugar millers claimed that higher FRP and SAP leads to rising cane price payment arrears. However, farmers' leaders refuse to accept the argument.
- Sugarcane farmers in Maharashtra have demanded that sugar mills must pay FRP in one go.
- According to the Indian Sugar Mill Association (ISMA), one of the main reasons for cane price payment arrears is high FRP set by the Centre.
- The FRP is based on the cost of production of sugarcane and an element of assured profit as to cover the risk of sugarcane farmers.
- According to ISMA, the mark up above the cost of production of sugarcane, at an all-India average basis, is as high as 100 per cent over the cost of producing sugarcane.
- The government has increased the FRP for sugarcane from October, 2020 but not the MSP of Sugar.

- The Centre increased the FRP by ₹10 to ₹285 per quintal for a basic recovery of 10 per cent for the current season.
- NITI Aayog, along with various States, have requested for a hike in the MSP to ₹33-36 per kilo, to facilitate timely payment to farmers.



FRP of sugarcane for 2020–21 sugar season at **₹285/quintal** for a basic recovery rate of 10%



₹2.85/quintal for every 0.1% increase above 10% in the recovery



Reduction in FRP by ₹2.85/quintal for every 0.1% point decrease in recovery, mills whose recovery is below 10% but above 9.5%



For mills having recovery 9.5% or below, the FRP is fixed at **₹270.75/quintal**

Dual pricing

- Some States including Uttar Pradesh declare SAP for sugarcane considering the cost of production and productivity levels.
- The SAP is generally higher than the FRP.
- Millers said that dual pricing is distorting sugar economy and leading to cane price arrears.
- High SAPs without any linkage with the output price is viable, said industry players, adding that the system of SAP must be removed and if States announce SAPs they must shoulder the price differential.

BusinessToday.In

BENEFITS FOR EMPLOYERS

- Threshold for retrenchment, closure or lay-off without requiring government approval raised from 100 to 300 workers
- Inspector to now be made 'Inspector-cum-Facilitator', arguably to end inspector raj. Random, web-based inspection system to be introduced instead
- Licences, registrations to be issued online and in a stipulated time period
- Compounding (settlement) in case of various offences instead of prosecution
- Bargaining rights of workers reduced by providing for 60 days prior notice before going on strike

Sugar Pricing Policy

- Price of sugar are market driven & depends on demand & supply of sugar. However, with a view to protect the interests of farmers, concept of Minimum Selling Price (MSP) of sugar has been introduced w.e.f. 07.06.2018 so that industry may get atleast the minimum cost of production of sugar, so as to enable them to clear cane price dues of farmers.
- Government exercised Essential Commodities Act, 1955, Government to notify Sugar Price (Control) Order, 2018.
- MSP of sugar has been fixed taking into account the components of Fair & Remunerative Price (FRP) of sugarcane and minimum conversion cost of the most efficient mills. Government has revised the MSP of white/refined sugar from Rs.29/kg to Rs.31/kg w.e.f. 14.02.2018.

BusinessToday.In

BENEFITS FOR EMPLOYEES/WORKERS

- Annual health check-up for workers
- Provision for accumulation of one day leave for every 20 days worked, when work done for 180 days instead of 240 days
- Issuance of appointment letter
- EPFO coverage would be applicable on all establishments having 20 workers. At present, it is applicable only on establishments included in the Schedule
- ESIC now in all 740 districts. Option for becoming member of ESIC extended to establishments with less than 10 workers
- 15 days salary for re-skilling in case of job loss. Payment to be made in 45 days from the date of retrenchment
- Fixed-term employees to be treated at par with regular employees for social security benefits like service terms, leave, gratuity, etc
- Home journey allowance once in a year for migrant workers



2.10. New Foreign Trade Policy will come into effect from April 1: DGFT

- The New Foreign Trade Policy will come into effect by April 1: Office of Directorate General of Foreign Trade (DGFT)
- Today, over 50-60 per cent of the imports into the country under FTAs are raw materials for the industries.
- Industry is urged to engage in trade agreements so that it can reap the benefits of incentives and leverage the opportunities.
- Automation, digitisation, innovation and branding are imperative for the industries and the industries must adopt them to thrive and grow.

FOREIGN TRADE POLICY 2015-20

New five-year Foreign Trade Policy announced on April 1, 2015

Mid-term Review released on December 5, 2017

Two new incentive schemes introduced viz. 'Merchandise Exports from India Scheme' (MEIS) and 'Services Exports from India Scheme' (SEIS)

Incentives extended to SEZs also

Duty Credit Scrips made freely transferable

Reduced Export Obligation (EO) for domestic procurement under EPCG scheme



Shri Suresh Prabhu, Hon'ble Minister of Commerce & Industry releasing the Mid-term Review of Foreign Trade Policy 2015-20

MEIS increased by 2% to MSMEs/labour intensive industries. Additional outlay of Rs. 7,310 crore

SEIS incentive rate increased by 2% for all notified services such as business, legal, accounting, architectural, engineering, educational, hospital, hotels & restaurants; amounting to Rs. 1,140 crore

Validity period of Duty Credit Scrips increased from 18 months to 24 months

New trust based Self Ratification Scheme to allow duty free inputs for export production for authorized economic operators

2.11. Union cabinet clears mine reforms

- A comprehensive licence for exploration and production, clarity in illegal mining, national mineral index and joint auctions of bauxite and coal mines for the aluminium sector are some of the other proposals that have been approved by the cabinet.
- These reforms will be implemented through an amendment to the Mines and Mineral (Development and Regulation) Act, 1957 for which a bill will be placed in Parliament.
- With the approval of the proposal for reforms, legacy issues related to the mines will be resolved, making a large number of mines available for auctions.
- It will help strengthen the auction-only regime and boost transparency in the system.
- It will require an amendment in the MMDR Act.
- The reforms include removing the distinction between captive and non-captive mines and introduction of an index-based mechanism by developing a National Mineral Index (NMI) for various statutory payments, among others.
- In order to boost exploration, there will be a review of the functioning of the National Mineral Exploration Trust (NMET).

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- NMET will be made an autonomous body.
- Private entities will also be engaged in exploration works now.
- Simplification of exploration regime will also be done to facilitate seamless transition from exploration to production.
- Approval has also been given for amendments to be made in the District Mineral Foundation (DMF) guidelines.
- The amendments are aimed at spending DMF funds on people living in directly affected areas.
- Local Member of Parliament (MP) will be a member of the DMF Governing Council.
- Captive mines will be allowed to sell up to 50 per cent of the minerals excavated during the current year.
- Based on the experience in the coal sector, it has been proposed to provide 50 per cent rebate in the quoted revenue share for the quantity of mineral produced and dispatched earlier than scheduled date of production.
- The major objective of the reforms is to generate huge employment opportunities, reduce imports and increase production by bringing large mineral blocks into auction.

4/12

Enhancing Private Investment in Mineral sector

- ➔ Introduction of seamless composite exploration-cum-mining-cum-production regime
- ➔ **500 mining blocks** to be offered through open process
- ➔ Joint auction for Bauxite and Coal mineral blocks
- ➔ Distinction between captive and non-captive mines to be removed
- ➔ Mineral index for different minerals
- ➔ Rationalisation of stamp duties payable during award of mining leases

#INDIAFIGHTSCORONA /COVIDNewsByMIB

2.12.Colombo Port terminal Investment

- Context: In developing a container terminal at the strategically coveted Colombo Port, 49% of the investment will come from the Adani Group and other stakeholders : Sri Lanka.
- Representatives of the Port's worker unions, have been resisting any foreign involvement in the proposed project to develop the East Container Terminal (ECT).
- While 66% of the transshipment business at the terminal is linked to India, New Delhi's strategic interest in having a presence at the Port, located along one of the world's shipping lanes, is no secret.
- In May 2019, Sri Lanka signed a Memorandum of Cooperation (MoC) with India and Japan for the project.
- The three countries agreed that the Sri Lanka Ports Authority (SLPA) would retain 100% ownership, while a jointly-owned Terminal Operations Company – 51% stake with Sri Lanka, and 49% with India and Japan – would run the terminal.
- But the new statement from Sri Lanka said after negotiations with India, it was possible to reach an agreement for SLPA to retain 51% of the ownership and the control.
- Colombo will not be resorting to any loans. It will all be investment, that is the main difference.
- Two Cabinet-appointed committees were tasked with looking into the specifics of the project and negotiating the new agreement.

- Japan too is considering the request for investments.

2.13. Post COVID-19, ILO calls for national-level policy on those working from home

- Context: There is a need to develop effective policies for home-based workers and ensure their proper implementation even as the practice had increased since the novel coronavirus disease (COVID-19) pandemic: International Labour Organization (ILO) report.
- Just 10 countries had ratified the Convention on Homework nearly 25 years since it was adopted by the International Labour Conference June 20, 1996
- Few governments had a comprehensive policy for working from home in place, the report titled Working from home: From invisibility to decent work.
- As a result, those working from home, especially in low-income countries, continued to work in poor working conditions.
- Before the COVID-19 pandemic hit, there were approximately 260 million home-based workers worldwide, representing 7.9 per cent of global employment.
- Of these, 56 per cent or 147 million were women.
- The report talked about three main types of home-based workers:
 - ✓ Industrial home-based workers, who are involved in the production of goods including artisanal production, such as making of handicrafts, rolling of beedis, making of laces, etc
 - ✓ Teleworkers, who use information and communication technologies to perform their work remotely
 - ✓ Home-based digital platform workers, who are 'crowdworkers' that perform service-sector tasks as specified by employers or intermediaries

Despite contributing significantly to the economy, home-based working had remained “invisible”.

- It also noted that the propensity of women to work from home – 11.5 per cent – was much higher than that of men (5.6 per cent).
- The report highlighted the plight of industrial home-based workers, citing the state of 2.5 million women rolling beedis (leaf cigarettes) in India.
- These were among the “poorest workers in the world of work” and worked in pathetic and unsafe conditions.

ILO's recommendations

- Governments need to play a major role to protect home-workers. It strongly recommended them to adopt a national policy on home-based work.
- It called upon governments to develop and implement a gender-responsive legal and policy framework that provided equal treatment for all categories of home-based workers in relation to other wage earners.
- This included facilitating the transition of informal workers to formal employment.

- The home-based workers needed to be counted better to record their earnings, hours worked and other conditions of employment.
- The labour registries needed to be revised to incorporate “place of work” and count those home-based workers who went missing due to poor labour registries.
- Few countries had labour inspection schemes adapted for home-based work.
- The report called for better compliance, legal protection, occupational safety and social security for industrial home-based workers.
- It said teleworkers were at the risk of working overtime and hence recommended the “right to disconnect” on their behalf.

2.14. Businesses can deploy CSR funds for awareness around covid

- Context: Businesses can use their corporate social responsibility (CSR) funds to create awareness about covid-19 but cannot use such funds exclusively on activities that benefit employees and family: GOI.
- Spending CSR funds for carrying out “awareness campaigns/programmes or public outreach campaigns on covid-19 vaccination programme is an eligible CSR activity” under provisions of law: The ministry of corporate affairs.
- Such spending will be considered under the Companies Act provisions allowing CSR expenditure towards promotion of healthcare including preventive healthcare and sanitation, promoting education and disaster management
- However, these activities have to be undertaken as per the Companies (CSR policy) Rules of 2014 and related orders.
- These rules do not recognize activities that benefit only employees and their family members as CSR activities.
- This prevents businesses from using their CSR funds for vaccination of employees and family.
- Companies with net worth of ₹500 crore or more, or turnover of ₹1,000 crore or more, or net profit of ₹5 crore-plus, are required to spend 2% of their average net profit of the preceding three years on CSR activities.
- The ministry had revised the CSR rules to align these with the requirements for fighting covid-19, allowing life sciences companies to spend CSR funds for finding therapies.
- The restriction on life sciences firms spending CSR funds in activities which are part of their normal course of business was lifted last August.
- Also, donations to the Prime Minister’s emergency fund to fight the pandemic was made eligible for CSR spending.
- However, for contribution to state agencies, only donations to the State Disaster Management Authority qualifies as CSR spending, not contributions to the chief minister’s relief fund.

3. Environment

Click [here](#) to watch the following questions on YouTube

3.1. Why forest fires are common in Himachal Pradesh

- Himachal Pradesh frequently witnesses forest fires during dry weather conditions. Recently a forest fire which started near Kullu raged for several days before being brought under control. Forest fires were also reported in Shimla and other parts of the state.
- The forest cover of Himachal Pradesh
 - ✓ Although two-thirds of the total geographical area of Himachal Pradesh is legally classified as forest area, much of this area is permanently under snow, glaciers, cold desert or alpine meadows and is above the tree line.
 - ✓ This leaves an effective forest cover of around 28 percent of the total area which amounts to 15,434 square kilometres, as per the Forest Survey of India.
 - ✓ Chir Pine, Deodar, Oak, Kail, Fir and Spruce are some of the common trees found here.

How fire prone are these forests?

- Except for periods of precipitation in monsoon and winter, the forests remain vulnerable to wildfires.
- Forest fires are a recurrent annual phenomenon in the state, and most commonly occur in Chir Pine forests.
- In the summer season, forest fires occur frequently in the low and middle hills of the state, where forests of Chir Pine are common.
- The dry summer season from March to June coincides with the shedding of highly-combustible needles by Chir Pine trees.
- Once the fallen dry needles catch fire, it can spread quickly over the entire forest due to the action of the wind.
- However, due to their thick bark, the Chir Pine trees are themselves relatively unharmed by these fires, and can spring back to life during the monsoon season.
- During the post-monsoon season and in winters, forest fires are also reported in higher areas, including parts of Shimla, Kullu, Chamba, Kangra and Mandi districts, where they usually occur in grasslands.

Causes of fire

- Natural causes such as lightning or rubbing of dry bamboos with each other can sometimes result in fires, but forest officials maintain that almost all forest fires can be attributed to human factors.
- When the grass is dry, even a small spark, such as someone dropping a burning matchstick, torchwood or a bidi/cigarette, can cause a massive fire.
- A spark can also be produced when dry pine needles or leaves fall on an electric pole.
- People who frequently pass through a forest to gather minor produce, take their animals for grazing or for other purposes may set up a temporary hearth to cook food or warm themselves.

- If they leave behind a smouldering fire, it can develop into a forest fire.
- Also, when people burn their fields to clear them of stubble, dry grass or undergrowth, the fire sometimes spreads to the adjoining forest.

What are the fuels of such massive fires?

- The dry leaf litter on the forest ground acts as a ready fuel.
- Fallen tree leaves, dry grass, weeds, low brushwood, deadwood on the forest floor, logs and stumps etc form the surface fuels.
- Below the loose litter, decaying materials such as humus, wood, shrubs, roots, much and peat can also support the combustion.
- Above the surface level, dry standing trees, mosses, lichens, dry epiphytic or parasitic plants, and fallen branches trapped in the under story can spread the fire to the upper foliage and the tree crowns.

How much damage do the forest fires cause?

- Forest fires can cause a lot of damage to the regeneration in the forests and their productivity.
- Moisture-loving trees such as Oaks and Deodars may give way to other species and exotic weeds.
- Forests help maintain aquifers and continuous flow of streams and springs, and provide firewood, fodder and non-timber produce to the local communities – all these capacities may get adversely affected in case of a fire.
- Forest fires may destroy organic matter in the soil and expose the top layer to erosion.
- They may also impact the wildlife by burning eggs, killing young animals and driving the adult animals away from their safe haven.
- Sometimes, a forest fire may get out of control and extend to human settlements, thus posing danger to human life and property.
- According to the Himachal forest department, forest fires cause an estimated loss of several crore rupees each year.
- From 2016-17 to 2019-20, the annual loss to the state due to forest fires has ranged from Rs 1.7 crore to Rs 3.5 crore.
- Around 1,200 to 2,500 forest fires were reported each year during this period affecting thousands of hectares.

Are the recent forest fires unusual?

- Forest fires are common every time a dry spell hits the state.
- Himachal witnessed unusually dry weather conditions in 2020 from August to November, resulting in drought-like conditions.
- That period also saw a large number of forest fires – at least 500 fires were recorded from August till early November.
- Currently, the weather has been dry for the past week, resulting in some fires.

What is done to prevent and control forest fires?

- Forecasting fire-prone days using meteorological data, clearing camping sites of dried biomass, early burning of dry litter on the forest floor, growing strips of fire-hardy plant species within the forest, and creating fire lines in the forests are some of the methods to prevent fires (fire lines are strips in the forest kept clear of vegetation to prevent the fire from spreading).
- Once a fire starts, early detection and quick action by fire-fighting squads is crucial.
- For such activities, the state forest department has a fire protection and fire control unit.
- In 1999, the state government notified forest fire rules which restrict or regulate certain activities in and around forest areas such as lighting a fire, burning agricultural stubble or undergrowth (ghansis) and stacking inflammable forest produce such as dried leaves and firewood.

3.2. Change rules on confiscation of animals, SC tells Centre

- The Centre informed the Supreme Court about the 2017 rules under the Prevention of Cruelty to Animals Act, 1960, and said that there was a difference between seizure and confiscation of animals, while responding to a petition.
- The Centre's response came after the court had asked it to amend a rule in the Act pertaining to confiscation of animals before an accused is convicted under the legislation.
- The plea questions the constitutional validity of the Prevention of Cruelty to Animals (Care and Maintenance of Case Property Animals) Rules, 2017 and Prevention of Cruelty to Animals (Regulation of Livestock Markets) Rules, 2017.
- The 2017 rules allow a magistrate to forfeit the cattle of an owner facing trial under the Act and send them to infirmaries, gaushalas etc.
- The petition pointed out that the transporters, farmers and cattle traders were being threatened since the rules were notified.
- The court pointed out that it was concerned about the animals being taken away from custody of owners even when the legal proceedings were on.
- The Supreme Court said that a provision in the 2017 rule notified by the Centre, allowing the confiscation of the animals of traders and transporters during the pendency of trials in cases under The Prevention of Cruelty to Animals Act, 1960, is contrary to the latter's provisions which allow such confiscation only in case of conviction.
- It asked the government to either change the rule or face a stay from the court.
- SC pointed out that Section 29 of the Act says that a person tried for an offence under the Act can be deprived of the ownership of the animal only upon conviction.
- Section 29, which deals with the "power of court to deprive person convicted of ownership of animal", in clause (1) says that "if the owner of any animal is found guilty of any offence under this Act, the court, upon his conviction thereof, may, if it thinks fit, in addition to any other punishment, make an order that the animal with respect to which the offence was committed shall be forfeited to Government and may, further, make such order as to the disposal of the animal as it thinks fit under the circumstances".

3.3.MEE report of 146 national parks wildlife sanctuaries released

- Environment Minister released Management Effectiveness Evaluation (MEE) report of 146 national parks and wildlife sanctuaries in the country, saying 70 per cent of global tiger population and over 60 per cent of leopard population in India is a certificate of its thriving biodiversity.
- It was announced that from this year onwards ten best national parks, five coastal and marine parks and top five zoos in the country would be ranked and awarded every year.

Key Findings

- West Bengal's Jaldapara national park and Raiganj wildlife sanctuary, Himachal Pradesh's Sainj and Tirthan wildlife sanctuaries as well as the Great Himalayan national park have been declared as top five national parks and wildlife sanctuaries in India.
- Two wildlife's sanctuaries in UP -- Turtle WLS and Jai Prakash Narayan Bird sanctuary -- and one each in Haryana, Assam and Rajasthan ranked as the bottom five.
- At present, India has a network of 903 protected areas covering about five per cent of the total geographic area of the country.
- Management Effectiveness Evaluation (MEE) of Protected Areas (PAs) has emerged as a key tool for PA managers and it is increasingly being used by governments and international bodies to understand the strengths and weaknesses of the protected area management systems.
- MEE is a very important document that provides valuable guidance on various aspects of wildlife and protected areas
- A new framework for MEE of Marine Protected Areas has been also jointly prepared by Wildlife Institute of India (WII) and MOEFCC.
- The assessment process of India's National Park and Wildlife Sanctuaries was adopted from International Union for the Conservation of Nature (IUCN) World Commission on Protected Areas (WCPA) framework of Management Effectiveness Evaluation (MEE).
- There are 30 'Headline Indicators' developed under six elements of MEE framework suitable in Indian context for evaluation.
- Each 'Headline Indicator' had four possible answers, 'poor' (score 2.5), 'fair' (score 5), 'good' (score 7.5) and 'very good' (score 10) to choose for evaluation.
- The total score would be 300 by including a maximum score of all questions.
- The ratings are assigned in four categories, as Poor -- up to 40 per cent; Fair -- 41 to 59 per cent; Good -- 60 to 74 per cent; Very Good -- 75 per cent and above.
- The environment minister also launched the Management Effectiveness Evaluation of Indian Zoos (MEE-ZOO) framework which proposes guidelines, criteria and indicators for evaluation of zoos of the country in a manner which is discrete, holistic and independent.
- The assessment criteria and indicators look beyond the traditional concepts, include issues of animal welfare, husbandry and sustainability of resources and finance.

- The MEE-ZOO exercise is moving towards developing highest standards in zoos across India and adhering to core values of accountability, transparency, innovation, use of technology, collaboration and integrity to achieve the mandate of conservation of endangered species
- India has systematically designated its Protected Areas in four legal categories – National Parks, Wildlife Sanctuaries, Conservation Reserves and Community Reserves under the Wildlife (Protection) Act, 1972.
- Under this Act, India has 903 formally designated Protected Areas with a total coverage 1,65,012.6 square km. Among these are 101 National Parks, 553 Wildlife Sanctuaries, 86 Conservation Reserves and 163 Community Reserves.
- For the survey, 146 National Parks and Wildlife Sanctuaries across 29 states and Union territories were evaluated.

3.4. Forest loss 'hotspots' bigger than Germany: WWF

- More than 43 million hectares of forest -- an area bigger than Germany -- have been lost in a little over a decade in just a handful of deforestation hotspots: WWF
- Swathes of forest continue to be flattened each year -- mainly due to industrial-scale agriculture -- as biodiversity-rich areas are cleared to create space for livestock and crops.
- Analysis by WWF found that just 29 sites across South America, Africa and South East Asia were responsible for more than half of the global forest loss.



- The Brazilian Amazon and Cerrado, the Bolivian Amazon, Paraguay, Argentina, Madagascar, along with Sumatra and Borneo in Indonesia and Malaysia were among the worst affected.
- Forests are an enormous carbon sink, together with other vegetation and soil sucking up roughly a third of all the carbon pollution humans produce annually. Yet they continue to disappear rapidly, threatening irreparable losses to Earth's crucial biodiversity.

World Wildlife Fund for Nature

- It is the world's leading conservation organization and works in more than 100 countries. It was established in 1961 and is headquartered at Gland, Switzerland.
- Its mission is to conserve nature and reduce the most pressing threats to the diversity of life on Earth.
- WWF collaborates at every level with people around the world to develop and deliver innovative solutions that protect communities, wildlife, and the places in which they live.

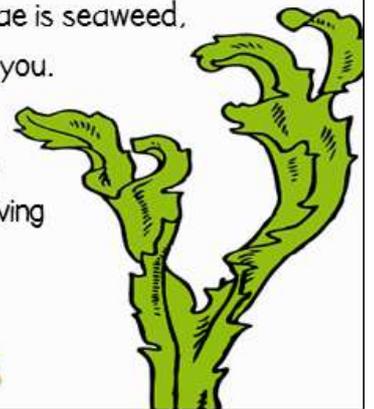
3.5. Seaweeds

- Seaweeds are the primitive, marine non-flowering marine algae without root, stem and leaves, play a major role in marine ecosystems.
- The thousands of species of this organism that vary vastly in size, shape and colour, provide habitats for marine lifeforms and protect them from threats.
- Large seaweeds form dense underwater forests known as kelp forests, which act as underwater nurseries for fish, snails and sea urchins.
- The herbivorous marine animals also feed on its thallus.
- On their part, the seaweeds derive nutrition through photosynthesis of sunlight and nutrients present in seawater.
- They release oxygen through every part of their bodies.
- Some nutrients found in large waterbodies are toxic to the marine life and can even kill them
- Seaweeds, found mostly in the intertidal region, in shallow and deep waters of the sea and also in estuaries and backwaters, absorb the excess nutrients and balance out the ecosystem.
- They also act as a bio-indicator.
- When waste from agriculture, industries, aquaculture and households are let into the ocean, it causes nutrient imbalance leading to algal blooming, the sign of marine chemical damage.
- These aquatic organisms heavily rely on iron for photosynthesis. When quantity of this mineral exceeds healthy levels and becomes dangerous to marine life, seaweeds trap it and prevent damage.

A QUIRKY FACT TO SHARE WITH YOUR CLASS

A common form of algae is seaweed, which is very good for you. It's high in protein, low in fat and contains a number of health-giving minerals such as iron and calcium.

treetopdisplays



- Similarly, most heavy metals found in marine ecosystems are trapped and removed by seaweeds.
- They also supply organic nutrients, which they are capable of producing, to other marine lifeforms.
- Seaweed has a significant role in mitigating climate change. By afforesting 9 per cent of the ocean with seaweed, it is possible to sequester 53 billion tons of carbon dioxide annually.
- Hence, there is a proposal termed as 'ocean afforestation' for farming seaweed to remove carbon.
- The importance of seaweed in agriculture and animal husbandry is noteworthy.
- They can be used as fertilisers and to increase fish production.
- Also, when livestock is fed with seaweed, methane emission from cattle may be reduced substantially.
- Additionally, they may be buried in beach dunes to combat beach erosion.
- It is used as an ingredient in preparing toothpaste, cosmetics and paints.
- The southeast Indian state of Tamil Nadu has 1,076km coastline with the convergence of the Bay of Bengal, Arabian Sea and the Indian Ocean.
- The southern Gulf of Mannar's rocky intertidal and lower intertidal regions maintain rich populations of several seaweed species.
- Studies carried out here reveal that there are about 302 species of the marine algae.
- However, some rare species of seaweed clash coral reefs and damage them severely.
- The exotic, invasive *Kappaphycus alvarezii* seaweed being cultivated this region by PepsiCo (an American multinational food, snack and beverage corporation) is posing a serious threat to the coral reefs.
- They have started smothering the coral reefs and slowly killing them.
- In 2005, a government order was issued restricting the cultivation of the exotic species only to the seawaters north of the Palk Bay and south of Thoothukudi coast.
- The forest department is carrying out manual removal of the seaweed annually since 2014 to protect the coral reefs.
- Fisher folk, mostly women, collect tonnes of seaweeds daily around the islands.
- And while doing so, they break the corals.
- Mechanical dredging causes damage to the kelp forests formed by large seaweeds.
- Indiscriminate collection of seaweed also causes severe damage to the useful algae.
- The conservation status of seaweeds is yet to be evaluated by the IUCN.
- Considering the ecological values of seaweeds, it is essential for the central and state governments to initiate speedy and scientific action for sustainable management of seaweeds to conserve them for posterity.

3.6. India collected just 3% e-waste generated in 2018, 10% in 2019: CPCB report

- Context: India collected just 10 per cent of the electronic waste (e-waste) estimated to have been generated in the country 2018-19 and 3.5 per cent of that in the generated in 2017-18, said a recent report by the Central Pollution Control Board.

TN 2nd in e-waste generation

According to a recent study, Maharashtra generates the maximum e-waste in the country, followed by Tamil Nadu. A lowdown...

Key points of ASSOSCHAM study

- India generates around 2 million tonnes per annum (TPA) of E-waste of which 12% is just telecom equipment
- Out of the 2 million TPA e-waste generated, only 4.38 lakh TPA is recycled in India
- The low quantum of recycling is due to lack of infrastructure, absence of strong legislative framework etc
- Among Indian states, the largest quantity of E-waste is generated by Maharashtra (19.8%) followed by Tamil Nadu (13%), Uttar Pradesh (10.1%), West Bengal (9.8%), Delhi (9.5%), Karnataka (8.9%), and Gujarat (8.8%)

What is E-waste?

The term refers to electronic equipment being thrown away. It includes discarded computer monitors, motherboards, printed circuit boards, mobile phones and chargers, compact discs, headphones, plasma TVs, air conditioners, refrigerators and so on





The chemicals and pollutants generated by E-waste lead to environment and public health issues.

Key Findings

- India generated 708,445 tonne e-waste in 2017-18 and 771,215 tonne in 2019-20. In 2019-20, the figure rose 32 per cent to 1,014,961 tonne.
- The figures have taken into account the 21 types of electrical and electronic equipments listed in the E-Waste Management Rules, 2016.

Why E-Waste A Problem?

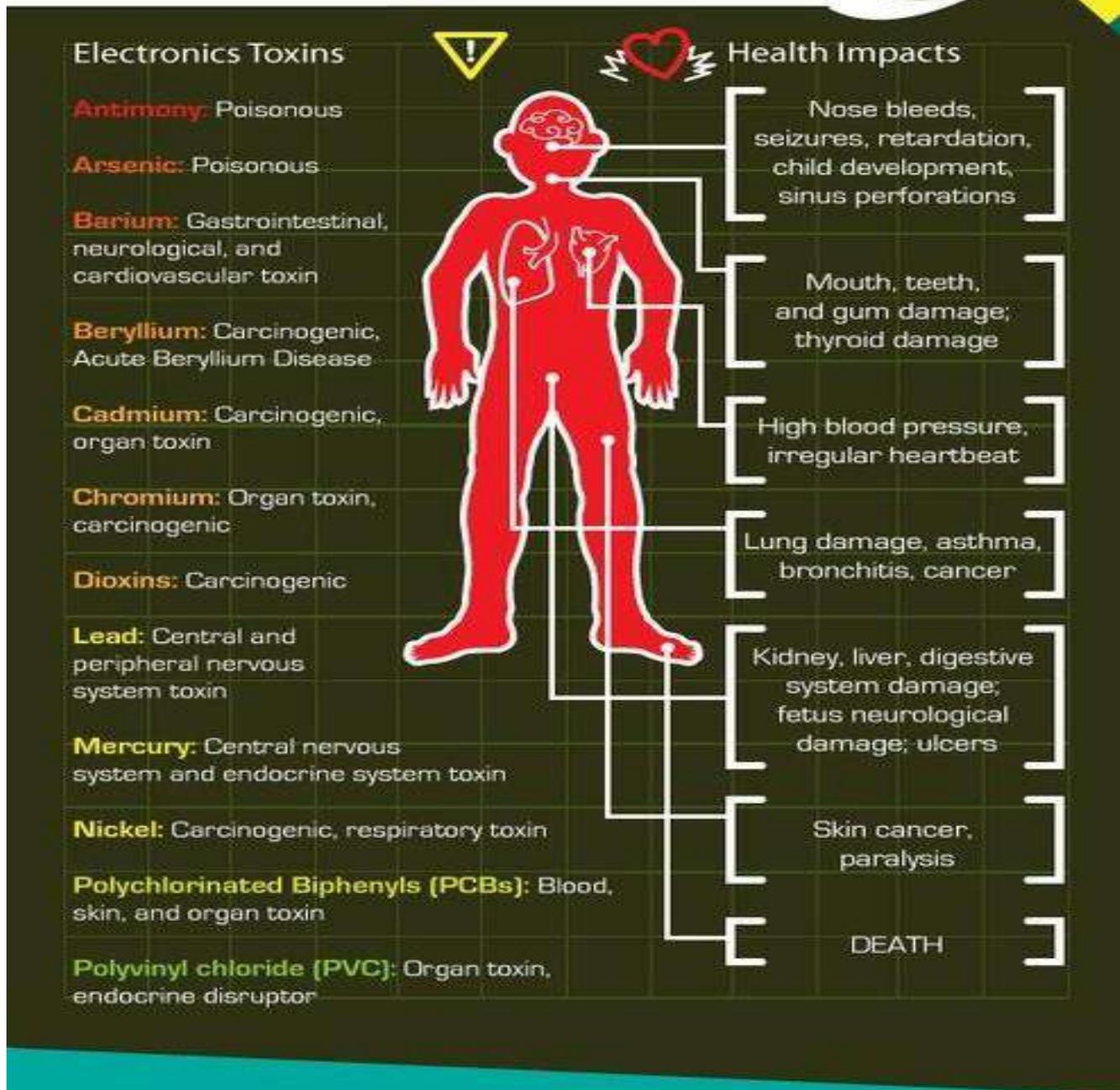
- Composed of Hazardous Materials
- Products are quickly obsolete and discarded
- Electronic products are difficult to recycle
- Discarded electronics are managed badly
- Most e-waste goes to Landfills
- Most recyclers don't recycle, they export



- These include discarded computer monitors, mobile phones, chargers, motherboards, headphones, television sets, among other appliances.
- The report mentioned that the collection targets for 2017-18 and 2018-19 based on the rules were 35,422 tonnes and 1,54,242 tonnes, respectively.
- The actual collection, however, was lower in both the years – 25,325 tonnes in 2017-18 and 78,281 tonnes in 2018-19.

EWASTE AND HUMAN HEALTH

Many of the materials used to make electronics are not at all healthy for us. If they **ultimately end up in our bodies** (easier than you think), they wreak havoc on our health.



- In the guidelines, the environment ministry had made the producers responsible for collection of end-of-life electronic products as part of the Extended Producer Responsibility, in line with the global best practice.
- The pollution board said 1,630 producers were extended EPR authorisation
- Also, 312 dismantlers or recyclers were authorised in the same period with a capacity of processing 782,080.2 tonne of e-waste every year.
- These units processed 69,413 tonnes of e-waste in 2017-18 and 164,663 tonnes in 2018-19.
- In September last year, CPCB issued show-cause notices to 186 producers for not meeting collection targets for 2018-19.
- The pollution control board also pulled up 292 producers in November last year because their collection centres were either non-complying or non-traceable and threatened to cancel their EPR authorisation and take action as per e-waste rules.
- The report also states that the volume of e-waste that a dismantler or recycler was handling increased over time but the shed area of these units remained the same.
- The rule mandates that dismantlers have a space of 300 square metre for a capacity of 1 tonne of e-waste per day. the same for recyclers is 500 square metre.
- The board recognised the role of state pollution control boards and pollution control committees in mitigating this gap and asked them to revise the capacity of such units following CPCB guidelines.

4. Science & Technology

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4.1.ISRO and Atal Tinkering Labs

- Context: ISRO will adopt 100 Atal Tinkering Labs across the country to promote scientific temperament among students and encourage them for space education and space technology related innovations.
- Indian Space Research Organisation will facilitate coaching and mentoring of students in advanced 21st century cutting-edge technologies, including those related to space
- The students will not only gain theoretical, but also practical and application-based knowledge of STEM and Space Education related concepts such as Electronics, Physics, Optics, Space Technology, Material sciences and many more
- Atal Innovation Mission and NITI Aayog have established over 7,000 ATIs across the country so far, enabling more than three million students between classes 6 to 12 acquire a problem solving, tinkering and innovative mindset

Atal Innovation Mission

- It is the flagship initiative to promote a culture of innovation and entrepreneurship in the country .
- AIM's objective is to develop new programmes and policies for fostering innovation in different sectors of the economy, provide platform and collaboration opportunities for different stakeholders, create awareness and create an umbrella structure to oversee innovation ecosystem of the country
- Major Initiatives
 - ✓ Atal Tinkering Labs - Creating problem solving mindset across schools in India
 - ✓ Atal Incubation Centers - Fostering world class startups and adding a new dimension to the incubator model
 - ✓ AtalNewIndiaChallenges-Fostering product innovations and aligning them to the needs of various sectors/ministries
 - ✓ MentorIndiaCampaign-A national Mentor network in collaboration with public sector ,corporates and institutions, to support all the initiatives of the mission
 - ✓ Atal Community Innovation Center - To stimulate community centric innovation and ideas in the unserved /underserved regions of the country including Tier 2 and Tier 3 cities
 - ✓ ARISE - To stimulate innovation and research in the MSME industry

4.2.3D printing adoption in US and India

- Production technologies such as 3D printing are getting popular in the push to build sustainable products. But the stage of progress varies in the developing and the developed world
 - ✓ A new study finds that while US firms tend to acquire 3D printing technologies more than Indian ones, they fall behind in the actual application of these methods in production
- The use of 3D printing in manufacturing is picking up as it improves sustainability.
 - ✓ Uses less energy and produces less waste than traditional methods.
 - ✓ Allows manufacturing to be done on demand, so less space is needed to store inventory.
- But there are high taxes on 3D printing tech in India which is coming in the way of its acquisition
 - ✓ Printers used in the technology are usually imported from abroad, which adds international shipping costs and customs duties.
- Indian firms apply 3D printing tech in production more, because technologies used in the US are already well established .
 - ✓ Applying 3D printing tech would mean replacing these technologies, which technical employees aren't eager to do .
 - ✓ In India, it's easier for the top management to have employees toe the line and apply 3D printing, as the Indian society is more collectivist and inclined to follow group norms, says the study.

4.3.Ultra-high Mobility Electron gas and Information Transfer

- Scientists at Institute of Nano Science and Technology (INST), Mohali (Punjab), have produced electron gas with ultra-high mobility, which can speed up transfer of quantum information and signal from one part of a device to another and increase data storage and memory.
- This is done by manipulating property of an electron called spin degree of freedom along with its charge.
 - ✓ This has given rise to an altogether new field of spin-electronics or 'spintronics'.
- It has been realized that a phenomenon called the 'Rashba effect', which consists of splitting of spin-bands in an electronic system, might play a key role in spintronic devices.
- Due to the high mobility of the electron gas, electrons do not collide inside the medium for a long distance and hence do not lose the memory and information.
- Hence, such a system can easily remember and transfer its memory for a long time and distance.
- In addition, since they collide less during their flow, their resistance is very low, and hence they don't dissipate energy as heat.
- So, such devices do not heat up easily and need less input energy to operate.

4.4. Ebola Vaccine Stockpile in Switzerland

- Four international health and humanitarian organisations have come together to establish a global Ebola vaccine stockpile to ensure a quick repose to an outbreak
- The effort was led by the International Coordinating Group (ICG) on Vaccine Provision, which includes the World Health Organization (WHO), UNICEF, the International Federation of Red Cross and Red Crescent Societies (IFRC), and Médecins Sans Frontières (MSF), with financial support from Gavi, the Vaccine Alliance
- UNICEF manages the stockpile on behalf of the ICG which, as with stockpiles of cholera, meningitis and yellow fever vaccines, will be the decision-making body for its allocation and release.

Ebola virus Disease (EVD)

- Formerly known as Ebola haemorrhagic fever, is a rare but severe, often fatal illness in humans
- Ebolavirus belongs to Filoviridae family and six species have been identified: Zaire, Bundibugyo, Sudan, Tai Forest, Reston and Bombali.
- Fruit bats of the Pteropodidae family are natural Ebola virus hosts
- Virus is transmitted to people from wild animals and spreads in the human population through human- to-human transmission
- A person infected with Ebola cannot spread the disease until they develop symptoms
- 2014–2016 outbreak in West Africa was the largest Ebola outbreak since the virus was first discovered in 1976
- The rVSV-ZEBOV (single-dose, injectable, live) vaccine is being used in the ongoing 2018-2019 Ebola outbreak in DRC
 - ✓ Pregnant and breastfeeding women can be administered the vaccine in the same way as general population
 - ✓ It protects against the Zaire ebolavirus species which is commonly known to cause outbreaks

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