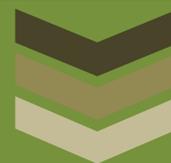


**WEEKLY CURRENT AFFAIRS MAGAZINE for**



# **U.P.S.C. - C.S.E.**

## **OCTOBER-VOL-II-2021**

8 October to 15 October



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*Success is born of action...*

## Topic 1. BALTIC EXCHANGE

*Importance for Prelims: Economy*



Spike in Baltic Exchange's capsize index signals costlier coal shipments

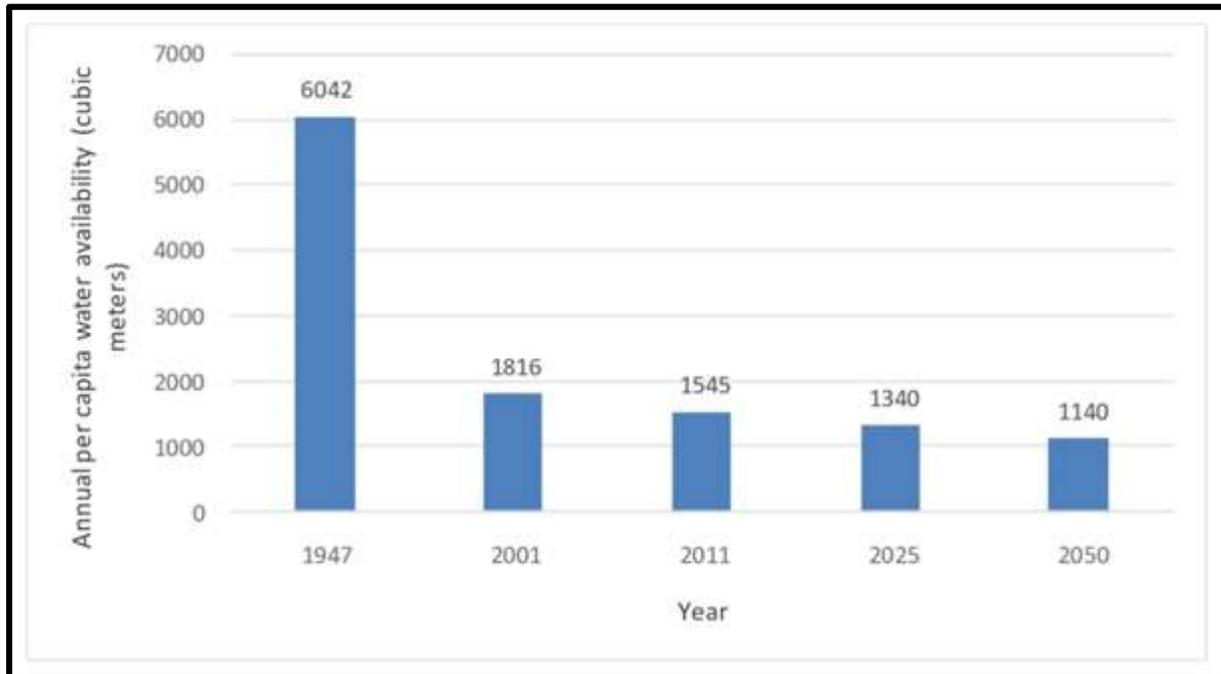
- Coal-starved power stations received another shock because the capsize index, the main dry bulk sea freight index of The Baltic Exchange sailed past the 10,000 points mark, a primary in additional than 13 years, creating the rates for shipping dry bulk commodities like coal costlier.
- The overall index rose 4.4 per cent to 5,647 points, the very best since September 2008 once the Lehman Brothers collapse triggered a global crisis.
- **About Baltic Exchange** – The Baltic Exchange (incorporated because the Baltic Exchange Limited) may be a membership organisation for the maritime trade, and freight market info supplier for the trading and settlement of physical and by-product contracts.
- It was located at 24–28 St mary Axe, London, till the building was destroyed by a bomb in 1992, and is currently situated at 38 St mary Axe.
- It has additional offices in Europe, across Asia, and within the u. s..

BIFFEX, the Baltic International Freight commodities market, was a London-based exchange for trading ocean freight futures contracts with settlement supported the Baltic Freight Index.

- Baltic Freight Index Baltic Freight Index stands for shipping and trade index that has been created by the Baltic Exchange based mostly in London.
- It may be a measure of the price of transporting various raw materials. The Baltic Exchange contacts the shipping brokers directly for assessing price levels for a particular route, product, time and speed.

## Topic 2. HIGHEST LOSS IN TERRESTRIAL WATER STORAGE

*Importance for Prelims: Environment*



Globally, India recorded the highest loss in terrestrial water storage

- Terrestrial water storage (TWS) born at a rate of one cm annually in 20 years (2002-2021), per a new report 2021 State of Climate Services discharged by the world meteorological Organization (WMO).
- The biggest losses have occurred in Antarctica and Greenland. however several extremely inhabited, lower latitude locations have also fully fledged TWS losses, per the report.
- This includes India, wherever the TWS has been lost at a rate of a minimum of three cm annually.
- In some regions, the loss has been over four cm annually too. India has recorded the very best loss in terrestrial water storage if the loss of water storage in Antarctica and Greenland is excluded.
- India is, therefore, the ‘topmost hotspot of TWS loss’, per the WMO analysis.
- The northern a part of India has fully fledged the utmost loss inside the

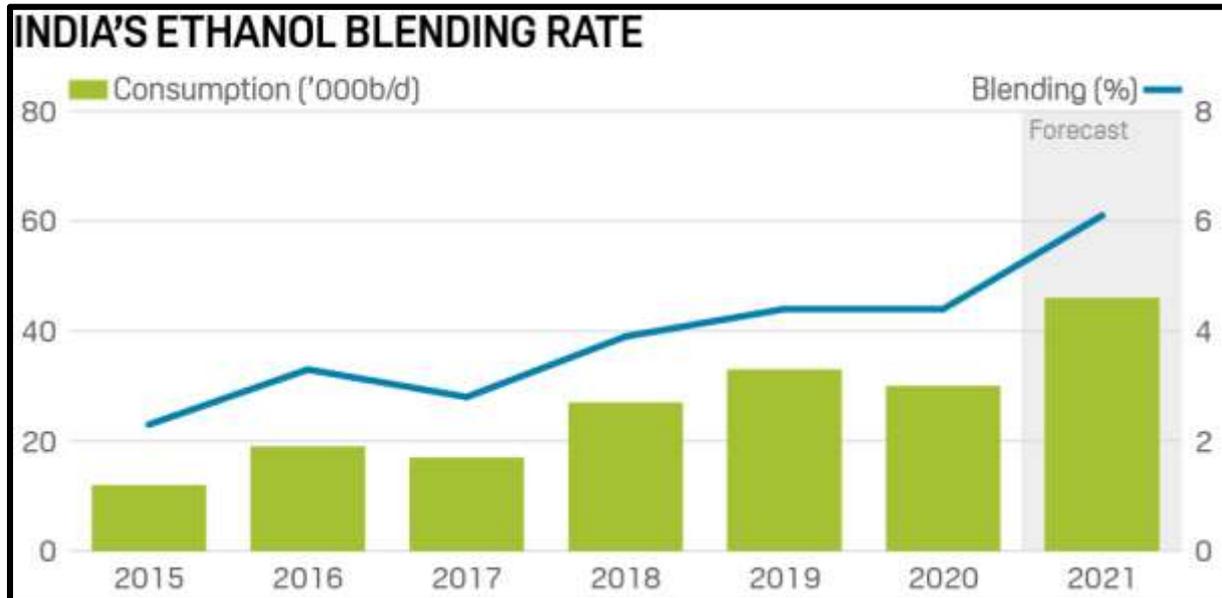
country.

### What is Terrestrial water storage (TWS)?

- TWS is that the sum of all water on the land surface and within the subsurface, ie surface water, soil moisture, snow and ice and ground water.
- Water could be a key necessity for human development.
- But only 0.5 per cent of water on Earth is usable and out there as fresh.
- **Indian scenario** – In India, per capita water handiness is reducing thanks to a rise in population.
- The average annual per capita water handiness has been systematically decreasing.
- It reduced to 1,545 cubical metres in 2011, from 1,816 cubical metres in 2001.
- It is projected to more decrease to one,367 cubical metres in 2031, per the Union Ministry of Housing and concrete Affairs. 5 of the 21 watercourse basins in India are ‘absolute water scarce’ (per capita water handiness below five hundred cubical metres) per the Falkenmark Water Stress Indicator.
- Five are ‘water scarce’ (per capita water handiness below one,000 cubic metres) and 3 are ‘water stressed’ (per capita water handiness below 1,700 cubic metres).
- By 2050, six can become absolute water scarce, six can become water scarce and 4 can become water stressed, per the State of India’s environment in figures, 2020.

### Topic 3. INDIA'S AMBITIOUS ETHANOL PLAN

*Importance for Prelims: Environment*



India's ambitious ethanol set up fuels food security concerns

- India's ambitious arrange to cut the use of fossil fuels by promoting ethanol derived from rice, corn and sugar is drawing criticism from some specialists who warn the move may undermine food security within the world's second-most populous country.
- In June, Prime Minister Narendra Modi's administration accelerated the nation's ethanol goal by 5 years, seeking to double production and to possess gasoline 20 per cent blended with the spirit by 2025.
- To facilitate meet the target, the government is providing financial assistance to biofuel producers and faster environmental clearances.
- The set up is additionally leading to the diversion of food grains meant for the poor to corporations at subsidized rates.
- The government argues that the new target can facilitate the world's third-largest oil consumer save ₹300 billion (\$4 billion) annually by cutting crude imports, reduce carbon emissions and boost farmers' incomes.

## Topic 4. BRASILIA DECLARATION ON ROAD SAFETY

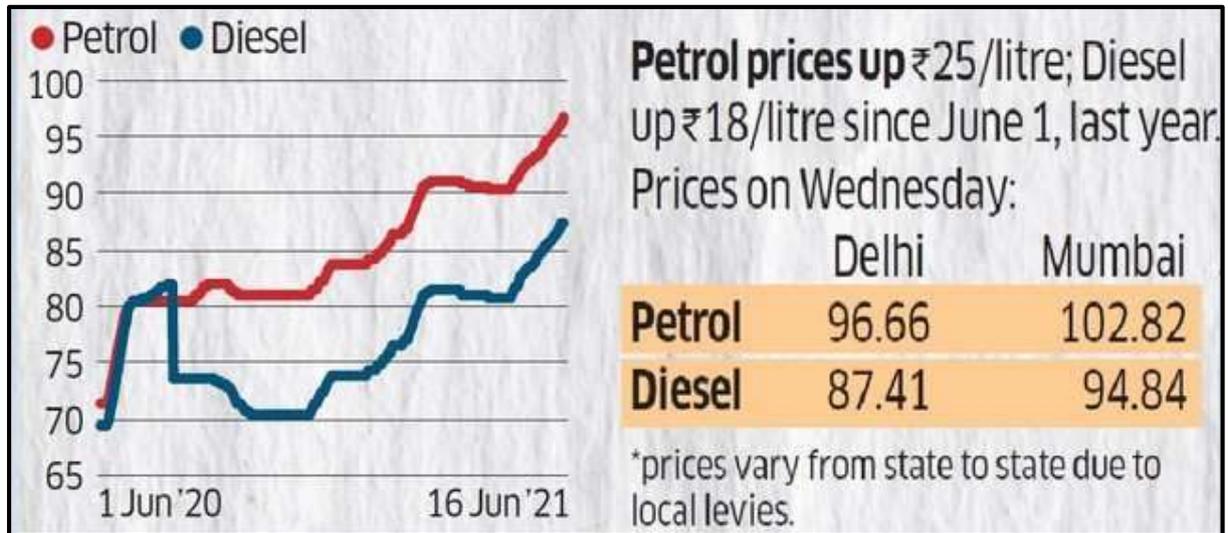
### *Importance for Prelims: Infrastructure*

Fifty-one passengers of an overcrowded bus died in an accident on the morning of February 16 once it fell into a canal close to Sarda Patan village in Sidhi district, Madhya Pradesh.

- The declaration was signed at the Second global High-Level conference on Road Safety held in Brazil.
- Through the Brasilia Declaration Countries decide to achieve the sustainable Development Goal 3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents.
- United Nations has also declared 2010-2020 because the decade of action for Road Safety.
- **The main points of the Brasilia Declaration are:** Countries should kind transport policies so as to favor a lot of property modes of transport like walking, cycling and using public transport.
- It highlights strategies to confirm the protection of all road users, by up laws and enforcement; creating roads safer through infrastructural modifications; guaranteeing that vehicles are equipped with life-saving technologies; and enhancing emergency trauma care systems.

## Topic 5. SPIKE IN CRUDE PRICES

### *Importance for Prelims: Economy*



The recent spike in global crude oil prices higher than the \$80-per-barrel mark led to a dip in key indices within the stock market as issues rose over the impact on inflation, currency and input value for companies across sectors.

- Reasons for rise in oil prices – Crude prices have up sharply in 2021 on the rear of a recovery in global demand because the world economy recovers from the pandemic.
- Supply restrictions maintained by the OPEC+ grouping, too, have unbroken international oil prices high. So far, these oil-producing economies have signalled only slow production will increase, that are resulting in an increase in gas prices yet.
- A shortage of gas in Europe and Asia has boosted demand for oil for power generation.
- The rise in crude prices has contributed to petrol and diesel prices hitting incomparable highs in India.
- Prices of petrol and diesel in India are pegged to a 15-day rolling average of the international prices of those fuels.
- High taxes by the central and state governments too have contributed to

retail prices being so much higher.

### **How can this impact stocks and bonds?**

- While a pointy surge in oil prices will produce short panic within the equity markets, historical precedents show that equity markets typically bottom out aboard a bottoming out of oil costs.
- Analysts denote that increasing oil costs mirror growing demand within the economy, and equities typically deliver more than the expected inflation that the oil surge could cause.
- In line with oil, prices of alternative commodities together with coal has been rising sharply.
- Any hint of sustained high inflation may result in rising yields and falling bond prices.
- For bonds, central bank policies can play a so much larger role than the direct impact of rising oil prices.

### **How will it impact currency and also the economy?**

- Rising crude costs tend to depress the rupee, as India being a serious importer of oil desires a lot of dollars to shop for an equivalent quantity of crude.

### **How will it hurt inflation, government finances, and also the markets?**

- Crude import accounts for nearly 200th of India's import bill.
- A rise in prices could lead on to a surge in inflation, forcing the rbi to travel for liquidity adjustment measures followed by rate hikes.
- An increase in crude costs means that a rise within the value of manufacturing and transporting product.
- **It so adds to inflation;** A surge in crude prices tends to extend India's expenditure and adversely affects the fiscal deficit.

## **Topic 6. STUDY FINDS HIGH LEVEL OF PHARMA CONTAMINANTS IN CAUVERY**

### ***Importance for Prelims: Environment***

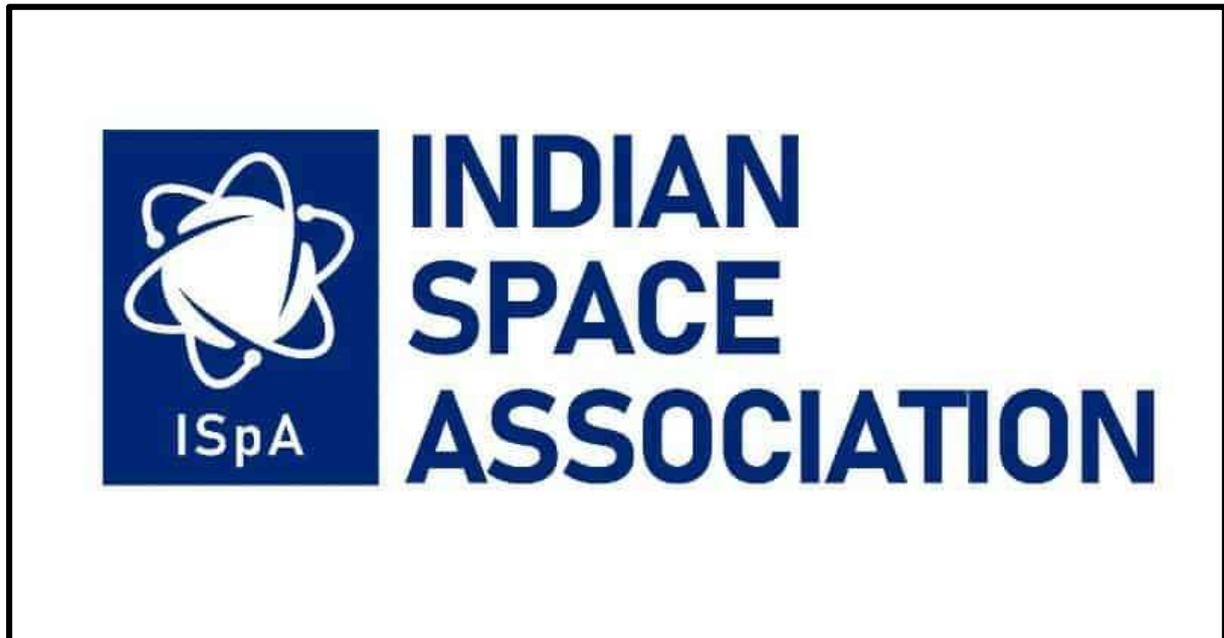
A new study has found that the waters of the Cauvery river in south India are contaminated by a variety of rising contaminants.

- A new study has found that the waters of the Cauvery stream in south India are contaminated by a variety of rising contaminants that embrace pharmaceutically active compounds, acid products, plastics, flame retardants, serious metals and pesticides, among several others.
- Of these, pharmaceutical contamination was found to be notably serious as their presence in water bodies even in minuscule amounts will damage human beings and therefore the system within the long haul.
- This study has been allotted with joint funding from Water Technology Initiatives of the Department of Science and Technology, Government of India and therefore the UK Natural atmosphere research Council
- The researchers found that water quality and levels of pharmaceutical contaminants within the Cauvery were influenced by the monsoon season.
- The post-monsoon amount showed an inflated level of various varieties of contaminants as well as prescribed drugs due to reduced riverine flow and continuous waste discharge from multiple sources.
- Among different things, fresh intake points were found to be loaded with terribly high concentrations of pharmaceutical contaminants.
- The contaminants enclosed anti-inflammatories like ibuprofen and diclofenac, anti-hypertensives like Tenormin and isoprenaline, catalyst inhibitors like perindopril, stimulants like caffeine, antidepressants like carbamazepine and antibiotics like ciprofloxacin.
- River networks contribute to 0.006 per cent of world freshwater and

sometimes function a lifeline for varied domestic and industrial activities. Worldwide, the water quality of the stream systems has been deteriorating because of various anthropogenic activities.

## Topic 7. INDIAN SPACE ASSOCIATION (ISPA)

*Importance for Prelims: Science and Tech*

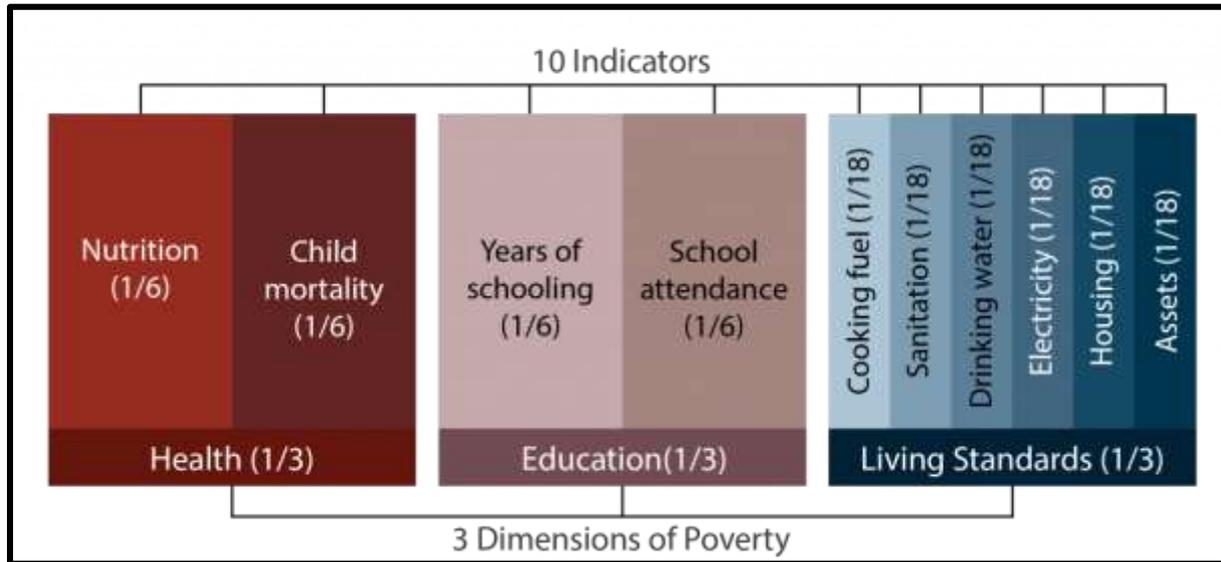


PM to participate in launch of Indian space Association

- It could be a premier industry association of space and satellite companies.
- ISPA is pictured by leading home big and international companies with advanced capabilities within the house and satellite technologies.
- Its founding members include Bharti Airtel, Larsen & Toubro, Nelco (Tata Group), OneWeb, Mapmyindia, Walchandnagar Industries and Ananth Technology Ltd.
- Other core members include Godrej, Hughes India, Azista-BST part personal Ltd, BEL, Centum electronics, Maxar India.
- ISpA can undertake policy support and have interaction with all stakeholders within the Indian space domain, together with the government and its agencies, to create India independent, technologically advanced and a leading player within the space arena.

## Topic 8. MULTIDIMENSIONALLY POOR

*Importance for Prelims: Governance*



In India, 5 out of 6 multidimensionally poor are from lower tribes or castes: UN report

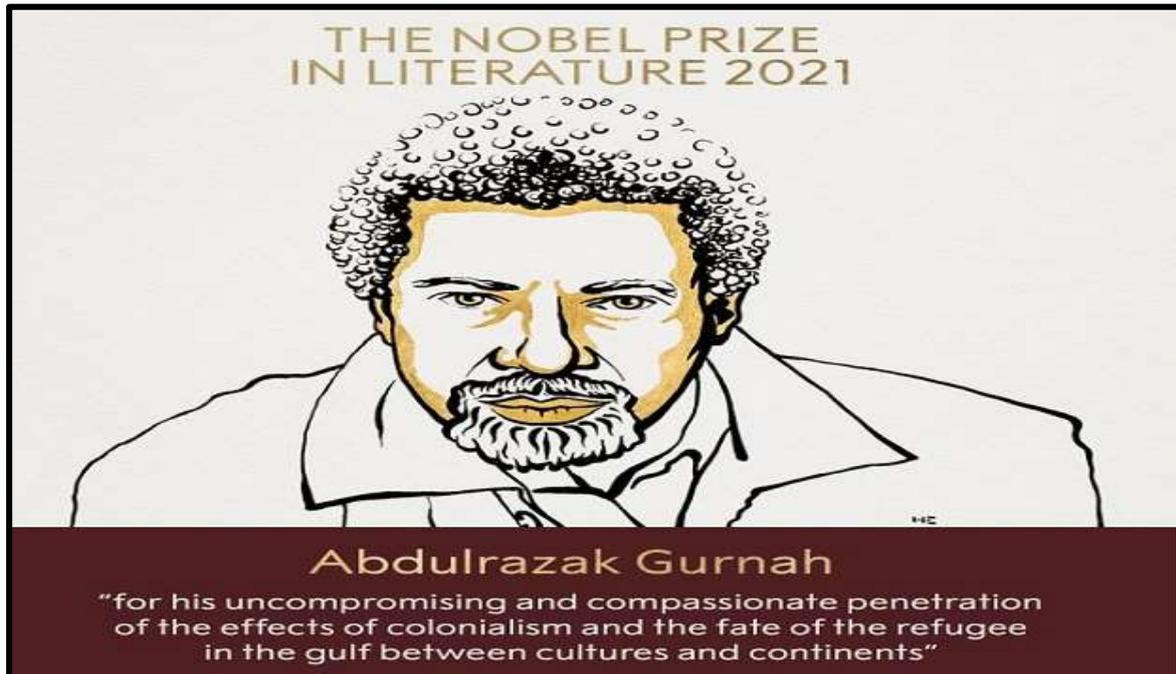
- Five out of six multidimensionally poor individuals in India are from lower tribes or castes, in line with a replacement analysis on global multidimensional poverty free by the UN.
- The global multidimensional Index (MPI) created by the UN Development Programme (UNDP) and also the Oxford financial condition and Human Development Initiative aforementioned this in its latest report on financial condition.
- The scheduled Tribe cluster accounts for 9.4 per cent of the population and is that the poorest, with 65 million of the 129 million individuals living in multidimensional poverty.
- They account for regarding one-sixth of all individuals living in multidimensional financial condition in India. Following the scheduled Tribe cluster is that the scheduled Caste cluster with 33.3 per cent — 94 million of 283 million individuals — living in multidimensional financial condition. 2 per cent of the opposite Backward category group-

160 million of 588 million individuals — board multidimensional financial condition.

- Among the 1.3 billion multidimensionally poor individuals studied globally, nearly two-thirds- 836 million- board households during which no feminine member has completed a minimum of six years of schooling.
- This exclusion of women from education has extensive impacts on societies round the world.
- According to the report, the highest 5 countries with the most important range of individuals living in multidimensional financial condition are in India (2015/16) at 381 millions, Nigeria (2018): 93 million, Pakistan (2017/18): 83 million, Ethiopia (2019): 77 million, Democratic Republic of the Congo (2017/18): 56 million.

## Topic 9. NOBEL PRIZE IN LITERATURE 2021

*Importance for Prelims: Science and Tech*

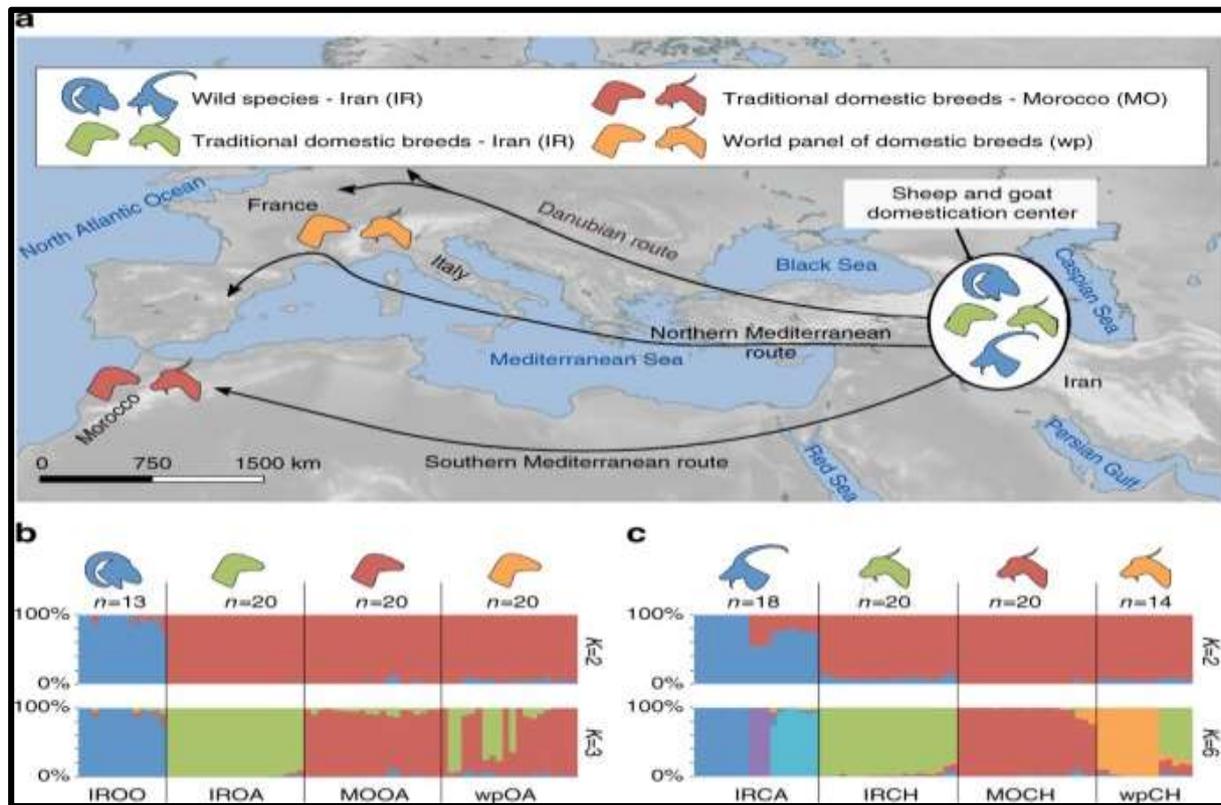


Abdulrazak Gurnah, 72, who was born in Zanzibar and now lives within the UK, became the fifth African author to win the laurels for Literature.

- Abdulrazak Gurnah, 72, who was born in Zanzibar and presently lives within the UK, became the fifth African author to win the laurels for Literature.
- In its citation, the Nobel committee lauded Gurnah’s “uncompromising and compassionate penetration of the results of colonialism and additionally the fate of the expatriate inside the gulf between cultures and continents.”
- The author of 10 novels and several other short stories and essays, together with Memory of Departure (1987), Pilgrims manner (1988), Paradise (1994), By the sea (2001), Desertion (2005), Gravel Heart (2017) and, most recently, Afterlives (2020), Gurnah’s writing explores the immigrant experience and therefore the way exile and loss kind identities and cultures.

## Topic 10. GENETIC PROOF FOR DOMESTICATION OF SHEEP

### Importance for Prelims: History



Study finds evidence that Indian subcontinent was one among domestication centres of Sheep.

- Researchers at the Central University of Kerala (CUK) have found that domestication of sheep had taken place within the Indian subcontinent, particularly in Indus valley civilisation regions within the 6th or 7th millennium before Christ.
- The study found genetic proof that sheep had been domesticated within the region in contrast to the overall belief that they were domesticated then in West Asia alone, which they had arrived within the Indian subcontinent through migration.
- Even although India ranks second in terms of sheep population, painted by as several as forty four well-described breeds, genetic diversity and phylogeography of Indian sheep breeds remained poorly understood,

significantly the south Indian breed.

- However, the study provided sturdy genetic proof that the Indian subcontinent was one among the domestication centres of the lineage A sheep.
- When DNA sequences were compared with alternative breeds across the world, it had been found that the Indian sheep haplotypes were distinctive and extremely various.
- The study also found that the introduction of sheep 'lineage B' into the Indian subcontinent had been through ocean route, and not from the Mongolian plateau, as projected by researchers in China.

## Topic 11. SC120-LOX

### *Importance for Prelims: Defence and Security*

HAL delivers heaviest propellant tank to ISRO

- The heaviest semi-cryogenic propellant tank (SC120- LOX) ever invented by Hindustan aeronautics limited (HAL) has been delivered to the Indian space research Organisation (ISRO).
- The semi cryo-liquid developmental (LOX) tank — the primary biological process welded hardware — may be a a part of the SC120 stage meant for payload improvement by replacement the L110 stage in existing Mk-III launch vehicle, said a release from HAL.
- Last year, HAL had delivered the biggest ever cryogenic liquid critical tank (C32- LH2), four meters in diameter and eight meters long. HAL has delivered crucial structures, tankages, satellite structures for the PSLV, GSLV-Mk II and GSLV-Mk III launch vehicles.

## Topic 12. PEOPLE'S PLAN CAMPAIGN

*Importance for Prelims: Polity*



The Panchayati raj, 1st adopted by Nagaur in Rajasthan on October 2, 1959, has distended immensely. There ar currently two,60,512 Panchayati raj institutions (PRIs) delineate by regarding 31 lakh elected members across India.

- It is additionally called “Sabki Yojana Sabka Vikas”.
- It aims to draw up Gram panchayet Development Plans (GPDPs) within the country and place them on an internet site wherever anyone will see the standing of the assorted governments’ flagship schemes.
- People’s arrange Campaign 2021 are conducted with higher people’s participation.
- Under the campaign, every activity can promote a way of camaraderie and commitment within the citizens towards a typical goal of overall development of villages.
- The People’s plan Campaign are rolled out all told the States from October 2, 2021.
- During the campaign, structured Gram Sabha conferences are control for

making ready panchayet Development Plans for future year 2022–2023.

- vivacious Gram Sabha Dashboard Vibrant Gram Sabha Dashboard was launched so as to assist in increasing most participation by means of meeting of Gram Sabha, meeting of elected panchayet Public Representatives and commission meeting of Gram panchayet.

## **Topic 13. IMMEDIATE MOBILE PAYMENT SERVICE (IMPS)**

### ***Importance for Prelims: Economy***

RBI hikes IMPS daily transaction limit to ₹5 lakh

- The reserve bank of India on Friday declared a proposal to extend the pertransaction limit for the immediate payment Service (IMPS) from ₹2 lakh to ₹5 lakh for channels apart from SMS and IVRS.
- This can lead to any increase in digital payments and can give a further facility to customers for creating digital payments beyond beyond lakh.
- The per-transaction limit for SMS and IVRS (interactive voiceresponse) channels is ₹5,000.
- The run batted in additionally unveiled a slew of alternative measures related to payment and settlement systems as well as geotagging of payment system touchpoints.
- It has planned to get down a framework for geotagging (capturing geographical coordinates through latitude and longitude) of physical payment acceptance infrastructure, purpose of sale terminals and fast response (QR) codes employed by merchants.
- Different ways that to transfer funds on-line in india– India presently has various strategies to transfer money on-line like digital wallets, UPI, and more.
- However, the most usually used on-line fund transfer methodology has been: National Electronic Funds Transfer (NEFT) real-time Gross Settlement (RTGS) Immediate Mobile Payment Service (IMPS) whereas NEFT and RTGS were introduced by rbi (Reserve Bank of India), IMPS was introduced by National Payments Corporation of India (NPCI). NEFT National Electronic Funds Transfer (NEFT) could be a payment system that facilitates oneto-one funds transfer. Using NEFT, individuals will electronically transfer cash from any bank branch to someone

holding an account with the other bank branch, that is participating within the payment system.

- Fund transfers through the NEFT system don't occur in period basis and therefore the fund transfer settles in 23 unit of time batches. RTGS period Gross Settlement (RTGS) is another payment system during which the money is attributable within the beneficiary's account in period and on a gross basis.
- The RTGS system is primarily meant for big price transactions that need and receive immediate clearing.
- IMPS Immediate Mobile Payment Services(IMPS) could be a real-time instant inter-bank funds transfer system managed by National payment corporation of India.
- IMPS is available 24/7 throughout the year as well as bank holidays, in contrast to NEFT and RTGS.
- National Payments Corporation of India (NPCI), an umbrella organisation for operational retail payments and settlement systems in India, is an initiative of reserve bank of India (RBI) and Indian Banks' Association (IBA) underneath the provisions of the Payment and Settlement Systems Act, 2007.
- It could be a "Not for Profit" Company underneath the provisions of Section 25 of firms Act 1956 (now Section 8 of firms Act 2013), with an intention to produce infrastructure to the whole industry in India for physical furthermore as electronic payment and settlement systems.

## **Topic 14. PREGNANT WOMEN WITH COVID CAN PASS ON ANTIBODIES TO FOETUS**

### ***Importance for Prelims: Science and Tech***

Babies born to mothers with SARS-CoV-2 infection could have enhanced levels of immune cells known to be concerned in speedy response to the viral infection, in line with a study.

- Babies born to mothers with SARS-CoV-2 infection could have increased levels of immune cells far-famed to be concerned in speedy response to the viral infection, in line with a study.
- The ability of immune cells to form mediators was increased even in babies born to mothers who had Covid earlier in pregnancy, the researchers said.
- This suggests that infection within the mother has altered the system of the baby.
- The researchers also found that the mothers pass antibodies against SARS-CoV-2 to their baby through the placenta – called the transfer of passive immunity.

## **Topic 15. KANNIYAKUMARI CLOVE GETS GI TAG**

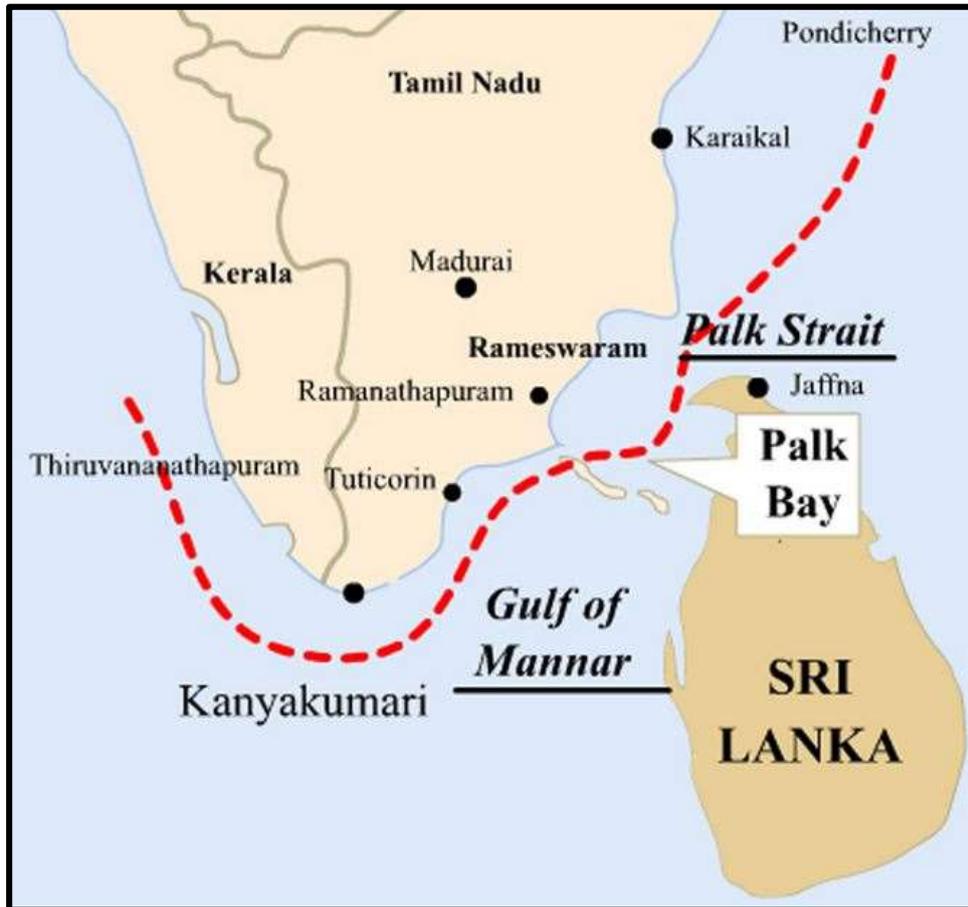
### ***Importance for Prelims: Economy***

#### Kanniyakumari clove gets GI Tag

- The spices growers of Kanniyakumari have obtained the Geographical Indication Tag for the clove being grown within the hilly regions of the district as it is known for its made aromatic oil content.
- Clove, one amongst the prominent spice crops of the district, is grown on 760 hectares within the densely wooded areas of Maaraamalai, Blackrock and Velimalai within the Western Ghats of the Veerapuli Reserve Forests and Mahendragiri.
- The district represents concerning 73 of the area under clove in province.

## Topic 16. PALK BAY SCHEME

*Importance for Prelims: Government Schemes*



Palk Bay scheme are given a fillip: Murugan

- The scheme, “Diversification Of Trawl Fishing Boats From Palk Straits Into Deep sea Fishing Boats”, was launched in 2017 as a Centrally Sponsored scheme.
- It was launched as a part of the umbrella Blue Revolution scheme.
- It could be a Tamil Nadu-specific scheme aimed at providing 2,000 vessels in 3 years to fishermen of the State and motivating them to abandon bottom trawling.
- Bottom trawling, an ecologically harmful apply, involves trawlers dragging weighted nets on the sea-floor, inflicting nice depletion of aquatic resources.

- Another objective of the scheme is to “reduce fishing pressure” round the proximity of the International Maritime boundary line (IMBL) so that state fishermen don't cross the IMBL and fish in Sri Lankan waters.
- The Funding pattern of the scheme is Centre 500th, State 20%, Institutional funding 100% and Beneficiary 200th.
- The theme is restricted to vessels cost accounting upto Rs. 80 Lakh.
- The scheme isn't a part of Pradhan Mantri Matsya Sampada Yojana.

## **Topic 17. PRIVILEGE MOTION**

### ***Importance for Prelims: Polity***

Centre didn't specifically ask for oxygen deaths data: Cong.

- All Members of Parliament (MPs) enjoy rights and immunities, singly and collectively, so they will discharge their duties and functions effectively.
- Any instance once these rights and immunities are disregarded by any member of Lok Sabha or Rajya Sabha is an offence, known as 'breach of privilege', that is punishable under the Laws of Parliament.
- Any member from either house will move a notice within the kind of a motion against the member who he/she thinks is guilty of the breach of privilege.
- Both houses of the Parliament reserve the correct to penalize any action of contempt (not necessarily breach of privilege) that is against its authority and dignity, as per the laws.
- Rules governing Privilege Motion the foundations governing the privilege are mentioned within the Rule No 222 in Chapter 20 of the Lok Sabha aggregation and Rule 187 in Chapter 16 of the Rajya Sabha rulebook.
- The rules make a case for that any member of the House may, with the consent of the Speaker or the chairman, raise a matter involving an event that he or she considers a breach of privilege either of a member or of the House or of a committee.
- The notice, however, must be a couple of recent incident and may would like the intervention of the House.
- These notices have to be submitted before 10 am to the Speaker or the chairman of the House.
- Role of the Lok Sabha Speaker and Rajya Sabha chairperson The

speaker of Lok Sabha and therefore the chairperson of Rajya Sabha are the primary level of scrutiny of a privilege motion within the 2 houses of Parliament. they will either take a choice on the privilege motion or can even refer it to the privileges committee of Parliament.

- Once the Speaker or the House chairperson provides consent under Rule 222, the involved member is allowed to clarify himself or herself. Privileges Committee
- The Speaker of Lok Sabha nominates a committee of privileges consisting of 15 members of parliament from every party.
- The report ready by the committee is submitted to the House for its thought.
- The Speaker may additionally permit a half-hour discussion on the report by the committee before passing orders or directional that the report be tabled before the House.
- A resolution is passed. within the Rajya Sabha, the deputy chairperson heads the committee of privileges, that consists of 10 members. Parliamentary Privileges Parliamentary privileges are special rights, immunities and exemptions enjoyed by the 2 houses of Parliament, their committees and their members.
- The Constitution additionally extends the parliamentary privileges to those persons who are entitled to talk and participate within the proceedings of a House of Parliament or any of its committees.
- These embody the professional General of india and Union ministers.
- The parliamentary privileges don't be the President who is additionally an integral a part of the Parliament.
- Article 361 of the Constitution provides for privileges for the President.
- Article 105 of the Constitution expressly mentions 2 privileges, that is, freedom of speech in Parliament and right of publication of its

proceedings.

- Apart from the privileges as laid out in the Constitution, the Code of Civil Procedure, 1908, provides for freedom from arrest and detention of members under civil method throughout the continuance of the meeting of the House or of a committee thence and forty days before its commencement and forty days when its conclusion.
- It has to be noted that the Parliament, till now, has not created any special law to thoroughly codify all the privileges.

## Topic 18. NOBEL PEACE PRIZE (2021)

*Importance for Prelims: Science and Tech*



Philippines journalist Ressa and Russian journalist Muratov win 2021 Nobel Peace Prize

- Maria Ressa and Dmitry Muratov, journalists whose work has infuriated the rulers of the Philippines and Russia, were awarded the altruist Peace Prize on Friday, a gift the committee said was an endorsement of free speech rights below threat worldwide.
- The 2 were awarded “for their mettlesome fight for freedom of expression” in their countries.
- The prize is the 1st altruist Peace Prize for journalists since the German Carl von Ossietzky won it in 1935 for revealing his country’s secret post-war armament programme.

- The Nobel Peace Prize are going to be given on Dec. 10, the day of the death of Swedish man of affairs chemist, UN agency based the awards in his 1895 can.

## Topic 19. ELEPHANT CONSERVATION

*Importance for Prelims: Environment*



Preventing Forest loss on personal land will aid elephant conservation: Paper

- Elephants like areas on the point of forests, with high vegetation cover and low human population densities.
- Preserving forest cover on personal land will aid elephants to travel between habitats, in turn, serving to to conserve their increasingly isolated populations.
- Connectivity is crucial for the Asian elephant, India's Natural Heritage Animal.
- They vary wide, generally over the area of many kilometres, to fulfill their immense food and water necessities. Identification of corridors for

the Asian elephant will doubtless aid the movement of alternative animals, like tigers or hog cervid, as well.

### **About Elephants**

1. Asian Elephants: There are 3 taxonomic group of Asian elephant that are the Indian, Sumatran and Sri Lankan. The Indian subspecies has the widest vary and accounts for the bulk of the remaining elephants on the continent. international Population: calculable 20,000 to 40,000. IUCN Red List: vulnerable. life (Protection) Act, 1972: Schedule I. CITES: Appendix I

2. African Elephants: There are 2 taxonomic group of African elephants, the savanna (or bush) elephant and therefore the Forest elephant. international Population: Around four,00,000. IUCN Red List Status: African savanna Elephant: vulnerable. African Forest Elephant: Critically endangered CITES: Appendix II

## **Topic 20. CLEAN HEALTHY AND SUSTAINABLE ENVIRONMENT A UNIVERSAL RIGHT**

### ***Importance for Prelims: Environment***

Clean, healthy and sustainable environment a universal right: global organization Human Rights Council

- The United Nations Human Rights Council October 8, 2021, unanimously voted for recognising a clean, healthy and property atmosphere as a universal right in Geneva, European country.
- If recognised by all, the correct would be the primary of its kind in addition than 70 years since the Universal Declaration of Human Rights was adopted by the United Nations General Assembly in 1948.
- The right to a clean atmosphere was Stockholm within the 1972 Stockholm Declaration.
- It was greatly encouraging to visualize it formally recognised at the world level 5 decades later.
- The resolution emphasises “the rights to life, liberty and security of human rights defenders operating in environmental matters, named as environmental human rights defenders.”

## Topic 21. FREE TRADE AGREEMENTS (FTAS)

*Importance for Prelims: Economy*



Exports on track for FY22, aim \$450-500 bn next year: Piyush Goyal

- A free trade agreement could be a pact between 2 or additional nations to reduce barriers to imports and exports among them.
- Under a free trade policy, product and services are often bought and sold across international borders with very little or no government tariffs, quotas, subsidies, or prohibitions to inhibit their exchange.
- The concept of trade is that the opposite of trade economic policy or economic isolationism.
- Major FTAs of India: India ASEAN change product Agreement, South Asia free trade Agreement (SAFTA), India Korea CEPA, Japan India CEPA, India Singapore CECA, Indo Malaysia CECA then forth. India is negotiating trade agreements (FTAs) with numerous countries and blocs, together with the uk, Oman, Australia, Canada, Russia, the United Arab Emirates, the eu Union, and therefore the Southern African union

comprising Botswana, Lesotho, Namibia, South Africa, and Swaziland.

1. preferential trade agreement A preferential trade agreement, could be a mercantilism coalition that offers preferential access to bound merchandise from the participating countries. This can be done by reducing tariffs however not by abolishing them completely. A PTA are often established through a trade accord. It's the primary stage of economic integration. Examples – Asia-Pacific Trade Agreement (APTA), India-Mercosur preferential Trade Agreement (PTA)

2. free trade agreement A free-trade area could be a trade coalition whose member countries have signed a free trade agreement (FTA), that eliminates tariffs, import quotas, and preferences on most (if not all) product and services listed between them. Examples – Evolution of SAPTA to SAFTA (South Asian PTA to FTA)

3. Comprehensive Economic Cooperation Agreement (CECA) once the countries go beyond FTA and agree for a bigger degree of economic integration which has up the attractiveness to capital and human resources, and to expand trade and investment, it might end in CECA or CEPA (Comprehensive Economic partnership Agreement). Whereas CECA comes 1st with elimination of tariffs, CEPA comes later together with change services and investments. CEPA includes a bit wider scope than CECA.

4. customs union an agreement among countries to own trade among them and to adopt common external barriers against the other country interested in exportation to those countries. Examples – Gulf Cooperation Council (GCC)

5. common market a sort of custom union wherever there are common policies on product regulation, and free movement of products and services, capital and labour.

6. Economic Union an economic union could be a form of trade coalition that consists of a standard market with a union. The participant countries have each common policies on product regulation, freedom of movement of products, services and therefore the factors of production (capital and labour) and a standard external trade policy.

7. Economic and financial union once an economic union involves unifying currency it becomes a economic and financial union. Example – Euro.

## Topic 22. HIMACHAL GETTING LESS SNOW

### *Importance for Prelims: Environment*

Himachal getting less snow: study

- The hill State of Himachal Pradesh has been gradually witnessing less snow within the past decade and also the space under snow is additionally decreasing.
- The trend triggered by climate change has afraid environmentalists, considering the importance of seasonal snow cover as a major input in dominant the hydrology of the stream basins within the ecologically fragile State.
- All major stream basins, as well as the Satluj, Ravi, Chenab and Beas, have witnessed an overall decrease of 18.5% in area under snow in 2020-21 winters compared to 2019-20
- The results also show that there's a gradual shift within the downfall incidence pattern additionally.
- The snowfall in peak winter is reducing slightly and, in fact, is shifting towards the late winter months or perhaps the first summer months.
- The climate pattern at the global level is changing.
- Rapid deforestation, in depth construction and unregulated activities are the causative factors.

## **Topic 23. MALABAR EXERCISE**

### ***Importance for Prelims: Defence and Security***

Malabar exercise phase -II to be held next week

- This is that the 1st military engagement among the Quad partner countries since Australia, the U.S. and the U.K. unveiled the AUKUS initiative to deepen cooperation on a variety of “emerging security and defence capabilities” which includes equipping Australian with at least eight nuclear powered submarines (SSN).
- The exercise are going to be control over 3 days, starting October 12, within the Bay of Bengal.
- Phase-I of Malabar, also its 25th edition, was hosted by the U.S. and control off island from August 26-29.
- The Malabar exercise commenced in 1992 as an India-U.S. exercise.
- In 2015, Japan joined as a permanent member, and Australia was included within the 2020 edition.

## **Topic 24. INDIAN SPACE ASSOCIATION**

### ***Importance for Prelims: Science and Tech***

The Indian space Association (ISPA) was formally launched Monday by Prime Minister Narendra Modi

- It is AN business body representing the various stakeholders within the Indian area domain with members comprising the Indian space research Organisation (ISRO), Bharti Airtel, OneWeb, Tata Group's Nelco, L&T, MapMyIndia among others.
- Along the lines of the US, currently many personal sector firms each international and domestic have taken interest in India's area domain, with space-based communication networks returning to the fore.

### **How are space-based communications network growing?**

- Several Indian and international firms have play satellite communications because the next frontier to supply web property at the retail level. This includes SpaceX's StarLink, Sunil Bharti Mittal's OneWeb, Amazon's Project Kuiper, US satellite maker Hughes Communications, etc.
- OneWeb, as an example, is building its initial constellation of 648 low-earth orbit satellites and has already put 322 satellites into orbit.
- Its services are expected to start this year to the Arctic region together with Alaska, Canada, and the UK. By late 2022, OneWeb can provide its high-speed, low latency property services in India and also the remainder of the planet.

### **Why is satellite internet important?**

- Industry specialists counsel that satellite internet are going to be essential for broadband inclusion in remote areas and sparsely inhabited locations wherever terrestrial networks haven't reached.
- As of currently, however, satellite communications remains restricted to

use by corporates and establishments that use it for emergency use, critical trans-continental communications and for connecting to remote areas with no connectivity.

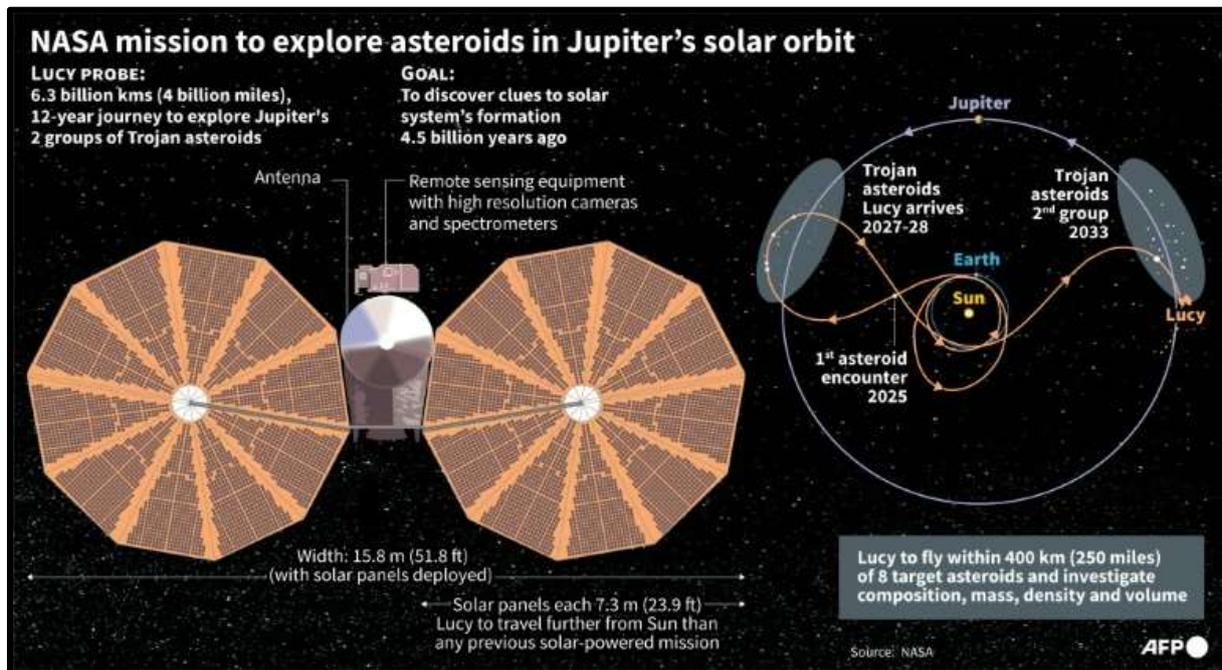
- As of August this year, India had only 3 lakh satellite communications customers, compared with 45 lakh within the USA and 21 lakh within the EC.
- Indian National space Promotion and Authorisation Centre (IN-SPACE) IN-SPACE are a separate vertical among the Department of space (DoS) which will create freelance selections for allowing and control activities of the non-public sector.
- It can have its own legal, technological, activity promotion and watching directorates and its Board can comprise members from the private business, world and government of India
- It can act as a national nodal agency for hand-holding and promoting private business within the space sector and can even facilitate private players build facilities among DoS premises New space {india|India|Republic of India|Bharat|Asian country|Asian nation} restricted NSIL could be a Central Public Sector Enterprise of the government of India.
- It was established in 2019 below the executive management of the Department of space.
- Headquarter: Bengaluru NSIL is that the industrial arm of Indian space research Organisation (ISRO) with the first responsibility of enabling Indian industries to require up high technology space connected activities and is additionally answerable for promotion and industrial exploitation of the merchandise and services emanating from the house business.
- The new company also will take care of the assembly and promoting of spacebased merchandise and services, together with launch and

application, developed by ISRO centres and also the constituent units of the Department of space and promoting product technologies and products and services each in India and abroad.

- The functions of NSIL can involve: little satellite technology transfer to business, producing of little Satellite Launch Vehicle (SSLV) — a product that is being developed by the ISRO — unitedly with the private sector and production of Polar Satellite Launch Vehicle (PSLV).
- NSIL differs from ISRO's existing industrial arm Antrix Corporation: Antrix can handle ISRO's industrial deals for satellites and launch vehicles with foreign customers.
- NSIL can traumatize capability building of local industry for space manufacturing.

## Topic 25. NASA'S LUCY

### *Importance for Prelims: Science and Tech*



NASA is about to launch 'Lucy' next week

- NASA is set to launch 'Lucy' next week, its 1st mission to explore the Jupiter Trojan asteroids.
- These asteroids are believed to be the remnants of the first solar system, and learning them can facilitate scientists perceive its origins and evolution, and why it's the manner it will.
- The solar-powered mission is calculable to be over twelve years long, throughout the course of that the ballistic capsule can visit eight asteroids covering a distance of regarding vi.3 billion km to deepen the understanding of the "young star system".
- The mission is known as when 'Lucy', a 3.2 million-year-old root who belonged to a species of hominins (which embody humans and their ancestors).
- The spacecraft's 1st encounter are with an asteroid that lies within the main belt which will be found between Mars and Jupiter. • This asteroid

is known as ‘Donald Johnson’ when the paleoanthropologist UN agency discovered the inflexible remains of ‘Lucy’.

- Aim of this mission – NASA says that as per some planet formation and evolution models, the Trojan asteroids are believed to be shaped from a similar material that led to the formation of planets nearly four billion years past once the scheme was shaped.
- Therefore, the mission is intended to grasp the composition of the varied asteroids that are a section of the Trojan asteroid swarms, to see the mass and densities of the materials and to search for and study the satellites and rings that will orbit the Trojan asteroids.

### **Where and what are the Trojan asteroids?**

- Asteroids are divided into 3 classes.
- First, those found within the main belt, between Mars and Jupiter. This region is calculable to contain somewhere between one.1-1.9 million asteroids.
- The second cluster is that of trojans (the name comes from Greek mythology), that are asteroids that share an orbit with a bigger planet. • NASA reports the presence of Jupiter, Neptune and Mars trojans. In 2011, they announced an Earth trojan similarly.
- The Jupiter asteroids will be found in what are cited as “swarms” that lead and follow the earth Jupiter on its orbit round the Sun. • ‘Lucy’ can reach the primary swarm of those asteroids that precede Jupiter by August 2027. •
- The third classification of asteroids is beneath Near-Earth Asteroids (NEA), that has orbits that pass on the brink of the world. those who cross the Earth’s orbit are referred to as Earth-crossers.
- More than 10,000 such asteroids are noted, of that over 1,400 are classified as potentially hazardous asteroids (PHAs).

## Topic 26. PM-WANI

### *Importance for Prelims: Governance*

First 'PM WANI' project launched

- BharatNet Project it's the world's largest rural broadband property programme using optical fibre.
- And additionally a flagship mission implemented by Bharat Broadband Network Ltd. (BBNL). BBNL may be a Special Purpose Vehicle (SPV) established by the government of Bharat underneath the businesses Act, 1956 with a certified capital of Rs 1000 crore.
- It may be a extremely ascendible network infrastructure accessible on a non-discriminatory basis, to supply on demand, cheap broadband property of 2 Mbps to 20 Mbps for all households and on demand capability to any or all establishments, to understand the vision of Digital Bharat, in partnership with States and therefore the private sector.
- It is being enforced by the Department of Telecommunication underneath the Ministry of Communications.
- The entire project is being funded by Universal service Obligation Fund (USOF), that was established for rising medium services in rural and remote areas of the country.
- National optical fibre network (NOFN) that was launched in October 2011 was renamed as Bharat Net Project in 2015.
- NOFN was envisaged as an information superhighway through the creation of a strong middle-mile infrastructure for reaching broadband property to Gram Panchayats. National Broadband Mission The Ministry of Communications launched 'National Broadband Mission' that may facilitate universal and equitable access to broadband services across the country, particularly in rural and remote areas, in 2019.
- The Mission is an element of the National Digital Communications

Policy, 2018.

- The vision of the Mission is to fast-track growth of digital communications infrastructure, bridge the digital divide, facilitate digital authorization and inclusion, and supply cheap and universal access of broadband for all.
- Key options Broadband access to any or all villages by 2022. considerably improve quality of services for mobile and web. • Develop a Broadband Readiness Index (BRI) to live the provision of digital communications infrastructure and conducive policy system within a State/UT.
- Creation of a digital fiber map of the Digital Communications network and infrastructure, as well as glass fibre Cables and Towers, across the country.
- Laying of progressive thirty lakhs route click of optical fiber Cable and increase in tower density from zero.42 to 1.0 tower per thousand of population by 2024.
- The Centre can work with States and UTs for having consistent policies referring to expansion of digital infrastructure as well as for Right of way (RoW) approvals needed for laying of glass fiber cable.
- Investment from stakeholders of Rs 7 lakh crore as well as Rs 70,000 crore from Universal Service Obligation Fund (USOF).

## **Topic 27. IRAN NUCLEAR DEAL**

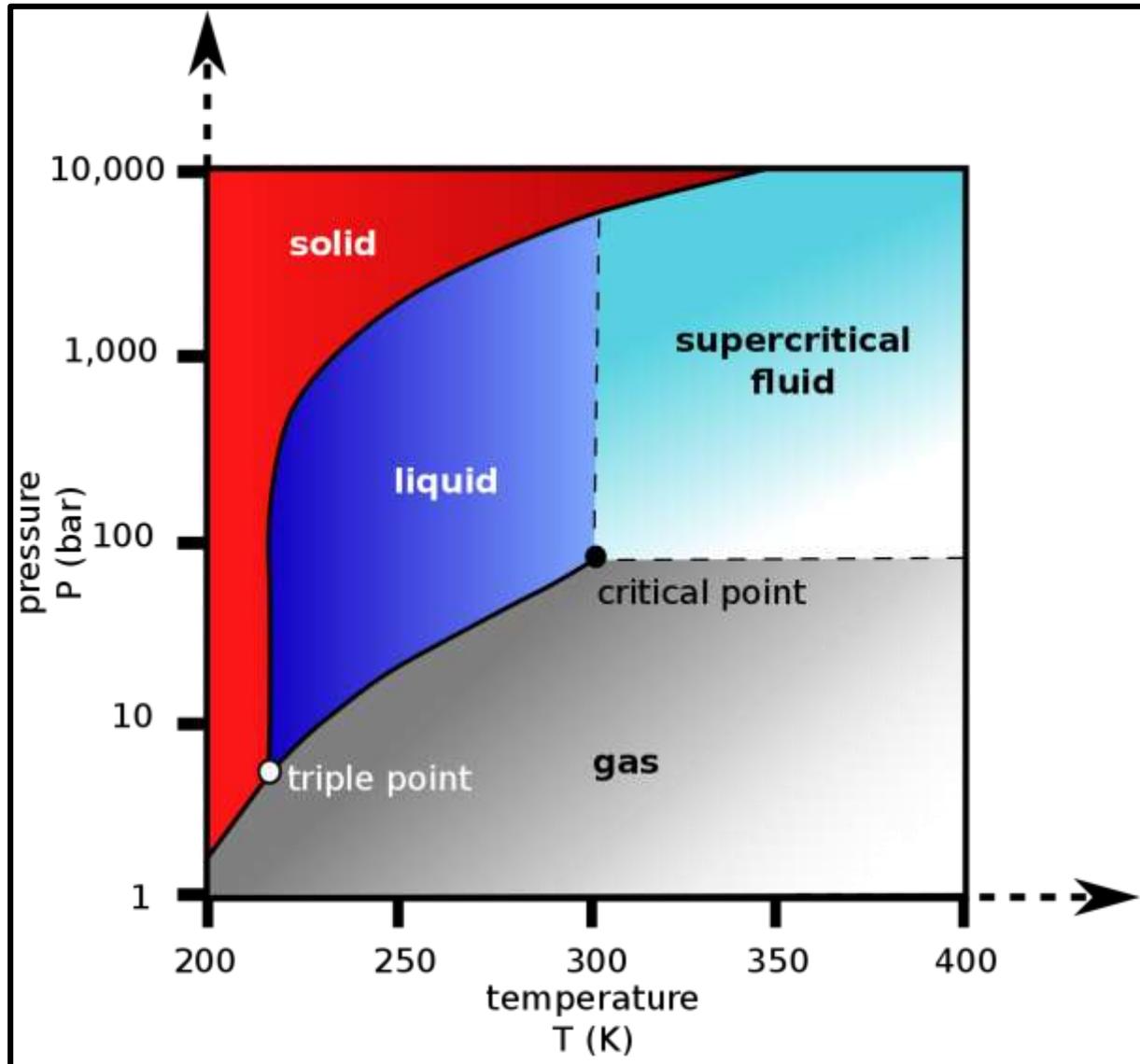
### ***Importance for Prelims: IR***

Iran makes 20% more enriched uranium

- The nuclear deal called the Joint Comprehensive set up of Action, or JCPOA, promises Iran economic incentives in exchange for limits on its nuclear programme, and is supposed to forestall Iran from developing a nuclear bomb. Tehran insists its programme is peaceful.
- The U.S. unilaterally forced out of the deal in 2018 under then-President Donald Trump, however Britain, France, Germany, China and Russia have tried to preserve the accord.
- Under the terms of the nuclear deal, Persia was prohibited from enriching uranium above 3.67% with the exception of its analysis reactor activities. Enriched uranium above 90th will be utilized in a nuclear weapon.
- Scientists estimate that a minimum of 170 kg of enriched uranium is required to create a bomb.
- Iran has created over 120 kg of 200th enriched uranium, the country's nuclear chief aforesaid, much more than what the UN nuclear watchdog reportable last month.

## Topic 28. SUPER-CRITICAL

*Importance for Prelims: Economy*



States sound the alarm on coal crisis

- According to the latest coal stock data of the 135 plants with over 165 GW of put in generation capability monitored by the Central Electricity Authority (CEA), as several as 70 plants are classified as “supercritical” or having but four days of fuel on October 10 compared to 64 per week ago on October 3 against a normative demand of 14 days reserve.
- Most of the country’s power is generated from coal, with State-owned Coal India meeting 80-85 per cent of the coal wants, whereas the

remainder are met through imports.

- With Coal India setting the nation's coal prices and keeping prices steady since 2020 despite international prices soaring, it remained in power plants' interests to resort to domestic coal provides.
- However, serious rain and flooding have led to a halt in coal mining domestically, along side transportation issues, making a offer issue. Compared to the government's recommendation to stock a minimum of time period of coal provides at power plants, 107 out of 135 power plants only had 8 days or less (most had 3-4 days) of coal left as of october 5, hinting at associate at hand power crunch, National Thermal Power Corporation restricted NTPC restricted, once referred to as National Thermal Power Corporation restricted, is an Indian statutory corporation.
- It engaged in generation of electricity and allied activities.
- It could be a statutory corporation incorporated under the businesses Act 1956 and is under the jurisdiction of Ministry of Power, Government of India.
- The headquarters of the corporate is placed at new delhi. NTPC's core operate is that the generation and distribution of electricity to State Electricity Boards in India.
- The body additionally undertakes practice and law officer project contracts that involve engineering, project management, construction management, and operation and management of power plants.
- The body has additionally ventured into oil and gas exploration and coal mining activities.
- It is that the largest public-service corporation in Asian country with an electric power generating capability of 62,086 MW.
- Although the corporate has approx. 16 PF of the entire national capability, it contributes to over 25th of total power generation thanks to

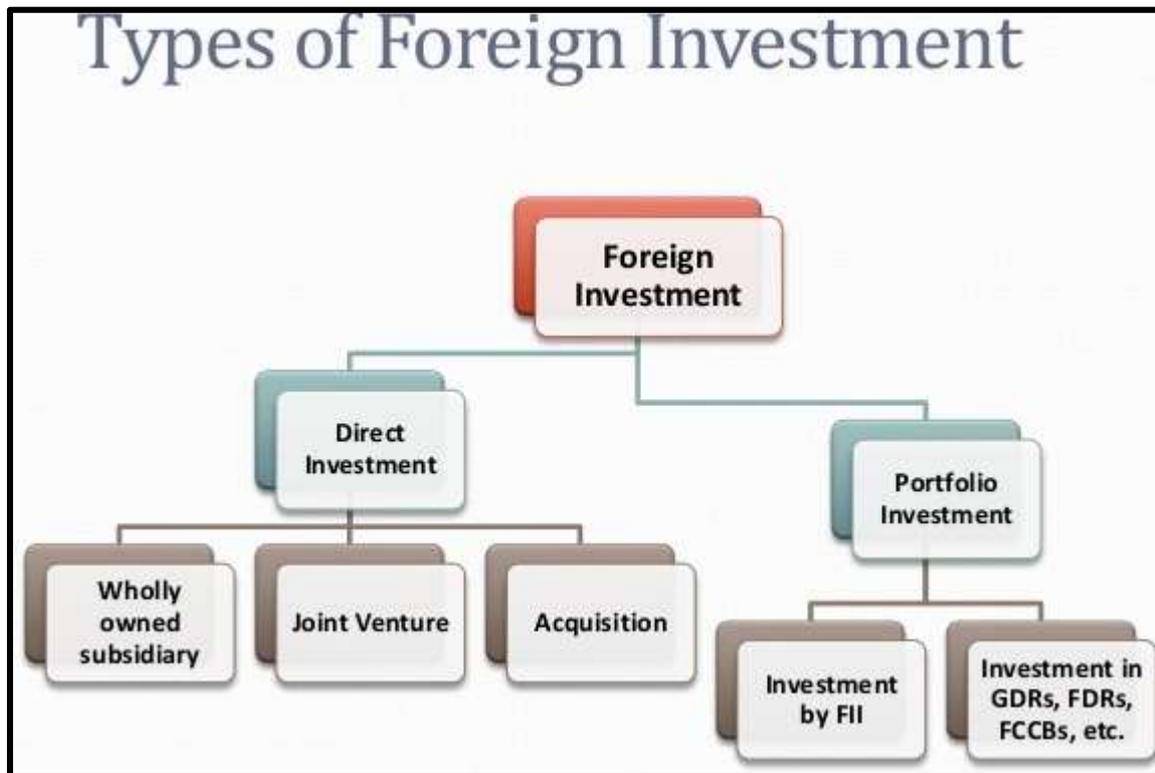
its specialize in in operation its power plants at higher potency levels (approx. 80.2% against the national terrorist group rate of 64.5%).

- NTPC presently produces 25 billion units of electricity per month. NTPC presently operates 55 power stations (24 Coal, seven combined cycle gas/liquid fuel, 2 Hydro, 1 Wind, and 11 solar projects).
- Further, it's 9 coal and one India, in hand by joint ventures or subsidiaries.
- It was supported by Government of Asian country in 1975, that currently holds 74 of its equity shares on 30 June 2016(after divestment of its stake in 2004, 2010, 2013, 2014, 2016, & 2017)
- In could 2010, NTPC was conferred Maharatna standing by the Union Government of India, one in every of the sole four corporations to be awarded this standing.
- It is hierarchal 400th within the Forbes international 2000 for 2016. •
- **Few Recent Initiatives:** Creation of public charging infrastructure in varied cities and battery charging and swapping stations for electrical 3-wheelers are commissioned.
- Providing electrical buses to state/city transport undertakings.
- For example, e-bus solutions for Andaman and Nicobar Administration are under implementation.
- Launch of its new project involving hydrogen fuel cell electric Vehicles (FCEV) to run in Delhi and Leh.
- Coal India limited (CIL) Coal India limited (CIL) is an Indian government-owned coal mining and purification corporation.
- it's under the possession of Ministry of Coal, Government of India headquartered in metropolis, West Bengal, India.
- It is that the largest coal-producing company within the world and a Maharatna public sector endeavor.

- It is additionally the fifth largest leader in India.
- The company contributes around 82 to the entire coal production in India.
- CIL is in hand primarily by the Union Government of Asian country that controls its operations through the Ministry of Coal.
- CIL ranks 8th among the highest 20 corporations chargeable for a 3rd of all international carbon emissions.
- While government-owned Coal India had 40 million tonnes (mt) stocks to fill up utilities, it additionally had seven.2 mt of inventories that may meet the country's demand for four days.
- (India holds the fifth largest coal reserves within the world. India is that the third largest importer of coal within the world).

## Topic 29. FDI CAPS IN DIFFERENT INDUSTRY

*Importance for Prelims: Economy*



‘49% FDI cap for Air India to stay’

- Private Airlines 100% FDI Foreign Airlines forty ninth FDI cap Foreign investments in Air India 49% FDI cap Indian Nationals investment (including NRI) in Air India 100% FDI 4/19 Foreign investment(s) in Air India Ltd, including that of foreign airline(s), shall not exceed 49 per cent either directly or indirectly except just in case of these NRIs, WHO area unit Indian nationals, wherever foreign investment(s) is allowable up to one hundred per cent under the automated route.
- Also, substantial possession and effective management of Air India can still be vested in Indian nationals as stipulated in craft Rules, 1937.
- **The strategic disinvestment has 3 specific clauses:** One, there'll be equity lock-in for one year.
- Two, the made bidder can have to ensure business continuity for a

minimum of 3 years.

- And three, no brand/logo is sold inside the primary 5 years and, even at the moment, it is sold to an Indian entity only.
- Equity lock-in amount A lock-up amount could be a window of your time once investors aren't allowed to redeem or sell shares of a selected investment.
- Lock-up periods are used to preserve liquidity and maintain market stability.

## Topic 30. NOBEL PRIZE FOR ECONOMICS 2021

*Importance for Prelims: Economy*



Nobel Prize for economics goes to three US-based economists

- Three US-based economists won the 2021 Nobel prize for political economy for pioneering analysis on the labour market impact of earnings, immigration and education, and for making the scientific framework to permit conclusions to be drawn from such studies that can't use traditional methodology.
- Canadian-born David Card of the University of CA at Berkeley was awarded one half the prize, whereas the opposite half was shared by

Joshua Angrist from the Massachusetts Institute of Technology and Dutch born Guido Imbens, 58, from Stanford University.

- Card worked on analysis that used restaurants in New Jersey and in Japanese Pennsylvania to live the effects of accelerating the earnings.
- He and his late analysis partner Alan Krueger found that a rise within the hourly earnings failed to have an effect on employment, difficult typical wisdom, that command that a rise in earnings can result in less hiring.
- Card's work also challenged another normally command concept immigrants depress wages for native staff.
- He found that incomes of the nativeborn will take pleasure in new immigration, whereas it's earlier immigrants who are in danger of being negatively affected.
- Angrist and Imbens won their half the award for working out the method problems that alter economists to draw solid conclusions concerning cause and impact even wherever they can't perform studies in step with strict scientific ways.
- Unlike the opposite Alfred Nobel prizes, the political economy award wasn't established within the can of chemist, however by the Swedish central bank in his memory in 1968, with the first winner elect a year later.

## **Topic 31. TARIFF AUTHORITY FOR MAJOR PORTS (TAMP)**

### ***Importance for Prelims: Economy***

TAMP asks DP World to file proposal on new charges at Vallarpadam terminal

- The Tariff Authority for Major Ports, the speed regulator for major ports, has asked DP World-run India entrance Terminal Pvt Ltd to file a proposal before it to levy new charges on direct port delivery and en-bloc movement of containers, a matter that has roiled the export-import interchange fowl Port.
- India entrance Terminal, the entity that runs the International container Trans-shipment Terminal at Vallarpadam in fowl Port Trust, had issued a trade notice seeking to levy ₹800 for a 20-foot container and ₹1,200 for a 40-foot container.
- About TAMP – Tariff Authority for Major Ports (TAMP) may be a multi-member statutory body with a mandate to repair tariffs levied by major port trusts under the management of Union Government and personal terminals in that.
- It is remitted not only to repair the rates however also the conditionality's governing application of the rates. Section 47-50 of the foremost Port Trust Act, 1963 provides the legal backing for TAMP.
- The Board of Port Authority, shaped under the foremost Ports Authority Bill 2020, can currently fix tariffs, which is able to act as a reference throughout bidding for public-privatepartnership (PPP) projects.

## **Topic 32. RUBBER BOARD**

### ***Importance for Prelims: Economy***

Rubber Board bets big on medicinal plants

- Intercropping of healthful plants in rubber plantations has gained momentum with leading ayurvedic drugs producing firms coming back forward to require up the project by activity necessary planting materials.
- Through the project, the Board aims to enhance the support security of rubber growers and guarantee continued provide of healthful plants to the requirements of the ayurvedic trade.
- Rubber research Institute of India (RRII) has conducted many experiments to guage the performance of healthful plants in mature rubber plantations.
- Light requiring medicinal plants such as Thechi (IxoraCoccinea), kattarvazha (Aloe Vera), Orila (DesmodiumGangeticum), Moovila (PserdarthisViscida), Neela Amari are often cultivated with rubber concerning Rubber Board – The Rubber Board may be a statutory body entrenched by the govt. of India, under the Rubber Act 1947, for the development of the rubber industry within the country.
- The Ministry of Commerce & industry, Government of india, established the Rubber Board in 1947 to strengthen the event of the rubber trade by giving monetary help, comforting and regulative services.
- Head workplace is in Kottayam, Kerala.
- The Rubber research Institute of India (RRII) established in 1955 is found on a hummock within the japanese residential district of Puthuppally, Kottayam, eight kilometres from the city.
- There are 9 analysis disciplines, seven Regional research Stations, 2 Hevean Breeding Sub-stations and a Central Experimental Station

attached to the RRII.

- The Institute is headed by the Director (Research).
- Foreign Direct Investment (FDI): 100% FDI in plantations of rubber, coffee, tea, cardamom, oil tree and vegetable oil tree.
- Rubber – India is presently the sixth largest producer of NR within the world with one in every of the very best productivity(694,000 tonnes in 2017-18).
- Traditional rubber-growing states comprising Kerala and province account for 81 of production.
- Major non-traditional rubber growing regions are the North eastern states of Tripura, province and Meghalaya, Odisha, Karnataka, Maharashtra and state.
- Due to the key spike within the rubber consumption and deficit within the NR production in Republic of India, around four-hundredth of NR is foreign from different major rubber manufacturing countries like Malaysia, indonesia and China.
- Conditions needed for the expansion of Rubber tree Rubber is formed from the latex of a tree referred to as Hevea Brasiliensis, a people established the primary rubber plantation in Republic of India in 1902 on the banks of the river Periyar in Kerala. Rubber may be a tropical tree.
- It needs heat throughout the year – travel between 20°-35°C or average monthly mean of 27°C.
- Less than 20°C temperature is detrimental. Similarly, rubber additionally needs serious rainfall.
- The rain ought to be well-distributed throughout the year.
- Rubber trees will grow in an exceedingly big selection of soils, together with clay, sand and soil.
- They will tolerate each acidic and alkalic soils, however want sensible

drain. National Rubber policy The National Rubber Policy includes many provisions to support the Natural Rubber (NR) production sector and the entire rubber trade worth chain.

- The Policy covers new planting and replanting of rubber, support for growers, process and selling of natural rubber, labour shortage, farmer forums, external trade, Centre-State integrated ways, research, training, rubber product producing and export, global climate change concerns and carbon market National Rubber Policy is predicated on the short term and long run ways known by the Task Force entrenched on the rubber sector for mitigating issues faced by rubber growers within the country.
- The Task Force control extensive consultations with numerous stakeholders of rubber sector.
- The policy is predicted to profit natural rubber growers and promote the natural rubber production sector.
- Developmental and analysis activities for supporting Natural Rubber sector for the welfare of growers are dole out through Rubber Board by implementing the theme property and inclusive Development of Natural Rubber Sector within the Medium Term Framework (MTF).
- The developmental activities embrace monetary and technical help for planting, provide of quality planting materials, support for farmer forums, coaching and ability development programme.

## **Topic 33. PUBLIC ACCOUNTS COMMITTEE(PAC) OF PARLIAMENT**

### ***Importance for Prelims: Polity***

Centennial celebration of the creation of the Public Accounts Committee (PAC) of Parliament

- The pac is that the oldest parliamentary committee within the Indian legislative affairs and has been crucial in upholding the principle of accountability because it exercises oversight of public expenditure.
- The Public Accounts Committee examines the worth for cash of presidency comes, programmes and service delivery.
- Drawing on the work of the National Audit workplace the Committee holds government officials to account for the economy, potency and effectiveness of public defrayment.
- This Committee scrutinises the worth for money—the economy, potency and effectiveness—of public defrayment and customarily holds the government and its civil servants to account for the delivery of public services.
- As delivery models for public services have modified, that the reach of the Committee, in following the taxpayer’s pound, has unfold on the far side government departments to also examine public bodies and personal firms providing public services.
- Public Accounts Committee was introduced in 1921 when its 1st mention within the Government of India Act, 1919 conjointly known as Montford Reforms. it's existing within the Indian Constitution since then.
- PAC is one among the parliamentary committees that examine the annual audit reports of CAG that the President lays before the Parliament of India.
- Those 3 reports submitted by CAG are: Audit report on appropriation accounts Audit report on finance accounts Audit report on public

undertakings

- The Public Accounts Committee examines public expenditure.
- That public expenditure isn't only examined from a legal and formal purpose of read to find technical irregularities however conjointly from the purpose of read of the economy, prudence, wisdom, and behavior.
- The sole purpose to try to to this is often to bring out cases of waste, loss, corruption, extravagance, unskillfulness, and worthless expenses.
- The money committee has 22 members.
- All the members are taken from the Indian Parliament. Out of 22 members, 15 are nonappointive from Lok Sabha (Lower House) and 7 members are nonappointive from Rajya Sabha (Upper House.)
- The members of the committee are nonappointive annually by the Parliament from amongst its members.
- The principle of proportional representation (PR) by means that of Single Transferable Vote (STV.)
- This election method offers equal illustration to all or any the members of the Parliament.
- Every member nonappointive by the Parliament from each Lok Sabha and Rajya Sabha are a part of the committee for a year.
- After a year, a replacement election takes place and members are modified or re-elected. What the Committee doesn't do The Committee appearance at however instead of why public cash has been spent and doesn't examine the deserves of presidency policy.
- That role is performed by the relevant division committee.
- The Committee doesn't scrutinize the defrayment of individual native authorities, police forces or alternative native bodies.
- That role is performed by the relevant native auditor and/or elected scrutiny body.

- The Committee cannot assist in resolution individual cases.
- That is that the role of body MPs.
- It will keep a tab on the expenses only when they're incurred.
- It has no power to limit expenses.
- It cannot intervene in matters of day-after-day administration.
- It isn't unconditional with the ability of disallowance of expenditures by the departments.
- Being only an executive body; it cannot issue an order.
- Only the Parliament will take a judicial decision on its findings.

## Topic 34. NATIONAL GREEN TRIBUNAL (NGT)

*Importance for Prelims: Environment*



NGT need not 'wait for Godot' to avoid wasting environment, says SC

- The Supreme Court has declared the National inexperienced Tribunal's (NGT) position as a "unique" forum dowered with suomotu powers to require up environmental problems across the country.
- The court said the NGT needn't anticipate the "metaphorical Godot" to play its portal to flex its sizeable muscles to avoid wasting the environment.
- "The exercise of power by the NGT isn't circumscribed by the receipt of applications.
- When substantial queries about the atmosphere arise and therefore the issue is civil in nature and people relate to the Act, the NGT, in our opinion, even within the absence of an application, will self-ignite action

either towards betterment or towards prevention of hurt.”

- NGT wasn't merely adjudicatory in nature.
- The court must perform equally important roles that were preventative, ameliorative or remedial in nature.
- The judgment represented the NGT “as a complimentary, competent, specialised forum to modify all environmental multidisciplinary problems each as original associated also as an proceeding authority, that complicated problems were so far restricted by the High Courts and therefore the Supreme Court”.

## **Topic 35. INTERNATIONAL ENERGY AGENCY (IEA)**

### ***Importance for Prelims: IR***

‘India invited to become full time IEA member’

- International Energy Agency (IEA) has invited India, the world’s third-largest energy client, to become its regular member — a proposal, if accepted, would require New Delhi to lift strategic oil reserves to ninety days’ demand.
- India’s current strategic oil reserves equal nine.5 days of its demand.
- In March 2017, India became an associate member of the agency.
- To become member a candidate country must demonstrate that it has: crude oil and/or product reserves of ninety days of the previous year’s net imports, to that the government has immediate access (even if it doesn't own them directly) and will be willing to address disruptions to world oil supply.
- A demand restraint programme to scale back national oil consumption by up to 100%.
- Legislation and organisation to control the Co-ordinated Emergency Response Measures (CERM) on a national basis.
- Legislation and measures to make sure that each oil firm under its jurisdiction report information upon request.
- Measures in situ to make sure the capability of contributing its share of an IEA collective action.
- Headquarters (Secretariat): Paris, France.

## **Topic 36. BIODIVERSITY FUND**

### ***Importance for Prelims: Environment***

China launches biodiversity fund

- China pledged to inject \$233 million into a new fund to shield diverseness in developing countries throughout a key UN conservation summit, despite disagreements among major donors on the initiative.
- Beijing — the world’s biggest bad person — has sought-after to play a a lot of prominent role internationally on diverseness conservation in recent years.
- Its pledge came as delegates from concerning 195 countries gathered within the southern Chinese city of Kunming for the primary of a two-part summit on safeguarding plants, animals and ecosystems. •
- The summit aims to determine a new accord taking off targets for 2030 and 2050.
- China can take the lead in establishing the Kunming diverseness fund with a capital contribution of one.5 billion yuan (\$233 million) to support the reason for diverseness conservation in developing countries.
- A key proposal being debated at the conference is that the “30 by 30” agenda that may afford 30 minutes of the Earth’s land and oceans protected standing by 2030.
- But some made country donors say a brand new fund for conservation is unnecessary as a result of the United Nations’ global environment Facility already helps developing nations finance inexperienced comes.

## Topic 37. SEA RISE

*Importance for Prelims: Environment*



‘Seas can rise for centuries to come’

- Even if humanity beats the percentages and caps heating at one.5 degrees celsius above pre-industrial levels, seas can rise for centuries to come back and swamp cities presently home to half-a-billion individuals, researchers warned.
- In a world that heats up another half-degree higher than that benchmark, an extra 200 million of today’s urban dwellers would frequently realize themselves knee-deep in ocean water and additional liable to devastating storm surges, they rumored in Environmental research Letters.
- Worst hit in any scenario are Asia, that accounts for 9 of the 10 mega-cities at highest risk.
- Land home to more than 0.5 the populations of Bangladesh and Vietnam fall below the long high water line, in a world with even a 2 degrees astronomer rise.
- Built-up areas in China, India and state would additionally face devastation.
- Most projections for water level rise run to the tip of the century.

- But oceans can still swell for many years beyond 2100 — fed by melting ice sheets, heat cornered within the ocean and also the dynamics of warming water — notwithstanding however sharply greenhouse gas emissions are drawn down.

## **Topic 38. BIOETHANOL BLENDING IN AVIATION FUEL**

### ***Importance for Prelims: Environment***

‘Bioethanol can be reliable aviation fuel’

- Bioethanol can be a property fuel for the aviation sector.
- It will offer 80th savings on greenhouse gas emissions and be blending up to 500th with standard jet fuels with none modification.
- It has already been tested and approved by the Indian Air Force.
- With the roll out of flex-fuel vehicles that run 100% on bioethanol, the demand for ethanol can jump four to 5 times.
- Brazil, under its Air Force programme, is adding 50 per cent ethanol in aviation fuel and India can communicate with the authorities of the involved department.
- As per the study conducted by Indian Oil Corporation, the prevailing vehicles running on Indian roads presently will take up to 13 per cent ethanol-blended gasoline with none modification within the engine and any loss in its potency.
- Accordingly, the government has mounted BIS standards for E12 and E15, which can be slowly rolled out over successive number of years to maneuver from the ten per cent mixing expected to be achieved in 2022 to 20 per cent mixing by 2025.

## **Topic 39. CARBON FOOTPRINT TRACKER AND SATELLITE IMAGERY SUITE**

### ***Importance for Prelims: Environment***

Carbon footprint tracker and satellite imagery suite unveiled by Google Cloud

- Alphabet Inc's Google can tell its cloud customers the carbon emissions of their cloud usage and open satellite imagination to them for the first time for environmental analysis, as a part of a push to assist corporations track and cut carbon budgets
- The leading cloud vendors Google, Microsoft firm and Amazon.com are competing on property offerings for years.
- They aim to serve corporations that are fraught from stakeholders to rethink operations in light of climate change.
- Google's new carbon footprint reportage tool, kind of like one Microsoft already provides, shows the emissions related to the electricity that was used to store and method a customer's data.
- In addition, Google can currently warn customers once they are wasting energy on inactive cloud services.
- The new mapping providing, Google Earth Engine, had been utilized by tens of thousands of researchers, governments and support teams since 2009.
- But Google now's holding businesses in on the service, which includes several large geospatial datasets like Landsat and therefore the software required to analyse them.
- Amazon contains a similar initiative.
- Earth Engine may help ensure provide chains are property and predict operation challenges from extreme weather, in line with Google.

## Topic 40. GREY HYDROGEN

### *Importance for Prelims: Environment*

Color	GREY HYDROGEN	BLUE HYDROGEN	TURQUOISE HYDROGEN*	GREEN HYDROGEN
Process	SMR or gasification	SMR or gasification with carbon capture (85-95%)	Pyrolysis	Electrolysis
Source	Methane or coal 	Methane or coal 	Methane 	Renewable electricity 

IOC plans to use hydrogen atomic number 1 to create aviation fuel

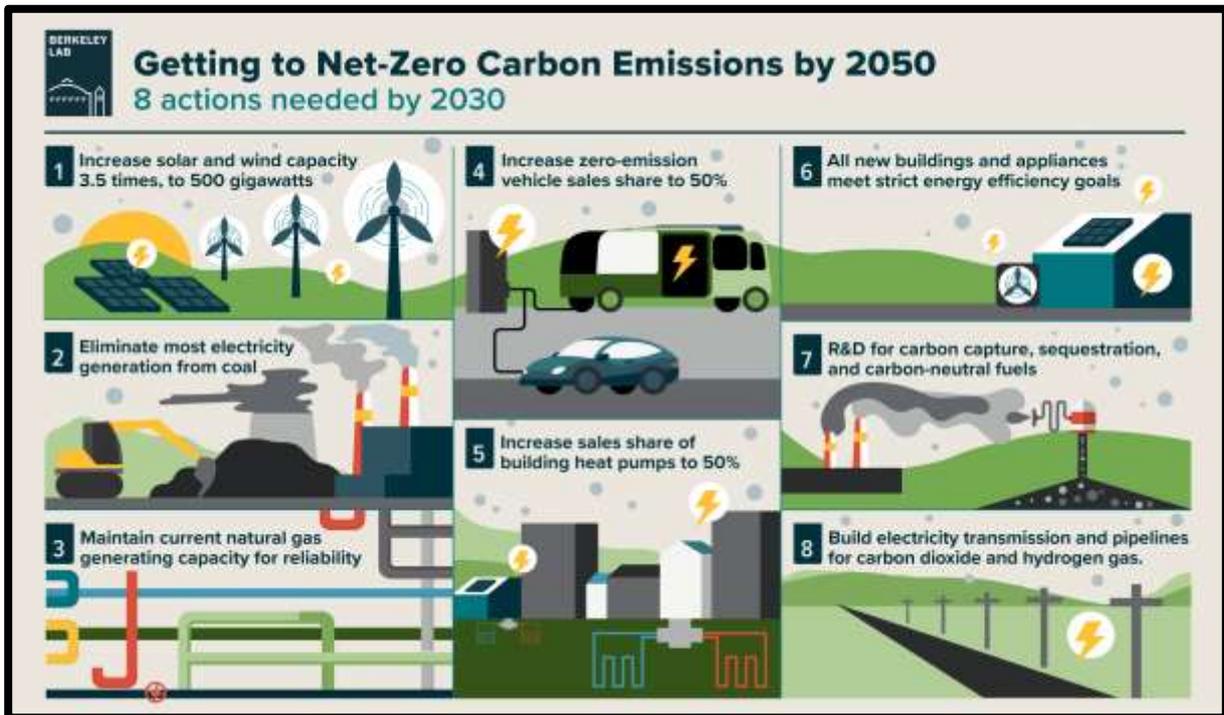
- Indian Oil Corporation (IOC) can place up a ‘demo plant’ inside the next 2 years to convert alcohol into a biogas that might be used to run aircraft.
- The ‘alcohol-to-jet’ fuel (ATJ) plant also will deplete its refiner’s grey hydrogen to provide the ethanol.
- There would be tons of demand for biogas for aviation once the Carbon compensatory and Reduction theme for International Aviation (CORSIA) emission norms kick in in 2027.
- Also, there's going to be an enormous increase within the demand for alcohol once the govt. of India’s mandate for admixture 20 per cent ethanol with petrol kicks in 2025.
- Meanwhile, IOC plans to try to to a ‘no hurt test’ on a pipeline to see that steel science will stand up to some quantity of hydrogen while not suffering embrittlement Carbon compensatory and Reduction theme for International Aviation The Carbon compensatory and Reduction theme for International Aviation (CORSIA) could be a carbon offset and carbon reduction theme to lower CO2 emissions for international flights, to curb the aviation impact on climate change.
- Developed by the International Civil Aviation Organization (ICAO) and

adopted in October 2016.

- Its goal is to own a carbon neutral growth from 2020.
- CORSIA uses Market-based environmental policy instruments to offset CO2 emissions: aircraft operators got to purchase carbon credits from the carbon market.
- Starting in 2021, the theme is voluntary for all countries till 2027.

## Topic 41. NET ZERO EMISSIONS

*Importance for Prelims: Environment*



India wants 5,630 GW star capability by 2070 for internet zero emissions: study

- India's total put in solar power capability can ought to increase to 5630 gigawatt (GW) by 2070 so as to realize internet zero emissions, per a new report by freelance think tank Council on Energy, environment and Water (CEEW).
- Consequently, the overall corresponding land demand for India's power generation assets, particularly solar, would be about 4.6 percent, says the report – titled 'Implications of a Net-zero Target for India's Sectoral Energy Transitions and Climate Policy'.
- At present, India has a hundred GW of put in renewable energy capability, of which solar includes 40 GW, and it aims to boost the RE capability to 450 GW by 2030.
- The report more highlighted that so as to realize net-zero by 2070, usage of coal, particularly for power generation, would need to peak by 2040

and call in 99 % between 2040 and 2060.

- Further, consumption of crude oil, across sectors, would wish to peak by 2050 and fall well by ninety p.c between 2050 and 2070. inexperienced hydrogen might contribute nineteen p.c of the overall energy wants of the commercial sector.
- These insights assume that atomic number 1 can play an integral part in this transition, whereas Carbon Capture and Storage (CCS) technology would play a negligible role.
- The recent IPCC report free earlier this year has underscored the importance of achieving net-zero globally to limit the overall rise in temperatures to 1.5-2 degrees within the coming back decades.
- Further, if India were to realize net-zero emissions by 2070, then the economic price of the transition can be around 4.1% of the value within the net-zero year.
- But, if India were to prepone the timeline to 2050, the economic price would be a lot of higher, around seven-membered in this specific year.
- More than a hundred twenty five countries have expressed their temperament to realize a netzero future.
- Even although Bharat is however to plan to a net-zero target, it's the sole G20 country to meet its emission reduction commitments created within the Paris Agreement.
- It is also a number one partner within the International star Alliance and has recently proclaimed the National hydrogen Mission to push the innovation, production, storage, and usage of inexperienced hydrogen.

## **Topic 42. INDIAN PORTS BILL 2021**

### ***Importance for Prelims: Economy***

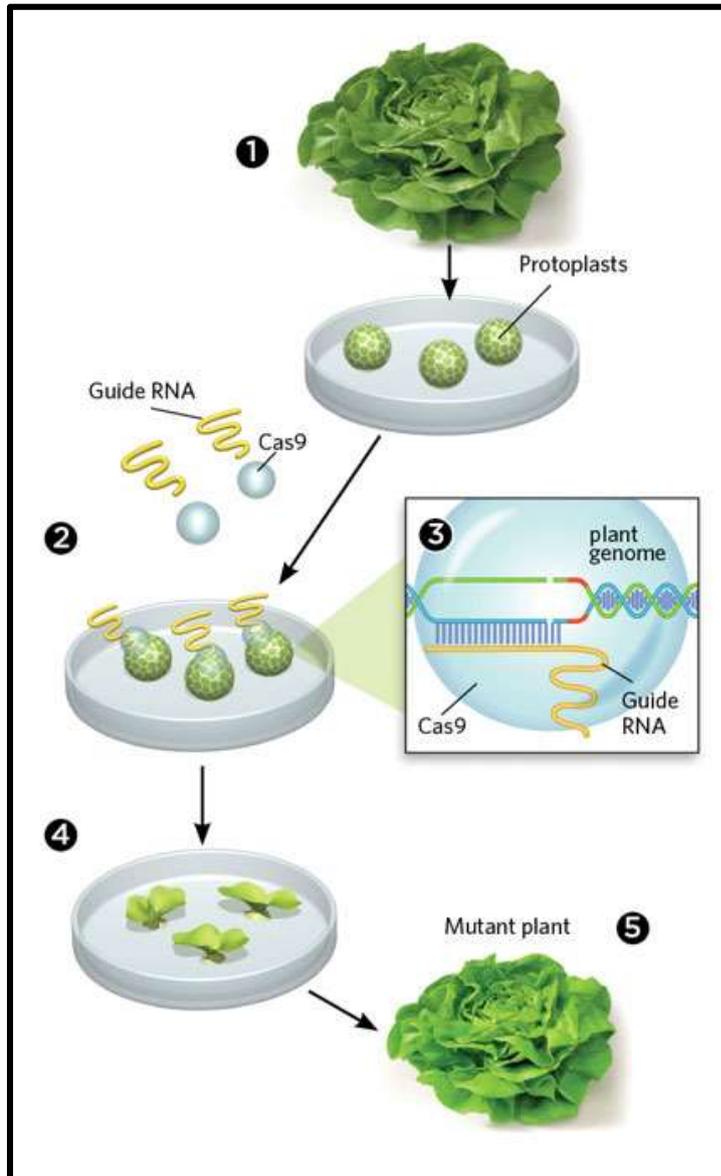
Ports Bill is raising States' hackles

- The Indian Ports Bill 2021 seeks to replace over a century previous Indian Ports Act 1908.
- The new Bill incorporates variety of international regulative developments within the national legislation specifically the “International Ship and Port Facility Security (ISPS) Code 2004, the International Convention for the prevention of pollution from ships (MARPOL) – (1983, 2005).
- It mandates port authorities to supply adequate “reception facilities” to ships to dispose of their waste.
- The International Ballast Water Management (BWM) convention (2017) aims at preventing the spread of invasive aquatic species and potentially harmful pathogens in ships’ ballast water once it's discharged into port premises or adjacent atmosphere.
- The draft Bill under Chapter IX contains provisions for safety and security of ports and Chapter X for hindrance and containment of pollution at ports and these provisions can apply to any or all ports in Republic of India — major and non-major and that they are needed to organize a “Security Plan” and a waste reception and handling set up and can be subject to periodic audit by the Union government to make sure compliance.
- The debatable provisions Chapter II deals with establishment of a Maritime State Development Council by the Centre with the Union Minister because the chairperson and Ministers accountable of ports within the Maritime States as members.
- It conjointly includes the Secretary and Joint Secretaries of the Ministry managing ports. surprisingly, neither the State Maritime Boards nor professional members on port administration and trade interests notice a place within the Council.
- It also proposes to form this Council a permanent body with wide-ranging powers to formulate a national set up for development of existing and new ports and to revise the set up sporadically, monitor the event of major and nonmajor ports to make sure integrated development

- of major and non-major ports with the national set up.
- Section 17, Chapter IV empowers the Union government to form a port reserve if it's not in consonance with the national set up.
  - Chapter XII, section 83 proposes significant penalties for body lapses on Port authorities and officers starting from officials,000 to ₹2 lakh or imprisonment up to 6 months or each.
  - This excessive authority and power focused within the Union government empowerment the maritime States into secondary position have diode to the maritime States — Tamil Nadu, Kerala, state, Odisha and Maharashtra to lodge their protest and convey their objections to the Centre. Indian Ports – India has twelve major ports and regarding 212 non-major ports.
  - Major ports return below the direct management of the Centre whereas all non-major ports return under the management of respective State governments.
  - In 2000-01 Indian ports handled a complete traffic of 369 million tonnes (major 281 and non-major 88) and also the share of major ports was seventy six per cent which of non-major ports twenty four per cent.
  - There is each reason to believe that by 2030 nonmajor ports in India can overtake the most important ports in freight handling and also the maritime State governments are the most thrust to impact such developments.
  - The British Government in 1962 appointed Lord Rochdale as Chairman of a Committee to review the organisation of ports and also the committee recommended institution of a National Ports Authority for British ports.
  - The British government didn't settle for this recommendation however felt that ports ought to be left to the individual local authorities for development with local initiative.

## Topic 43. GENE-EDITED PLANTS

*Importance for Prelims: Environment*

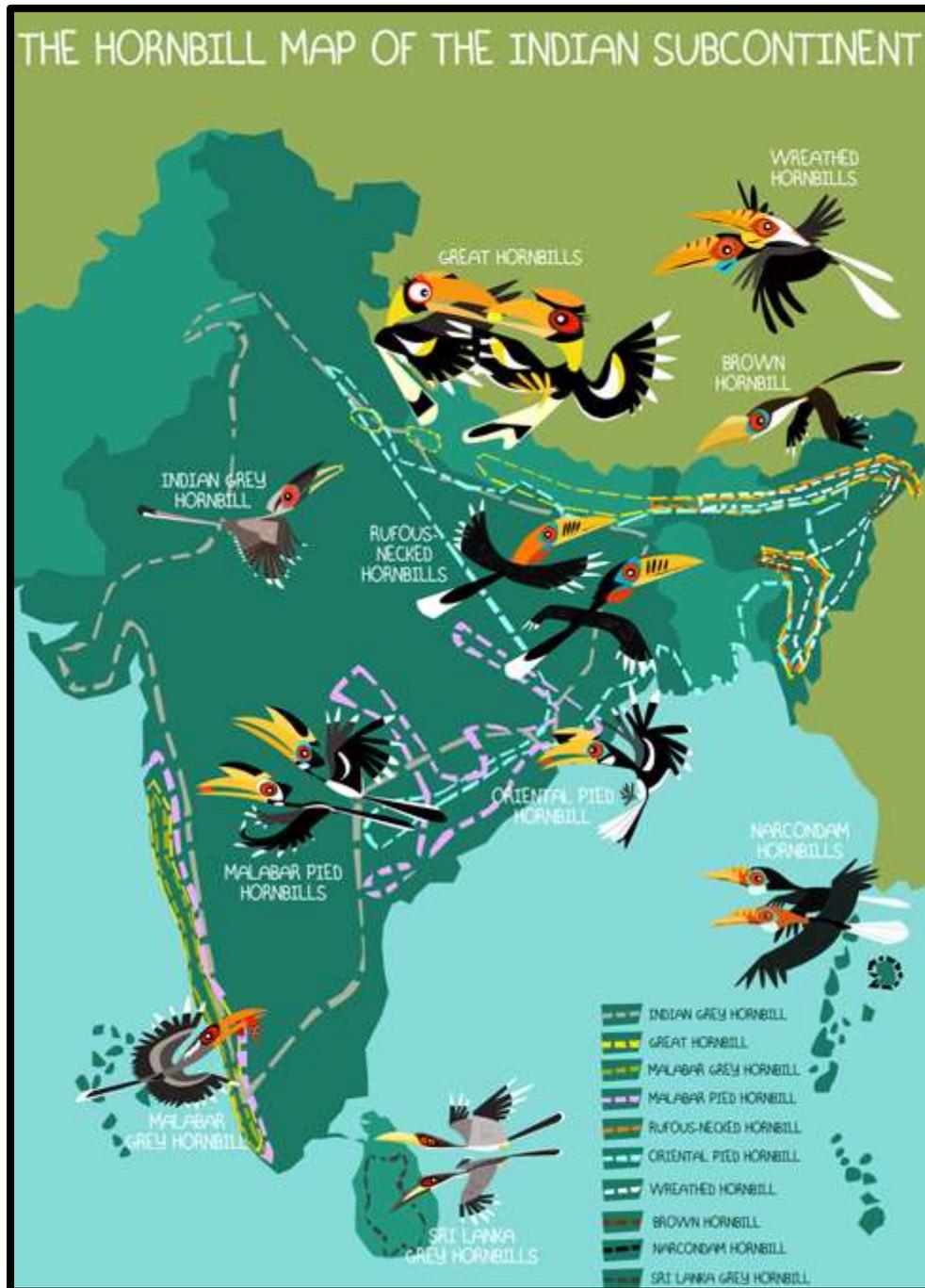


- With an “inordinate delay” in pronouncing safety norms for gene-edited plants delaying research, a gaggle of pro-biotechnology intellectuals and scientists have written to Prime Minister Narendra Modi, expressing concern over the undue delay.
- Seeking his attention to hasten the process, the India Agriculture Advancement group (IAAG) International said that the Draft tips for Safety Assessment of ordination and Gene-Edited Plants were already reviewed by an knowledgeable committee set up by the Department of Biotechnology (DBT).

- They were later endorsed by the Review Committee on Genetic Manipulation (RCGM) before it absolutely was forwarded to the gene-splicing Appraisal Committee (GEAC).
- Regulatory trials The GEAC, that works below the Ministry of setting, Forest and under, is that the nodal agency for giving approvals to agribiotech corporations for agri biotechnology trials.
- They argue that the genome-editing plants under the class that are in question don't need any regulatory trials as these are like alternative varieties and hybrids bred through typical plant breeding.

## Topic 44. HORNBILLS

*Importance for Prelims: Environment*



Save hornbills, for they are the gardeners of tropical forests: Study

- Scientists from 2 organisations studied however mature plants and hornbills influenced every other's distribution within the Namdapha Tiger Reserve.
- The reserve, located in Arunachal Pradesh, is one of India's most

biodiverse protected areas.

- It is home to 5 of India's 9 species of hornbills.
- The conservation of hornbills is of prime importance since they need a symbiotic relationship with many cover trees in tropical forests.
- They are interested in such trees for food and successively, they scatter their seeds, making orchards, a brand new study has same.
- Hornbills were among the only a few birds that would feed on fruits with massive seeds, regurgitate and disperse the undamaged seeds off from the mother plant.
- This was a vital service that hornbills provided to trees.
- Our study shows that forest patches that have rare trees like Canarium, attract hornbills in large numbers.
- In turn, hornbills find yourself dispersing seeds of a various array of plant species in higher numbers in these patches with a number of these hornbill food trees.
- In the long run, this probably creates orchards that continue attracting hornbills.
- The researchers observed four species of hornbills as well as the good, Rufousnecked and Brown, with the exception of the decorated Hornbills.
- The most common decorated coraciiform bird was principally seen in patches with the rare, large-seeded cover trees.
- The variety of spread seeds was highest in patches with the best abundance of hornbills.
- The diversity of create saplings was also highest in those patches.
- The study strengthens the popular image of hornbills being gardeners or farmers of the forest, demonstrating that they farm their own food-rich patches through their seed spread.
- The statement same hornbills were being driven domestically extinct thanks to threats posed by searching and environment loss.
- **About Hornbills** – The hornbills (Bucerotidae) square measure a family of birds found in tropical and subtropic Africa and Asia.
- India is home to 9 species of hornbills.
- The northeastern region has the best diversity of coraciiform bird species among India.
- Papum Rerserve Forest in Arunachal Pradesh could be a nesting environment of 3 species of hornbills: the good hornbill (Buceros

bicornis), decorated hornbill (*Aceros undulatus*) and therefore the Oriental pied coraciiform bird (*Anthracoceros albirostris*), decorated and Oriental pied.

- The 862 sq.km. Pakke reserve homes a fourth species, the Rufous-necked coraciiform bird (*Aceros nipalensis*) species square measure found here.
- The nice hornbill is that the state bird of Arunachal Pradesh and Kerala. they're the cultural symbols of some ethnic communities within the northeast, specifically the Nyishi of Arunachal Pradesh.
- They are remarked as 'forest engineers' or 'farmers of forest' for enjoying a key role in dispersing seeds of tropical trees and indicate the prosperity and balance of the forest they build nests in.
- The hornbill competition celebrated in Nagaland is known as once the bird – hornbill that is that the most revered and loved bird for the Nagas. Currently, 26 out of the sixty two species (40%) of hornbills are Globally vulnerable or close to vulnerable with extinction, with all different species listed as Least Concern, according to the International Union for Conservation of Nature (IUCN) Red List of vulnerable Species.
- The nice hornbill is evaluated as vulnerable.
- It is protected at the best level under Schedule I of the life Protection Act, 1972.

## **Topic 45. EC TO DERECOGNISE 5 AGENCIES CERTIFYING ORGANIC EXPORTS FROM INDIA**

### ***Importance for Prelims: Agriculture***

As many as five certifying agencies are set to be blacklisted from certifying organic product exports from India by the European Commission.

- As several as 5 certifying agencies are set to be blacklisted from certifying organic product exports from India by the ECU Commission as Indian shippers, cleared by them, did not meet the norms for ethylene oxide presence in their consignments, notably sesame (til/gingelly).
- The action, that withdraws recognition granted to them to certify organic products from India, comes when the ECU Union issued a minimum of 90 notifications within the Organic Farming information system (OFIC) over the past few months.
- The development is unlikely to have an effect on exports of organic merchandise from India since there are 28 alternative agencies, each native and foreign, which might certify organic product exports from the country.
- The EU considers ETO as carcinogenic for humans and has been strictly observation imports to make sure that the utmost permissible level of ETO residue isn't exceeded.
- In the case of Indian sesame shipments, the global organization same they had so much exceeded the utmost level allowable for the chemical.
- In explicit, the draft same the certifying agencies mustn't seem within the list of management bodies recognised by India's competent authority – the Agricultural and Processed Food products Export Development Authority (APEDA).
- Agricultural and Processed Food products Export Development Authority (APEDA)
- The Agricultural and Processed Food products Export Development Authority (APEDA) was established by the govt. of India under the Agricultural and Processed Food merchandise Export Development Authority Act elapsed the Parliament in December, 1985.
- The Authority replaced the Processed Food Export Promotion Council (PFEPCC).
- It is an apex body that promotes export trade of agricultural merchandise

in India. Set-up by the ministry of Commerce and business, Government of India.

- Functions of APEDA – APEDA is responsible for export promotion of contemporary Fruits & Vegetables, Processed Food products, eutherian products and Cereals.
- It provides the crucial interface between farmers, storehouses, packers, exporters, surface transport, ports, Railways, Airways, all others engaged in export trade and eventually to the international market. Directly or indirectly, it offers services that support farmers and exporters from different states within the country.
- It bridges the gap between agricultural and processed food producers to succeed in to the exporters in international markets.
- APEDA has been entrusted with the responsibility to watch import of sugar.
- It takes care of the event of industries with reference to the regular merchandise for export by manner of providing monetary help or otherwise for enterprise surveys and feasibility studies, participating through grant schemes.
- Registration of persons as exporters of the regular merchandise and fixing of standards and specifications for the regular merchandise for the aim of exports.
- Carrying out inspection of meat and meat merchandise in slaughterhouses, process plants, storage premises and rising packaging of the regular merchandise.
- Administrative created of APEDA – Chairman – Appointed by the Central Government Director – Appointed by APEDA Secretary – Appointed by the Central Government alternative Officers and employees – Appointed by the Authority.
- European Commission the european Commission (EC) is that the arm of the ecu Union, liable for proposing legislation, imposing EU laws and leading the union's body operations.
- The Commission operates as a cabinet government, with 28 members of the Commission.
- There is one member per member state.
- These members are planned by member countries and European Parliament provides final approval on them.

- olefin compound Ethylene oxide is an chemical compound with the formula  $C_2H_4O$ .
- At room temperature, olefin compound could be a combustible colorless gas with a sweet odor.
- It is employed primarily to supply alternative chemicals, together with liquid. In smaller amounts, olefin compound is employed as a chemical and a sterilizing agent.
- The ability of olefin compound to break DNA makes it a good sterilizing agent however conjointly accounts for its cancer-causing activity.
- Export Of Organic merchandise from India In 2020-21, the overall volume of organic merchandise export was eight.88 hundred thousand metric MT and the export realization was around ₹7,078 crores or \$1 billion.
- As per the accessible statistics, India's rank 8th in terms of World's Organic Agricultural land and first in terms of total range of producers as per 2020 knowledge (Source: FIBL & IFOAM Year Book, 2020).
- Madhya Pradesh has lined largest area under organic certification followed by Rajasthan, Maharashtra, Gujarat, Karnataka, Odisha, geographical area and Uttar Pradesh.
- During 2016, Sikkim has achieved a stimulating distinction of changing its entire cultivatable land (more than 75000 ha) underneath organic certification.
- Organic merchandise square measure exported to USA, EEC, Canada, nice United Kingdom, peninsula Republic, Israel, European country, Ecuador, Vietnam, Australia etc.
- In terms of export worth realization Processed foods together with legume meal (57%) lead among the products followed by Oilseeds (9%), Cereals and millets (7%), Plantation crop merchandise like Tea and occasional (6%), Spices and condiments (5%), medicative plants(5%), Dry fruits (3%), Sugar(3%), and others. Organic merchandise are presently exported from Asian country on condition that they're created, processed, packed, and tagged as per the wants of the National Programme for Organic Production (NPOP).
- The NPOP certification has been recognised by the european Union and European country that allows India to export unprocessed plant products

to those countries while not the need of extra certification. National Programme for Organic Production (NPOP) The APEDA, Ministry of Commerce & Industries, Government of India is implementing the National Programme for Organic Production (NPOP).

- The programme involves the certification of Certification Bodies, standards for organic production, promotion of organic farming and marketing etc.
- The NPOP standards for production and certification system are recognized by European Commission and Switzerland for unprocessed plant products as like their country standards.
- With these recognitions, Indian organic products punctually certified by the licenced certification bodies of India are accepted by the importing countries.

## **Topic 46. KUNMING DECLARATION ON BIODIVERSITY CONSERVATION**

### ***Importance for Prelims: Environment***

Over 100 countries sign Kunming Declaration on biodiversity conservation

- The Kunming Declaration was adopted by over 100 countries October 13, 2021 at the primary a part of the on-going virtual 15th meeting of the Conference of the Parties to the United Nations Convention on Biological Diversity.
- It calls upon the parties to “mainstream” biodiversity protection in decision-making and recognise the importance of conservation in protective human health.
- By adopting this, the nations have committed themselves to support the event, adoption and implementation of a good post-2020 implementation set up, capability building action set up for the Cartagena Protocol on biosafety.
- The theme of the declaration is Ecological Civilization: Building a Shared Future for All Life on Earth. somebody nations can make sure that the post-pandemic recovery policies, programmes and plans contribute to the conservation and property use of biodiversity, promoting property and comprehensive development.
- This declaration may be a reflection of the political can of all parties to the United Nations Convention on Biological Diversity.
- The parties have incontestible their commitment to accelerate development and update of the strategy document National biodiversity strategies and Action Plans.
- The signed declaration are going to be submitted to the overall Assembly of the international organization, the 2022 High-Level Political Forum on property Development, and also the United Nations surroundings Assembly at the second a part of the on-going session in Kunming, China from 25 April-8 may 2022.

## **Topic 47. FLOWER SCORPIONFISH**

### ***Importance for Prelims: Environment***

Fish species found only within the Pacific, discovered within the Bay of Bengal

- A unique, lesser-known fish species that was until currently thought to be found only within the Pacific Ocean has been found within the Indian Ocean too.
- *Hoplosebastes Armatus*, additionally called the flower scorpionfish, belongs to the order of ray-finned fish that also are notable *Scorpaeniforme*.
- The *Hoplosebastes Armatus* was discovered within the Pacific Ocean off Japan nearly a century ago in 1929.
- The species had not been found within the Indian Ocean.
- The length of the species ranged from 75-127 millimeter, whereas its body dimension was from 14-22 millimeter.
- The head of the species was relatively large and greater than the body. •
- The recent specimen of the species, caught from the ocean, was faint red, he noted.
- But alcohol specimens were pale yellow colour and solution specimens were brownish.
- The specimen found from the ocean resembles PJ Schmidt's specimen that was found in 1929.
- But it differs within the presence of tentacles on the head, intensive spots on the fins, scale-less maxilla, range of spines on sub-orbital stray, etc.
- The rise within the temperature of ocean water because of heating may induce the migration of this species from totally different regions.

## **Topic 48. BORDER SECURITY FORCE (BSF)**

### ***Importance for Prelims: Defence and Security***

Punjab unhappy when Centre enhances powers of BSF

- The Union Home Ministry has increased the powers of the Border security force (BSF) to “arrest, search and seize” among 50 km from the international boundary in Assam, West Bengal and Punjab.
- Such operational powers to the BSF, a Central Armed force under the Union, also will be applicable to the new created Union Territories of Jammu and Kashmir and Ladakh, in keeping with a notification printed within the Gazette of India on October 11.
- Earlier, the BSF’s limit was restored to 80 km from the international boundary in Gujarat and 15 km in Rajasthan, Punjab, West Bengal and Assam.
- The October 11 notification replaces a 2014 order under the BSF Act, 1968, that additionally lined the States of Manipur, Mizoram, Tripura, Nagaland and Meghalaya.

## **Topic 49. GLOBAL HUNGER INDEX 2021**

### ***Importance for Prelims: Governance***

Global Hunger Index 2021: India slips to 101st spot, behind Pakistan, Bangladesh, Nepal

- India has slipped to the a hundred and first position among 116 countries in the global Hunger Index (GHI) 2021 from its 2020 ranking (94), to be placed behind Pakistan, Bangladesh and Nepal.
- With this, only 15 countries — papua New Guinea (102), Afghanistan (103), Nigeria (103), Congo (105), mozambique (106), Sierra Leone (106), Timor-Leste (108), Haiti (109), Liberia (110), Madagascar (111), Democratic Republic of Congo (112), Chad (113), Central African Republic (114), Yemen (115) and somalia (116) — fared worse than India this year.
- A total of 18 countries, as well as China, Kuwait and Brazil, shared the highest rank with GHI score of but 5.
- The report, ready together by Irish aid agency Concern Worldwide and German organisation Welt Hunger life, mentioned the amount of hunger in India as “alarming” with its GHI score decelerating from 38.8 in 2000 to the vary of 28.8 – 27.5 between 2012 and 2021.
- The GHI score is calculated on four indicators — undernourishment; child wasting (the share of children under the age of 5 who have low weight for his or her height, reflective acute belownutrition); kid aerobatics (children under the age of 5 who have low height for his or her age, reflective chronic belownutrition); child mortality (the morbidity of children under the age of five).
- Hunger in India – in keeping with the report, the share of wasting among kids in India rose from 17.1 per cent between one998-2002 to 17.3 per cent between 2016-2020.

- People are severely hit by COVID-19 and by pandemic connected restrictions in India, the country with highest kid wasting rate worldwide. close countries like Nepal (76), Bangladesh (76), Burma (71) and Pakistan (92), that ar still earlier than India at feeding its citizens, are within the ‘alarming’ hunger class.
- However, India has shown improvement in indicators just like the under-5 mortality rate, prevalence of aerobatics among kids and prevalence of hunger thanks to inadequate food, the report aforesaid. Stating that the fight against hunger is hazardously off beam, the report aforesaid supported the present GHI projections, the globe as a full — and 47 countries specially — can fail to attain even a low level of hunger by 2030. whereas the GHI score for the globe fell 4.7 points, from 25.1 to 20.4, between 2006 and 2012, it's fallen simply 2.5 points since 2012.
- After decades of decline, the global prevalence of undernourishment — one in all the four indicators wont to calculate GHI scores — is increasing.

## **Topic 50. CAPITAL ACCOUNT CONVERTIBILITY**

### ***Importance for Prelims:– Economy***

India On Verge Of Achieving Capital Account Convertibility: RBI Deputy Governor

- India is on the cusp of basic shifts within the capital account convertibility space, with accrued market integration within the offing and freer non-resident access to debt on the table, in step with T Rabi Sankar, Deputy Governor, reserve bank of India (RBI).
- Capital account of any country records cyberspace changes in its foreign assets and liabilities, whereas convertibility refers to the flexibility to convert domestic currency into foreign currencies and vice versa for creating payments for balance of payments (BoP) transactions.
- BoP refers to monetary transactions undertaken by a rustic with different nations across the world throughout a specific amount of your time, usually one year.
- The Tarapore Committee (2006) outlined capital account convertibility because the “freedom to convert native monetary assets into foreign monetary assets and vice versa.”
- The country is additionally on the cusp of witnessing some basic shifts during this space with greater market integration expected within the close to future.
- The rate of capital account interchangeability also will accerate through measures like freer non-resident access to debt and greater market integration.
- There is a shot to liberalise foreign portfolio investment (FPI) debt flows any, with the introduction of the fully Accessible Route (FAR), that places no limit on non-resident investment in specific benchmark securities.

## What is Capital Account Convertibility?

- The balance of payments account, that a press release of all transactions created between a country and also the outside world, consists of 2 accounts — current and capital account.
- While the present account deals mainly with import and export of goods and services, the capital account is created of cross-border movement of capital by manner of investments and loans.
- Current account interchangeability refers to the liberty to convert your rupees into different internationally accepted currencies and contrariwise with none restrictions whenever you create payments.
- Similarly, capital account convertibility suggests that the liberty to conduct investment transactions with none constraints.
- Typically, it'd mean no restrictions on the quantity of rupees you'll convert into foreign currency to alter you, an Indian resident, to amass any foreign quality.
- Similarly, there should be no restraints on your NRI first cousin transferral in any quantity of dollars or dirhams to amass an quality in India.
- India has return an extended manner in liberating the capital account transactions within the last 3 decades and presently has partial capital account convertibility.
- Some of the recent moves embrace increasing the foreign portfolio investment limits within the Indian debt markets, introducing the fully Accessible Route (FAR) — through that non-residents will invest in specific government securities with none restrictions and also the easing of the external business borrowing framework by quiet end-user restrictions.
- Inward FDI is allowed in most sectors, and outbound FDI by Indian

incorporated entities is allowed as a multiple of their web value.

### Why is it important?

- Developing are typically cautious in opening up their capital account.
- This is as a result of inflows and outflows of the foreign and domestic capital, that are liable to volatility, will cause excessive appreciation/depreciation of their currency and impact the financial and monetary stability.
- India's prudence in opening up its capital account was lauded when the currency crisis in East Asian countries in 1997 exposed the issues arising from the potent combination of high accounting imbalances, dependence on short-run capital flows and also the arbitrary nature of those flows.
- The SS Tarapore committee's report on fuller capital account convertibility free in 2006 argued that even countries that had apparently snug commercial enterprise positions have veteran currency crises and speedy deterioration of the charge per unit, once the tide turns.
- The report any points that almost all currency crises arise out of prolonged overvaluation in exchange rates resulting in unsustainable current account deficits.
- An excessive appreciation of the charge per unit causes commerce industries to become unviable, and imports to become way more competitive, inflicting the present account deficit to worsen.
- Thus, it suggests clear fiscal consolidation is critical to cut back the possibilities of a currency crisis.
- If you're an capitalist trying to park cash overseas or an NRI desirous to invest in Indian assets, full interchangeability on capital account could provide you with a bigger chance to diversify investments and cut back geographical risk.
- Note that crossborder investments are allowed even currently beneath

RBI's Liberalised remission scheme however at intervals the overall limit of \$250000.