

CURRENT AFFAIRS ANALYST

- **WEEKLY** -

Week - 1

APRIL, 2019

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However, this doesn't mean that Mains articles don't cover facts and PT articles can't have analysis. You are suggested to read all of them for all stages of examination.

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WEEK-1 (APRIL, 2019)

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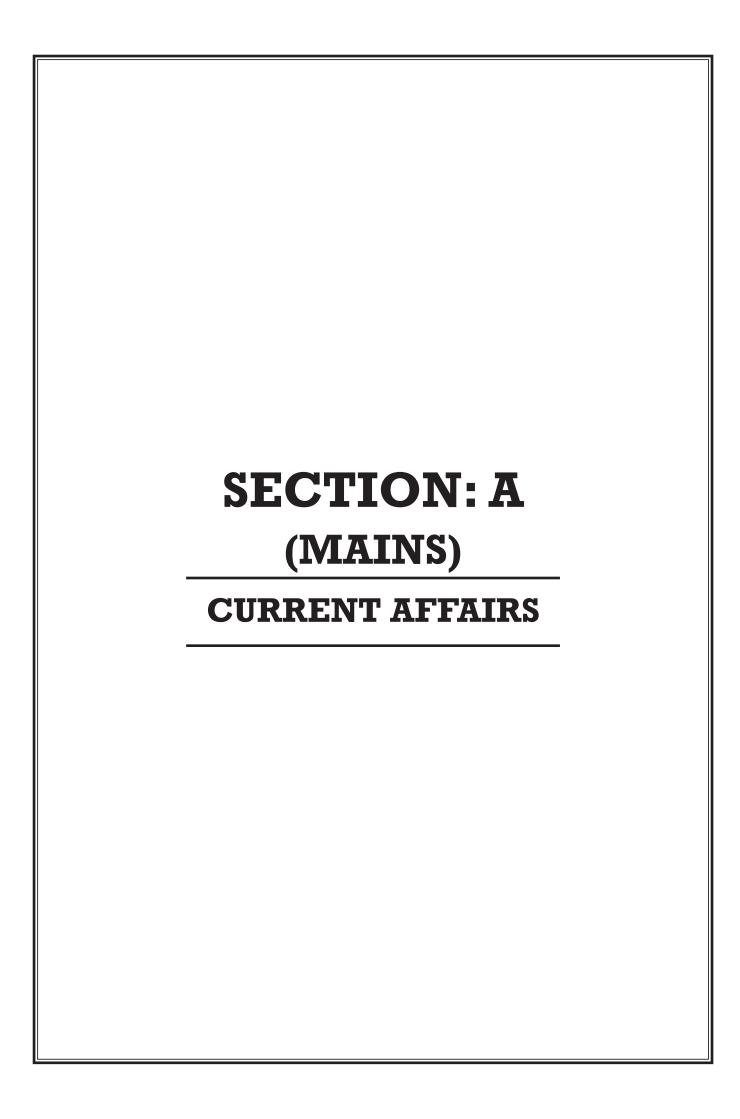
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ESSAR STEEL TAKEOVER BID AND LEGAL ISSUES

CONTEXT

- The National Company Law Appellate Tribunal (NCLAT) refused to stay a bankruptcy court order approving global steel giant ArcelorMittal's Rs 42,000 crore takeover bid for Essar Steel.
- However, it sought a fresh plan for the distribution of bid amount between financial and operational creditors of the debt-laden firm.
- Making a suggestion, the NCLAT said all operational creditors below Rs 1 crore should get 100 per cent of the dues and so should the employees of Essar Steel. Only 90 per cent of Rs 42,000 crore should be allowed for financial creditors.

• ABOUT:

- Essar Steel directors had challenged Ahmedabadbench of National Company Law Tribunal's (NCLT) nod to global steel giant ArcelorMittal SA's bid for the debt-laden company on the plea that their offer of Rs 54,389-crore was superior as it clears 100 per cent outstanding of both financial and operational creditors.
- ArcelorMittal's Resolution Proposal involves financial creditors getting Rs 41,987 crore out of their total dues of Rs 49,395 crore. Operational creditors, under the plan, would get just Rs 214 crore against the outstanding of Rs 4,976 crore.
- If the ArcelorMittal plan is implemented, Standard Chartered will only get Rs 60 crore against its claims of Rs 3,187 crore from Essar Steel.

BACKGROUND:

- Standard Chartered moved the NCLAT against the plan as its counsel contended that the bank was being given only 1.7 per cent of its total dues from Essar Steel while other financial creditors, forming part of the Committee of Creditors (CoC), were getting over 85 per cent of their dues.
- NCLAT is of the view that the CoC cannot reserve 92% of the bid amount for financial creditors and leave just 4% for operational creditors.
- The CoC, however, opposed proposal to give 10% to operational creditors, saying they had approved ArcelorMittal's bid for Essar Steel based on the money that secured lenders are able to recover from the insolvency process.

ANALYSIS:

Financial and Operational Creditors:

• **Financial creditor:** According to Section 5(7) of the IBC it is defined as - a person to whom a financial debt is owed and includes a person to whom such debt has been legally assigned or transferred.

- **Operational creditor**: Under Section 5(20) of the IBC it is defined as any person to whom an operational debt is owed and includes any person to whom such debt has been legally assigned or transferred e.g. Wholesale vendor of spare parts whose spark plugs are kept in inventory by car mechanics and who get paid only after the spark plugs are sold is an operational creditor.
- Tribunals are reluctant in entertaining petitions from any person who does not fall under the definition of financial creditor or operational creditor according to the IBC. To initiate business insolvency proceedings under the Code, this requirement must be satisfied.

IBC process:

Application to the NCLT:

 A financial or operational creditor can apply to the National Company Law Tribunal (NCLT) for an order to admit the debtor into the corporate insolvency resolution process (CIRP). The creditor has to show that there has been a default in the payment of its debt exceeding 1 lakh rupees. The NCLT has to pass an order either admitting or denying the application within 14 days.

Interim resolution professional:

 Once a corporate debtor is admitted into the CIRP, its board of directors is suspended and its management is placed under an independent interim resolution professional. From this point on and until the end of the CIRP, the erstwhile management ceases to have any control over the affairs of the company.

Formulation of COC:

 The interim resolution professional will then invite and verify claims made by the corporate debtor's creditors, classify them, and within 30 days of the admission into CIRP, form the Committee of Creditors (COC), comprising all the financial creditors of the corporate debtor.





Appointment of the resolution professional:

 The COC then appoints an independent person to function as the resolution professional for the remainder of the CIRP term. The resolution professional may be the same person as the interim resolution professional, or someone else, depending on what the COC wants.

Approval of the resolution plan or liquidation:

- Within 180 days from the start of the CIRP, a resolution plan for the revival of the company needs to be approved by creditors holding 75% of the financial debt.
 - If a plan is approved within this period and is sanctioned by the NCLT, it is adopted and becomes binding on all stakeholders involved in the CIRP.
 - And if no resolution plan is approved in this period, the NCLT is required to order the liquidation of the corporate debtor. If an order of liquidation is passed, a liquidator will be appointed by the COC to sell the assets of the corporate debtor and distribute the assets among the stakeholders.

Operational effectiveness of the programme:

- In the past two years since the Insolvency and Bankruptcy Code came into being, 701 companies have been admitted under the corporate insolvency resolution process and only 22 resolution plans have been approved, around 87 firms are heading for liquidation and the CIRPs of 525 firms are still under way as of June 2018.
 - There is a growing concern that the Insolvency and Bankruptcy Code (IBC) has taken a bit too long in resolving cases of corporate indebtedness — much beyond the stipulated outer limit of 270 days.
 - Under the liquidation process, financial and operational creditors are less likely to recover

the full-value of their dues, while employees may not get their full salaries.

Challenges to resolution process:

- For the financial creditors, the insolvency resolution process granted a proper way to get back the debt amount with time. However for the operational creditors, who are supposed to be paid almost instantly, there is not a lot ways.
- Within the voting pattern of the committee of creditors, there is an issue where operational creditors votes who were not fully willing, they were forced.
- The code is not well communicated to the rural regions of the country.

Way forward:

- Due to rapid increase in the number of cases to be referred to NCLT under IBC it is imperative to create additional benches to minimize the delay in the resolution process.
- New initiatives such as Samadhan and Sashakt which aim to encourage Pre-NCLT resolution for stressed companies may also lead to reducing the burden and effective utilization of the NCLT benches and avoid value diminishing due to delay in the resolution process at NCLT.
- Training and support to Insolvency professionals is required to ensure that a high level of competence and professionalism is maintained in the resolution process.
- In case of non-completion of the CIRP in 270 days, the adjudicating authority is required to pass an order to liquidate the corporate debtor. However, in most cases, the tribunal has further extended the process. Although the extensions are being granted with the right intention and aimed towards maximization of value, they are setting a bad precedent. This should be stopped.

Practice Question

• Although India has managed to improve its ranking in both the World Bank's Ease of Doing Business as well as the World Economic Forum's Competitiveness Index, but World Bank Data shows that India still performs poorly on debt resolution with other BRICS countries. Discuss how changes in Insolvency and Bankruptcy Code can help India improve its current standing.



INDIA'S RESPONSE TO CLIMATE CHANGE: CHALLENGES AND WAY FORWARD

CONTEXT

- More than three years after the Paris Agreement was finalized at COP21, it is evident that the developing world is unlikely to receive even the modest amount of US\$100 billion annually in climate finance by 2020.
- Given the weak efforts of the developed world to assist the developing countries so far, India has had to chart a path largely through its own economic and financial arrangements.

• BACKGROUND:

- SDG 2030 and Paris agreement paved a guided path to attain Green, low carbon intensive and all inclusive sustainable growth.
- Before these policy terms are critically analyzed with reference to India and other developing economies, it is important to briefly list their important attributes.

Paris Agreement

- It opened for signature on 22 April 2016 Earth Day – at UN Headquarters in New York.
- It entered into force on 4 November 2016, 30 days after the so-called "double threshold" (ratification by 55 countries that account for at least 55% of global emissions) had been met.
- It is aimed to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.
- The agreement also aims to increase the ability of countries to deal with the impacts of climate change, and at making finance flows consistent with a low GHG emissions and climate-resilient pathway.
- It requires all Parties to put forward their best efforts through "nationally determined contributions" (NDCs) and to strengthen these efforts in the years
- This includes requirements that all Parties report regularly on their emissions and on their implementation efforts.
- There will also be a global stock take every 5 years to assess the collective progress towards achieving the purpose of the agreement and to inform further individual actions by Parties.

ANALYSIS:

Official aid and grants promised under Paris agreement are insufficient to meet the burgeoning energy and infrastructure needs of emerging economies.

Lack of finance for climate action can be attributed to the fact that the international financial community—banks, asset managers, investors and capital markets—have failed to align their operations with the goals of the Paris Agreement.

The role of international investors and institutions:

- Multilateral Development Banks have failed to create bridges between private capital and clean energy/climate resilient infrastructure demands in developing countries
- Bias of international investors towards investing mostly in mitigation efforts: Conventional wisdom in the private sector holds that the costs of adaptation and resilience should be borne by governments.
- **Basel norms** have been designed to respond to the interests of developed nations.
- By prioritizing macroeconomic stability and implementing new liquidity restrictions, these actors have failed to consider adverse implications on cross-border flows, especially with regards to long-term green investments.

Financing green transitions: India

- India will be the first large country that must transition to a middle-income economy in a fossil fuel-constrained world.
- India is also constricted by the same political, regulatory and financial challenges that confront much of the developing world.
- Therefore, an assessment of India's capacity to now leverage international financial flows and its ability to undertake a low-carbon transition may well provide a reliable template for developing countries to emulate.

India's own development policy choices and lessons therein for other developing countries:

A stable infrastructure policy will have significant implications for green investment choices





 However, India is still evolving its infrastructure trinity - PPP model, regulatory oversight and private financing.

Reasons for the lack of private-sector involvement in India's climate-resilient urban infrastructure:

- The state of its energy distribution companies
- Underdeveloped financial markets
- Inflexible international credit and risk assessment practices

Role of human capital in enabling greater green investment:

- The executive pay of 31 of India's top companies shows that by linking management compensation to short-term performance objective, companies are failing to integrate sustainability objectives into their long-term vision.
- Even though women and marginalized groups are likely to be more exposed to climate change related risks, they are severely underrepresented in the investment and regulatory classes.
- The reasons behind the significant shortfall in private finance in relation to low-carbon investments provide a clue that India must attempt to resolve.
 - The Indian Politico-economy setup must reclaim the power sector.
 - The large-scale subsidization of has created significant distortions in energy use, pricing and policy.
 - State-level reform in India suggests that splitting the electrical grid for agricultural and non-agricultural sectors, implementing a credible metering system and providing subsidies as direct benefits can have significant positive effects on the power sector.
 - Without a viable grid, green investments are likely to remain unviable.

Build capacity amongst international investors to understand risk and opportunity in India:

- There is generally a bias stemming from lack of knowledge (information) and capacity (human resources) to assess risks in emerging economies.
- This ultimately translates into an inability to understand the economic landscape of recipient countries.

India must build innovative policy tools to leverage new financial instruments and mechanisms:

- Currently, regulations related to debt and equity markets restrict the flow of international capital into climate action projects.
- Emerging economies must co-opt their financial sector in the fight against climate change
- Financial markets that allow for debt financing and locally issued green bonds for example create a diverse set of instruments that different types on investors can rely on.

Overhaul regulatory systems:

- This has to be done both in recipient and investing states.
- Vast pools of money are held by multiple categories of investors, such as pension funds and insurance companies.
- However, existing regulations limit the ability of fund managers to invest in climate related projects.

There is an urgent need to review the current set of Basel Accords as well as the next iteration of Basel IV accords

The macro-prudential regulations were designed to create a more risk-free international banking system but have unintentionally stymied the ability of the financial sector to contribute to climate resilience.

The banking community must acknowledge that planetary risk is the largest systemic challenge to financial stability and that mitigating such risk is the most prudential practice.

Key actions India has taken towards combating and adapting to climate change:

- India's National Action Plan on Climate Change (NAPCC) which covers eight major missions on Solar, Enhanced Energy Efficiency, Sustainable Habitat, Water, Sustaining the Himalayan Ecosystem, Green India, Sustainable Agriculture and Strategic Knowledge on Climate Change.
- Generating 175 GW of renewable energy by 2022
- Smart cities, electric vehicles, energy efficiency initiative
- Leapfrogging from Bharat Stage -IV to Bharat Stage-VI emission norms by April 2020
- The renewable energy capacity stands at more than 74 GW today which includes about 25 GW from solar.
- India's forest and tree cover has increased by 1 percent as compared to assessment of 2015.
- Schemes like UJALA for LED distribution has crossed the number of 320 million while UJJWALA for distributing clean cooking stoves to women below poverty line has covered more than 63 million households.



- International Solar Alliances (ISA)
- FAME Scheme for E-mobility
- Mission for Rejuvenation Urban Transformation (AMRUT) - for Smart Cities
- Swachh Bharat Mission

India recently submitted its Second Biennial Update Report (BUR) to UNFCCC in December 2018 as per the reporting obligations under the convention.

The report brings out the fact that emission intensity of India's GDP came down by 21% between 2005 & 2014 and India's achievement of climate goal for pre-2020 period is on track.

Given the weak efforts of the developed world to assist the developing countries so far, an assessment of India's capacity to undertake a low-carbon transition may well provide a reliable template for developing countries to emulate.



Practice Question

Given the weak efforts of the developed world to assist the developing countries so far, India has had to chart a path largely through its own economic and financial arrangements. Discuss how far this path is sustainable.





DECLINING TREND IN CASUAL LABOUR IN AGRICULTURE SECTOR

CONTEXT

- According to a data series released by NSSO, the share of rural households with major income from casual labour in agriculture decreased by 10 percentage points since 2011-12.
- There is a drop of 15 million families (from 36 million to 21 million) who were dependent on casual farm work.
- Since 2011-12, India's national workforce shrunk by 4.7 crore more than the population of Saudi Arabia.

ABOUT:

- It is estimated that 3.2 crore casual laborers lost their jobs in rural India between 2011-12 and 2017-18. Of these, almost 3 crore were those working on farms.
- This implies that there is a 40 per cent shrinkage in the casual farm labor workforce since 2011-12.

• BACKGROUND:

- The basis of above findings are rooted in the Periodic Labour Force Survey (PLFS) 2017-2018 report by NSSO which the government has declined to release.
- Casual labour, irregular employment or part-time labour, including the labour of workers whose normal employment consists of a series of shortterm jobs.
- Casual labour is usually hired by the hour or day or for the performance of specific tasks, while parttime labour is typically scheduled for a minimum number of hours per week
- Construction, logging, sawmilling, agriculture, and the service trades industries have relied heavily on casual labour.
- National Sample Survey Office (NSSO), Ministry of Statistics and Programme Implementation has been regularly conducting nation-wide surveys on various socio-economic subjects.
- Results of these surveys are used for planning, policy formulation and decision making.
- NSSO has also launched a new employmentunemployment survey, namely, Periodic Labour Force Survey (PLFS).
- PLFS is a continuous/regular survey for generating estimates of various labour force indicators on quarterly basis for urban areas and annual basis for both rural and urban areas, at State/UT and all-India level.

What is Periodic Labor Force Survey (PLFS) of the NSSO?

- One of the major statistical hurdles in our country is the estimation of reliable employment and unemployment data.
- The NSSO (National Sample Survey Office) has historically been conducting Employment and Unemployment Surveys as part of its National Sample Surveys.
- These surveys were the prime source for statistics about employment and unemployment situation in the country.
- From 2017 onwards, a nationwide Labor Force Survey called Periodic Labour Force Survey (PLFS) was launched by the NSSO.
- The PLFS was aimed to provide quarterly employment and unemployment data. Report of the PLFS was expected in December 2018 but was postponed.

Quarterly changes of various indicators of the labour market in urban areas as well as to generate the annual estimates of different labour force indicators both in rural and urban areas are the supplementary objectives of the PLFS.

Annual estimates (for both rural and urban areas) would be generated for major parameters like:

- Labour Force Participation Rate (LFPR),
- Worker Population Ratio (WPR),
- Unemployment Rate (UR),
- Distribution of workers by industry, occupation, workers employed in informal sector and
- Conditions of employment of the workers

The first results of the PLFS was scheduled to be available by December 2018 and from thereafter on a regular basis (release of the data was postponed as a result of higher unemployment figure).



ANALYSIS:

- According to NSSO data, the rural casual labour segment — farm and non-farm — shows an overall slide of 7.3 per cent in male and 3.3 per cent in female employment since 2011-12.
- A bulk of this loss, almost 3 crore, was in casual farm labour since the fall in households dependent on non-agricultural casual labour was negligible (from 13.5 per cent to 12.9 per cent).
- The PLFS 2017-18 report identifies a 4 per cent rise in self-employed farm labour.
- Since it is unlikely that casual labourers became landholders overnight, this may be partly explained by a stagnation in agriculture leading to reduced hiring capacity of the landowner.
- It looks like that the hired casual labour is getting substituted by household (self) labour.

Why the issue is gaining importance?

- For the first time since 1993-94, the actual size of India's male workforce, has shrunk. Data from the NSSO's Periodic Labour Force Survey 2017-18, account for 28.6 crore employed male in the country.
- This is the first instance of a drop in the male workforce that steadily swelled from 21.9 crore in 1993-94 to 30.4 crore in 2011-12 when the last NSSO survey was conducted.
- This suggests fewer men were employed in 2017-18 compared with five years ago.
- While the employment loss in the rural segment hurt the women most (68 per cent), men suffered more (96 per cent) job losses in the urban areas.

Why this should be a worry?

- A shrinking workforce suggests an increase in the number of unemployed, and also points to fewer new job opportunities.
- Given India's demography and labour force growth over the decades, this should be a cause for concern.

Declining trend observed in skill building capacities:

- According to PLFS 2017-18, the percentage of working age (15-59 years) population that received any formal vocational/technical training actually came down from 2.2 per cent in 2011-12 to 2 per cent in 2017-18.
- Among the youth (15-29 years), however, a jump of 0.1 per cent is recorded in the same time period.

Labour at Farm vs. Worker with skills:

- In India, while contribution of agriculture to GDP has been declining, agriculture still remains mainstay of the rural economy by employing almost half of the population.
- However, the gap between job seekers in rural areas and employment opportunities in agriculture has been widening and non-farm sector has become an increasingly important source of livelihood.
- ILO has observed a significant shift towards nonfarm employment in rural areas, and this shift happened predominantly among economically weaker sections of the rural society.
- Access to land was an important determinant in this process of rural employment diversification.
- However, this diversification has generally been offset by low capacity augmentation in education (Economic Survey highlighted Learning Poverty Count and Learning Poverty Gap) and skill building exercise.
- Most of these initiatives have been marred by poor implementation and vested corrupt interests.
- Until 2006, the situation was little better because Among non-farm activities, construction was one of the predominant forms of employment to a considerable section of workers due to the fact that it did not necessarily ask for any specific skill.
- It was due to the option of seasonal employment which allowed workers to take up agricultural activities during peak seasons.
- However, recession and slowdowns have greatly impacted demand creation in this sector as well and that has cumulatively led to the decline in Worker's productive engagement.

Can MGNREGA bridge the gap?

- It is in this context of overall scenario of rural labour market that MGNREGA assumes significance in providing social protection, asset creation, and empowering the poor.
- In India, the economic deprivation is most pronounced among SCs and STs. Therefore, it is not surprising that SCs and STs constituted the bulk of the households that got MGNREGA work.
- Almost half of the households that got work under MGNREGA belonged to either SC or ST social groups.
- While some of the economically weaker States like Rajasthan, Madhya Pradesh, Chhattisgarh were better performers in this regard (which is a positive thing), other economically backward States like Bihar, Jharkhand, Orissa were lagging behind.





- In addition to increase in days of employment, a very significant impact of MGNREGA has been in an overall rise in rural wages, and thereby resulting in improvement of consumption among poorer households.
- It is high time that the PLFS 2017-18 report be published and a Social audit based accountability outcome of all relevant socio-economically schemes/programmes be carried out and deeper questions be asked as to when and where did the trail was missed.



Practice Question

According to NSSO, casual farm labour has shrunken by 40% since 2011-12. This equals to a total job loss of nearly 3 crore. Critically evaluate the challenges that it has forecasted.





EXTRADITION POLICY OF INDIA

CONTEXT

A London court issued an arrest warrant against Nirav Modi in response to an extradition request by the **Enforcement Directorate (ED).**

ABOUT

With the advent of globalization and increased interconnectivity, it has become easier for offenders in India to escape to foreign jurisdictions and avoid prosecution in the country. India's success rate in extraditing fugitives is abysmally low; only one in every three fugitives are being successfully extradited to India.

Extradition

- Extradition may be defined as the process by which one State upon the request of another surrenders to the latter a person found within its jurisdiction for trial and punishment or, if he has been already convicted, only for punishment, on account of a crime punishable by the laws of the requesting State and committed outside the territory of the requested State.
- The extradition of a fugitive from India to a foreign country or vice-versa is governed by the provisions of Indian Extradition Act, 1962.
- The basis of extradition could be a treaty between India and a foreign country. Under Section 3 of the Act, a notification could be issued by the Government of India extending the provisions of the Act to the country/countries notified.

BACKGROUND:

- ICPO (International Criminal Police Commission)-Interpol has been a forerunner in international efforts to improve and accelerate existing procedure of extradition.
- Information regarding the fugitive criminals wanted in foreign countries is received directly from the concerned country or through the General Secretariat of the ICPO-Interpol in the form of red notices.
- The Interpol Wing of the Central Bureau of Investigation immediately passes it on to the concerned police organizations. The red notices received from the General Secretariat are circulated to all the State Police authorities and immigration authorities.

There is a daily inflow and outflow of communications between Interpol New Delhi and National Central Bureaus of member countries which ranges from:

a compassionate request to locate and notify the next-of-kin of a death;

- request to search for a missing person;
- criminal history requests for any number of reasons;
- requests to carry out investigations in cases of fraud, commercial crime, trafficking in narcotics drugs, and criminal code offences upto murder.

The Ministry of External Affairs (MEA) is India's nodal government body for extradition matters.

What is Interpol?

- The word 'INTERPOL' is radio-telegraph code for the International Criminal Police Organization which consists of 188 member countries who have agreed to "ensure and promote the widest possible assistance between all criminal police authorities in the prevention and suppression of ordinary law crimes".
- The Organization's headquarters is in Lyon, France.

National Central Bureau (Interpol) New Delhi

- India is one of the oldest members of Interpol, having joined the organization in 1949. The Central Bureau of Investigation, which is a Federal/Central investigating agency functioning under the Central Government, Department of Personnel & Training is designated as the National Central Bureau of India.
- The Director of the CBI is the ex-officio Head of the NCB-India. All matters relating to the NCB India are, however, dealt with by the Ministry of Home Affairs, Government of India.
- All the State Police forces and other law enforcement agencies in India have a link through Interpol New Delhi to their counterparts in other member countries, through Interpol Global Communications System (I- 24/7) prepared to assist in dealing with criminal investigations. This is the area where the greatest volume of work occurs.

• ANALYSIS

India has bilateral extradition treaties with 43 countries and extradition arrangements with 10 countries. Unlike treaty mechanisms, where states are obligated to consider requests for extradition, "extradition arrangements" are non-binding and do not impose any legal obligations on party states.





- Requests for surrender of fugitives can also be made to non-treaty states. These requests will be considered in accordance with laws and procedures of the foreign state, and with the assurance of reciprocity from India.
- India does not have extradition treaties with several neighboring states, such as China, Pakistan, Myanmar and Afghanistan.
- Many security threats originate from border areas and flourish due to challenges presented by difficult terrain, harsh climate and poor border infrastructure.
- With the absence of a defined treaty mechanism, India finds it difficult to secure the surrender of criminals who flee to India's Border States.

Issues and Challenges to the Return of **Fugitives from Abroad -**

- Extradition is usually not granted for "political offences"; for nationals of the requested country; offences where death penalty may be imposed; where there will be "double jeopardy"; or where there could be actual or potential discrimination on account of religion, race and nationality.
- The "double jeopardy" clause, which debars punishment for the same crime twice, is the primary reason why India, for example, has been unable to extradite David Headley from the US.
- Headley, an American terrorist involved in plotting the 26/11 Mumbai attacks, has already been sentenced to imprisonment by US courts, for killing six Americans.
- Challenges to extradition orders can also be raised outside treaty terms.
- These are generally based on concerns of human rights violations, such as torture or cruel, inhuman and degrading treatment.
- For instance, the US usually follows the principle of "non-inquiry" in judicial review of extradition orders, and does not go into conditions or circumstances awaiting the requested person.
- European countries and the United Kingdom have been rejecting extradition cases on human rights concerns, such as the possibility of receiving "torture, inhuman and degrading treatment" at the hands of the requesting state.
- Vijay Mallya's lawyers argued that the poor conditions in Arthur Road Jail (Mumbai) will be tantamount to inhuman and degrading treatment.
- In the event that India succeeds in regaining custody of a fugitive, compliance with treaty **terms** is necessary.
- An important treaty clause known as the "rule of specialty" mandates that the extradited fugitive will be prosecuted only for the offence for which he was surrendered.

- For example, when India secured the return of Abu Salem from Portugal, the law enforcement agencies framed additional charges against him for his role in the 1993 Mumbai serial blasts. Portugal widely criticized the move, and the Supreme Court in Lisbon held that India was in violation of extradition rules.
- Adherence to treaty commitments is of paramount importance and helps maintain mutual trust, cooperation and reciprocity between countries.
- The low numbers of extradited economic offenders (13 as against 28 ongoing investigations) can be attributed to the history of extradition treaties and the legal opinion regarding categorizing financial irregularities as a civil offence rather than a criminal one.
- The exclusion for fiscal offences was based on the view that these offences were not criminal conduct, and attracted less moral stigma.
- Most of India's bilateral treaties provide that an individual alleged to have committed fiscal offences would be extradited back to the country.
- However, considering that India has only been able to secure the return of 13 economic offenders since 2002, the prospect of securing the return of Modi and Choksi, and other economic offenders, looks bleak.
- Extradition procedures are further complicated by unreasonable delays and variance in documentary requirements of foreign countries.

Extradition process

- The first step of the extradition process is to transmit a formal extradition request through diplomatic channels to the foreign government.
- Once investigations are completed by state or central agencies, they forward a request containing full details of the case accompanied with translations (where required) detailing the offences charged with, witness testimonies, arrest warrant, and documents establishing identity of the requested person.
- These requests are received by the CPV (Consular, Passport and Visa) division, MEA and are processed in consultation with the Legal and Treaties division of the ministry.
- When the MEA transmits a formal extradition request to its diplomatic counterparts abroad, the foreign government is required to act on the request by issuing an extradition order against the requested person and fight the case, on behalf of India, before their courts.
- Irregularities that arise at this stage, such as delays in investigation, misbehavior by police officials, improper or fabricated documents, and incorrect format of affidavits and certificates, may come to fore at the penultimate stage of judicial review before foreign courts.





Way forward:

- Extradition is as much a political process as it is a judicial one.
- The expeditious processing of extradition requests and the commitment to prepare for and defend the case before Courts, depends on bilateral relations and the opportune use of diplomacy and negotiations to push for the process by the requested country.
- India needs to take steps to dispel concerns regarding poor prison conditions and potential human rights violations of the requested person.
- India could consider signing international instruments, such as the UN Convention Against Torture (1984) to establish India's zero tolerance towards torture and custodial violence.

- For addressing investigational delays, it is imperative to improve the capacity and organizational efficiencies of law enforcement agencies so that they may conduct speedy investigation in these cases.
- To ensure that India's extradition requests are in compliance with treaty conditions and documentary requirements, India must put in place suitable organizational mechanisms to familiarize itself with laws and regulations of treaty states.
- India could adopt the good practices of the US' Office of International Affairs (OIA), Washington's primary body to handle extradition requests, and employ lawyers and station trained liaison officers in countries with which the country has extradition relations.
- Extradition is, after all, a sovereign decision.



Practice Question

o Globalization has brought new challenges such as offenders fleeing India. In this context, examine how equipped is India to tackle this situation.





COUNTER-TERRORISM INFRASTRUCTURE IN **INDIA**

CONTEXT

- On February 13, Suicide bomber targets security convoy in Kabul. At least 12 killed, six wounded in a Taliban ambush that hit a convoy of security personnel in Kabul.
- On February 14, 40 CRPF personnel were killed in Pulwama in Jammu and Kashmir when a convoy in which they were travelling was attacked by a Jaish-e-Mohammed (JeM) suicide bomber, who rammed his explosivesladen vehicle into one of the convoy's buses on the Srinagar-Jammu highway.
- On March 15, as many as 49 people were killed and many injured in shooting in two mosques in Christchurch, New Zealand. Gunmen live-streamed the shooting in social media.

ANALYSIS:

- Terrorism in India: Terrorism in India can be classified into 4 categories:
- Jammu and Kashmir militancy: After losing the initial battle in 1947 and later the wars of 1965 and 1971, Pakistan resorted to the tactics of low intensity warfare as it realised that it could not win over India in a full scale direct war. It is actively supporting separatists and militant insurgency in Kashmir Valley since late eighties.
- Insurgency in North-East: There are more than 100 tribal groups in the entire north-east region. The policies of Britishers resulted in their isolation from the rest of India. Currently there are a number of militant outfits having diverse demandschecking illegal immigration from Bangladesh, separate statehood, secession.
- Left Wing extremism (Naxalism): Originated from Naxalbari village in Darjeeling district of West Bengal. It has spread to Bihar, Odisha, Andhra Pradesh and Chhattisgarh. It aims to capture political power through armed struggle to install the so called people's government.
- Hinterland terrorism: The terrorist activities that have been taking place all across India. Examples: Militancy in Punjab in eighties, 1993 Bombay serial blasts, Parliament attack (New Delhi) in 2001, Akshardham Temple (Gujarat) attack in 2002, Mumbai Attacks in 2008, Pathankot attack (Punjab) in 2016.

Reasons for spread of terrorism:

- **Indoctrination:** The religious belief has become a key means of indoctrinating and training wouldbe terrorists. Extremists use websites and social media to recruit and radicalise individuals through videos and propaganda. Suicide terrorism, selfsacrifice, or martyrdom has been organized and perpetrated by groups with religious motivations.
- Sophisticated **Technology:** communication- electronic media, print media, social media, and internet helps in faster promotion of terrorist ideology and hate campaign across international borders. Websites and social media messages are used to provide advice and

- instructions on how to plan and prepare for attacks, acting as a "virtual training camp" or ideas forum. Other technologies available to conduct acts of terror are mobile phones, satellite phones and GPS systems.
- Feeling of alienation and deprivation among the local people, violation of human rights, abuse of dignity of life, disconnect with mainstream communities, discontent against government.
- Porosity of border with neighbouring countries-Bangladesh, Myanmar, Bhutan, Nepal. Some of it is due to difficult terrain and some are due to bilateral arrangements between the governments.
- Evasion of land ceiling laws, non-regularization of traditional land rights, land acquisition without appropriate compensation and rehabilitation, disruption of age old tribal-forest relationship.
- Links between terrorism and organised crime to earn easy money. Easy availability of arms and ammunition.
- Developmental deficit: Unemployed and poor youths with high aspiration become the victim of trap set by the terrorist groups who lure them with short term gains of money, food, clothes, shelter and in return ask them to execute terrorist acts like- suicide car bombing.

Institutional framework tackle to terrorism:

- National Investigation Agency (NIA) is a central agency established by Government to combat terror in India. It acts as the Central Counter Terrorism Law Enforcement Agency. The agency is empowered to deal with terror related crimes across states without special permission from the states. It came into existence with the enactment of the National Investigation Agency Act 2008 by the Parliament of India on 31 December 2008. NIÁ was created after the 2008 Mumbai terror attacks as need for a central agency to combat terrorism was realised.
- NATGRID (National Intelligence Grid) is an intelligence sharing network that collates data from the standalone databases of the various agencies and ministries of the government. It is a counter



terrorism measure that collects and collates a host of information from government databases including tax and bank account details, credit card transactions, visa and immigration records and itineraries of rail and air travel.

- National Security Guard (NSG) is a Special Forces unit under the Ministry of Home Affairs (MHA). It was raised in 1984, following Operation Blue Star and the assassination of Indira Gandhi for combating terrorist activities with a view to protect states against internal disturbances.
- Anti-Terrorism Squad (ATS) is a special police force raised to combat terror. It is set up in several states - Maharashtra, Gujarat, Kerala, Uttar Pradesh, Rajasthan and Bihar.

Legal framework to tackle terrorism:

- **Terrorist and Disruptive Activities (Prevention)** Act: Commonly known as TADA, was antiterrorism law which was in force between 1985 and 1995 under the background of the Punjab insurgency and was applied to whole of India. It came into effect on 23 May 1985. It was renewed in 1989, 1991 and 1993 before being allowed to lapse in 1995 due to increasing unpopularity after widespread allegations of abuse.
- Prevention of Terrorism Act, 2002 (POTA): It was an Act passed by the Parliament in 2002, with the objective of strengthening anti-terrorism operations. The Act was enacted due to several terrorist attacks that were being carried out in India and especially in response to the attack on the Parliament. The Act replaced the Prevention of Terrorism Ordinance (POTO) of 2001 and the Terrorist and Disruptive Activities (Prevention) Act. The Act was repealed in 2004 by government.

At present, the legislations in force to check terrorism in India are the National Security Act, 1980 and the Unlawful Activities (Prevention) Act, 1967.

National Security Act, 1980: The National Security Act is a stringent law that allows preventive detention for months, if authorities are satisfied that a person is a threat to national security or law and order.

The grounds for preventive detention of a person include:

- Acting in any manner prejudicial to the defence of India, the relations of India with foreign powers, or the security of India.
- Regulating the continued presence of any foreigner in India or with a view to making arrangements for his expulsion from India.
- Preventing them from acting in any manner prejudicial to the security of the State or from acting in any manner prejudicial to the maintenance of public order or from acting in any manner prejudicial to the maintenance of supplies and services essential to the community it is necessary so to do.
- Unlawful Activities (Prevention) Act, 1967: Aimed at effective prevention of unlawful activities associations in India. Its main objective is to make powers available for dealing with activities directed against the integrity and sovereignty of India.

Way forward:

A comprehensive approach is needed to tackle the terrorism. It requires effort from all stakeholdersgovernment, security agencies, civil society and

- Political: National interest should be supreme. It should be up and above the vote bank politics. All political parties should come forward together to take a call to combat terrorism in all its forms.
- **Legal:** we need to have very stringent laws against terrorism and fast track courts which can deliver judgement within 3-4 months.
- **Police:** Strengthening the state police by enhancing their training capabilities and providing them with modern equipment for surveillance, investigation and operation.
- **Media:** the media often indulges in needless debates on such issues which are of importance from point of view of national security. In a democracy, debate is always welcome but on some issues, the media should take a more dispassionate view.
- **Public:** the general public needs to be educated about the evil designs of our neighbouring countries. Both the majority and minority communities should promote interreligious harmony and work together for peace.



Practice Ouestion

In the light of recent terrorist attack in a mosque in Christchurch, New Zealand, discuss the causes and impacts of such incidents. What are the existing provisions in India to deal with such situations and what more needs to be done?



SECTION: B (PRELIMS) CURRENT AFFAIRS

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SCORPENE SUBMARINE KHANDERI

O CONTEXT

The Navy is set to induct the second Scorpene submarine Khanderi by early May.

ABOUT

Scorpene-class submarines

- These are a class of diesel-electric attack submarines jointly developed by the French Direction des Constructions Navales (DCN) and the Spanish company Navantia, and now by Naval Group.
- It features diesel propulsion and an additional air-independent propulsion (AIP).

More on News

- Mazagon Dock Limited (MDL), Mumbai, is manufacturing six Scorpene submarines under technology transfer from Naval Group of France under a 2005 contract worth \$3.75 bn.
- The entire project is expected to be completed by 2020.
- The first submarine of the class Kalvari joined service in December 2017.
- Khanderi was launched into water in January 2017 and has since been undergoing a series of trials.
- The third in the Scorpene series Karanj which was launched in January last year is in advanced stage of trials and could be ready for induction by year end.
- The fourth submarine Vela is ready to be launched into water for trials around the same time depending on the ocean tide.
- The last two submarines Vagir and Vagsheer are in advanced stages of manufacturing on the assembly line.
- The fifth submarine is in the final stages of being booted together. The 'Boot Together' is where the five separate sections are welded together to form the submarine.

Indian Navy's Submarine Programme

- Kalvari Class: INS Kalvari is the first of the six Scorpene class submarines built under Project 75.
- **Chakra Class:** INS Chakra is an 8,140-tonne Akula class, nuclear-powered submarine. The submarine was commissioned in April, 2012.
- **Sindhughosh Class:** These are the Kilo class diesel-electric submarines. They are designated 877EKM, and were built under a contract between Rosvooruzhenie and the Ministry of Defence (India).
- The submarines have a displacement of 3,000 tonnes, a maximum diving depth of 300 meters, top speed of 18 knots, and are able to operate solo for 45 days with a crew of 53
- **Shishumar Class:** The Shishumar class vessels (Type 1500) are diesel-electric submarines. These submarines are developed by the German yard Howaldtswerke-Deutsche Werft (HDW).
- These submarines have a displacement of 1660 tons when surfaced, a speed of 22 knots (41 km/h), and a complement of 40 including eight officers. The submarines have the provision of an IKL-designed escape system.
- The first two of these vessels were built by HDW at Kiel, while the remainder have been built at Mazagon Dock Limited (MDL) Mumbai. The ships were commissioned between 1986 and 1994.
- All Submarines are prefixed with letters 'INS' when being referred to by their Indian Navy designated Names.





CYCLONE 'IDAI'

OCONTEXT

 The Indian Navy was the first to respond cyclone Idai, a category 4 tropical storm, which hit southern Africa, is the worst weather-related disaster to hit the southern hemisphere.

ABOUT

More on News

- Cyclone 'IDAI' made landfall at Beira, Mozambique in early hours of 15 March 2019 causing widespread damage and loss of human life in the Central and Northern provinces of the country.
- The situation is being monitored closely and the Indian Navy is prepared to render all necessary assistance to the local population in Mozambique.
- Ships of First Training squadron of Indian Navy, Sujata, Sarathi and Shardul, operating
 in Southern Indian Ocean were diverted to Port Beira in Mozambique based on the
 request of the Government of Mozambique.
- The Indian Navy has made HADR (Humanitarian Assistance and Disaster Relief) assistance a major tool of its foreign cooperation initiative in the Indian Ocean Region (IOR) which has a high incidence of natural disasters.

Tropical Cyclones

- Tropical Cyclones are low pressure systems that form over warm tropical waters and have gale force winds (sustained winds of 63 km/h or greater and gusts in excess of 90 km/h) near the centre.
- They derive their energy from the warm tropical oceans and do not form unless the sea-surface temperature is above 26.5°C.
- Once formed, they can persist over lower sea-surface temperatures.
- Tropical cyclones can persist for many days and may follow quite erratic paths. They
 usually dissipate over land or colder oceans.
- The circular eye or centre of a tropical cyclone is an area characterised by light winds and often by clear skies. Eye diameters are typically 40 km but can range from under 10 km to over 100 km.
- The eye is surrounded by a dense ring of cloud about 16 km high known as the eye wall which marks the belt of strongest winds and heaviest rainfall
- Tropical Cyclones are dangerous because they produce destructive winds, heavy rainfall
 with flooding and damaging storm surges that can cause inundation of low-lying
 coastal areas.

Categories of tropical cyclone:

- The severity of a tropical cyclone is described in terms of categories ranging from 1 to 5 related to the zone of maximum winds. Using this severity scale, communities will be able to assess the degree of cyclone threat and take appropriate action. A gale is a strong wind, typically used as a descriptor in nautical contexts.
 - **Category 1:** Less than 125 km/h Gales Minimal house damage. Damage to some crops, trees and caravans. Boats may drag moorings.
 - Category 2: 125 164 km/h Destructive winds Minor house damage. Significant damage to signs, trees and caravans. Heavy damage to some crops. Risk of power failure. Small boats may break moorings.
 - **Category 3:** 165 224 km/h Very destructive winds Some roof and structural damage.
 - Category 4: 225 279 km/h Very destructive winds Significant roofing and structural damage
 - **Category 5:** More than 280 km/h extremely destructive winds Extremely dangerous with widespread destruction.



ITALY TO JOIN BRI

O CONTEXT:

- Italy becomes the first member of the Group of Seven (G7) major industrialised nations to join China's "Belt and Road" infrastructure project (BRI), which is inspired by historic, centuries-old trade routes.
- Italy and China have attempted to revive the spirit of the ancient Silk Road by deepening their trade and investment ties.

• ABOUT:

- China considers OBOR and its components as Chinese wisdom and a Chinese approach
 to benefit those outside of China.
- According to Chinese academics and policy analysts, the BRI promises to integrate China's internal markets with those of its neighbours.
- Doing so will bring its neighbours closer to China geopolitically and bring stability to the region.
- By increasing economic activity in China's border regions, such as Xinjiang and Tibet, the Belt and Road Initiative will lessen the appeal that separatist ideology might have to the residents.

Is OBOR in the doldrums?

- Investment decisions often seem to be driven by geopolitical needs instead of sound financial sense.
- Large state-owned enterprises and government policy provide more than 95 percent of BRI funding. BRI is not a brand investor's trust.
- Prolonged exposure to the BRI process has driven opposition to Chinese investment and geopolitical influence across the region.

Why has Italy chosen to join BRI?

- Italy's populist government is eager for such initiatives to get underway swiftly as it battles to revitalise a sickly economy, which has slipped into its third recession in a decade.
- Italian and leading Global think tanks have been stressing on equity as a firm base for BRI. The Silk Road must be a two-way street and not only trade must travel along it, but also talent, ideas and knowledge.

Signalling fear around BRI:

- China is taking over Zambia's international airport after a debt instalment default, while Congo is in deep debt due to China-funded projects.
- After terms are reached with a host country, funds are transferred directly into the Beijingbased bank accounts of China's state-owned enterprises, which build the project often with Chinese materials. This is a model Beijing has employed extensively in Africa.
- Chinese governments and state-owned enterprises are willing to lend so much that BRI investments threaten to drive some countries towards default, the central government is not willing to be the lender of last resort for the countries thus driven.
- Like Pakistan last month, most countries forced to this extremity will have only one option left: come crawling to the International Monetary Fund in hopes of a solution.
- What it looks like is that the end result of Chinese investment is an even stronger dependence on the Western-led financial system.

BRI is a sign of strategic dysfunction:

- There is no evidence that it has reshaped Asia's geopolitical realities.
- The countries that have benefited most from it are those that already had strong geopolitical reasons for aligning themselves with Chinese power, such as Cambodia and Pakistan





REAL ESTATE INVESTMENT TRUST

O CONTEXT

• The recent initial public offering (IPO) of India's first Real Estate Investment Trust (Embassy REIT) was subscribed 2.5 times, with the share sale generating a demand of over Rs 5,300 crore.

ABOUT

More on news

- The portion reserved for high net-worth individuals and retail investors was subscribed 3.1 times.
- REIT had also raised capital by allocating units to institutional investors as part of its anchor book allocation.
- The anchor book is that part of an IPO which bankers can allot to institutional investors on a discretionary basis.
- The Embassy Office Parks REIT IPO, backed by global private equity firm Blackstone Group LP and Bengaluru-based developer Embassy Property Developments Pvt. Ltd.

What is Real Estate Investment Trust?

- REIT is a process to generate funds from a lot of investors, to directly invest in properties like offices, residential units, hotels, shopping centers, warehouses, etc.
- All REITs will be listed with the stock exchanges, as they would be structured like trusts.
- Consequently, REIT assets will be held with independent trustees for unit holders/ investors.

What is the role of the trustees in a REI?

 The trustees of REITs have defined duties, which typically involve ensuring compliance and adherence to all applicable laws that protect the rights of the investors.

What are the objective of REITs?

- It aims to provide the investors with dividends that are generated from the capital gains
 accruing from the sale of the commercial assets.
- The trust distributes 90% of the income among its investors via dividends.
- Apart from minimum entry level, a REIT is supposed to provide diversified and safe investment opportunities with reduced risks and under a professional management, to ensure maximum return on investments.

Advantages:

- Income dividends: 90% of distributable cash, at least twice in a year.
- Transparency: REITs will showcase the full valuation on a yearly basis and will also update
 it on a half-yearly basis.
- Diversification: According to the guidelines, REITs will have to invest in a minimum of two projects with 60% asset value in a single project.
- Lower risk: At least 80% of the assets will have to be invested into revenue-generating and completed projects. The remaining 20% include under construction projects, equity shares of the listed properties, mortgage-based securities, equity shares that derive a minimum of 75% of income from government securities or G-secs, money market instruments, cash equivalents and real estate activities.

BACKGROUND

- In 2014, the Securities and Exchange Board of India (Sebi) had amended the Sebi (Real Estate Investment Trusts) Regulations, 2014, (REIT Regulations), which allowed them to issue debt securities apart from raising equity.
- The amendment was part of the government's move to revamp the real estate sector by allowing more investor participation.
- The listing of India's first REITs was one of the most awaited events for the real estate sector as it has taken over a decade and half to come to fruition.



- The over subscription of REITs is, therefore, a very encouraging sign for the real estate sector at large, and especially for the commercial segment.
- This is not just India's first REITs offering, but also the largest in Asia.

WORLD COST OF LIVING SURVEY 2019

O CONTEXT

 The Economist Intelligence Unit has released the report of the Worldwide Cost of Living Survey 2019.

ABOUT

World Cost of Living Report

- The Worldwide Cost of Living is a biannual Economist Intelligence Unit survey which
 compares more than 400 individual prices across over 150 products and services in cities
 around the world.
- These include food, drink, clothing, household supplies and personal care items, home rents, transport, utility bills, private schools, domestic help and recreational costs.

Highlights of the Report

- For the first time three cities share the title of the world's most expensive city Singapore,
 Hong Kong and Paris.
- This year's top ten is largely split between Asia and Europe, with Singapore representing the only city that has maintained its ranking from the previous year.
- Three Indian cities New Delhi, Bengaluru and Chennai, are among the cheapest cities in the world.
- India is tipped for rapid economic expansion, but in per-head terms, wage and spending growth will remain low. Income inequality means that low wages are the norm, limiting household spending and creating many tiers of pricing as well as strong competition from a range of retail sources.
- Moreover, in India cheap and plentiful supply of goods into cities from rural producers with short supply chains as well as government subsidies on some products, has kept prices down, especially by Western standards.
- Syria's capital, Damascus is the cheapest city in the world. Joining Damascus at the bottom is Venezuela's capital, Caracas and Kazakhstan's business centre, Almaty, in the second and third position respectively.
- Others in the 10 cheapest cities list include Lagos at the 4th place, Bengaluru (5th), Karachi (6th), Algiers (7th), Chennai (8th), Bucharest (9th) and New Delhi (10th).
- Although the Indian subcontinent remains structurally cheap, instability is becoming an increasingly prominent factor in lowering the relative cost of living of a location. This means that there is a considerable element of risk in some of the world's cheapest cities.
- Singapore retained its title as the world's most expensive city for the fifth consecutive year. Singapore was ranked ahead of Paris placed second on the list, Zurich (3rd) and Hong Kong (4th).
- Oslo is the 5th most expensive city in the world, followed by Geneva (6th), Seoul (7th), Copenhagen (8th), Tel Aviv (9th) and Sydney (10th).
- According to the Worldwide Cost of Living 2018 survey South Asian cities, particularly those in India and Pakistan offers the best value for money.

Economic Intelligence Unit

- It is the world leader in global business intelligence.
- It helps businesses, the financial sector and governments to understand how the world is changing and how that creates opportunities to be seized and risks to be managed.





 It helps to produce the highest-quality research, analysis and data about countries, cities, industries and companies, and our consultancy, advisory and networking solutions help our clients to understand and navigate the toughest business challenges.

AURORAS

OCONTEXT

Geostorm offers Northern USA rare chance to see aurora borealis.

ABOUT

More on news

- A solar flare that erupted on March 20 and made the National Oceanic and Atmospheric Administration to issue a G2 watch, or moderate geostorm watch.
- The flare bends around the Earth's natural magnetic field, and slammed into the poles at either end of the planet, which supercharged the northern lights and pushed it deeper.

What is an Aurora?

 Polar lights (auroras) are a natural phenomenon. In the North Pole, it is called an aurora borealis or northern lights. In the South Pole, it is called aurora australis or the southern lights.

What makes this happen?

- Even though auroras are best seen at night, they are actually caused by the sun.
- The protective magnetic field around Earth shields us from most of the energy and particles, and we don't even notice them.
- During coronal mass ejection (kind of solar storm) the sun burps out a huge bubble of electrified gas that can travel through space at high speeds.
- When a solar storm comes toward earth, some of the energy and small particles can travel down the magnetic field lines at the north and south poles into upper Earth's atmosphere.

Do other Planets get auroras?

- They sure do! If a planet has an atmosphere and magnetic field, they probably have auroras.
- The gas giants in our solar system (Jupiter, Saturn, Uranus and Neptune) each have thick atmospheres and strong magnetic fields, and each have auroras — although these auroras are a little different from Earth's, given they are formed under different conditions.

What are Pulsating Auroras sometimes seen in news?

- Sometimes on a dark night near the poles, the sky pulses a diffuse glow of green, purple and red. Unlike the long, shimmering veils of typical auroral displays, these pulsating auroras are much dimmer and less common.
- While scientists have long known auroras to be associated with solar activity, the precise mechanism of pulsating auroras was unknown.
- According to NASA's THEMIS Mission and Japan's Arase satellite mission, it is the chirping waves that rhythmically pulse the particles that create the auroras.
- The magnetosphere is home to a type of plasma wave known as whistler mode chorus.
- These waves have characteristic rising tones reminiscent of the sounds of chirping birds and are able to efficiently disturb the electrons.
- When these waves make their appearance within the magnetosphere, some of the electrons scattered by the wave careen down into Earth's atmosphere, causing the pulsating auroras.



Magnetosphere

- It is that area of space, around a planet, that is controlled by the planet's magnetic field.
- The shape of the Earth's magnetosphere is the direct result of being blasted by solar wind. The solar wind compresses its sunward side to a distance of only 6 to 10 times the radius of the Earth.
- A supersonic shock wave is created sunward of Earth called the Bow Shock.
- Most of the solar wind particles are heated and slowed at the bow shock and detour around the Earth in the Magnetosheath.
- The solar wind drags out the night-side magnetosphere to possibly 1000 times Earth's radius; its exact length is not known.
- This extension of the magnetosphere is known as the Magnetotail. The outer boundary of Earth's confined geomagnetic field is called the Magnetopause.
- The Earth's magnetosphere is a highly dynamic structure that responds dramatically to solar variations.

THEMIS MISSION

 NASA's Time History of Events and Macroscale Interactions during Substorms (THEMIS) aims to resolve one of the oldest mysteries in space physics, namely to determine what physical process in near-Earth space initiates the violent eruptions of the aurora that occur during substorms in the Earth's magnetosphere.

Arase Mission/ERG

- ERG is a Japanese (JAXA/ISAS) STP (Solar Terrestrial Physics) minisatellite mission into geospace focused on the formation of the radiation belts associated with magnetic storms.
- The aim is to elucidate acceleration and loss mechanisms of relativistic particles in the inner magnetosphere during space storms.

CERTIFICATION STANDARD FOR SUSTAINABLE FOREST MANAGEMENT (SFM)

O CONTEXT

• India's first forest-certification scheme gets global recognition as Geneva-based nonprofit recently decided to endorse the Certification Standard for Sustainable Forest Management designed for Indian forests.

ABOUT More on news

• The council of Programme for Endorsement of Forest Certification (PEFC), a Genevabased non-profit, has decided to endorse the Certification Standard for Sustainable Forest Management (SFM) developed by Network for Certification and Conservation of Forests (NCCF), an Indian non-profit organisation.

What is Forest Management Certification and why is it Important?

- Forest certification is a global movement initiated in 1990s after Rio Earth Summit.
- It is a market-based non-regulatory conservation tool designed to promote sustainable management of forests and trees outside forests by an independent third party.
- As several developed countries have put trade restrictions on import of non-certified timber, non-timber forest products and wood-based goods into their countries, getting sustainable forest management certificates has become mandatory for exports.



- In fact, forest-based industries in India, particularly those for paper, boards, plywood, medium density fibreboard, furniture and handicrafts etc, have been pushing for forest certification to enhance their market accessibility to western markets including European Union and USA.
- There are currently two mainstream operational Forest Management Certification schemes available on a global level; FSC (Forest Stewardship Council) launched in 1993, PEFC (Programme for Endorsement of Forest Certification) founded in 1999.

What is NCCF?

- Network for Certification and Conservation of Forests (NCCF) is a non-profit organisation, registered as a Society, to have a globally aligned certification program developed within India.
- It came into existence in January 2015.
- NCCF is working towards developing national sustainability certification standards in diverse areas of natural resource management, majorly forestry, trees outside forests, protected areas and wetlands.
- It also includes non-wood forest products, quality planting material, ecotourism, biofuels, sustainable mining and water quality etc.
- Policy advocacy and diverse conservation activities are its other areas of focus.
- The NCCF has got support from the key forest based stakeholders such as the Ministry of Environment, Forest and Climate Change (MoEFCC).

Programme for Endorsement of Forest Certification (PEFC)

- PEFC is an international non-profit, non-governmental organization dedicated to promoting Sustainable Forest Management (SFM) through independent third-party certification.
- It works throughout the entire forest supply chain to promote good practice in the forest and to ensure that timber and non-timber forest products are produced with respect for the highest ecological, social and ethical standards.
- Through eco-label, customers and consumers are able to identify products from sustainably managed forests.
- As an umbrella organization, it works by endorsing national forest certification systems developed through multi-stakeholder processes and tailored to local priorities and conditions.
- With 44 endorsed national certification systems and over 300 million hectares of certified forests, PEFC is the world's largest forest certification system.
- Each national forest certification system undergoes rigorous third-party assessment against our unique Sustainability Benchmarks to ensure consistency with international requirements.
- India is the National Governing Body Member of PEFC.

HONEY AS POLLUTION DETECTOR

O CONTEXT

- Recently, scientists in Canada have reported that honey can be a sensitive indicator of air quality.
- Organic things carry coded messages about their home environments, tree rings can tell scientists what the atmosphere was like when the tree was young. Similarly, lichens (unions of algae and fungi) can reveal local air pollution levels.



ABOUT

- A survey of urban beehives around Vancouver showed that the hives' honey contained minute levels of lead.
- And with urban hives growing in number, tracking their pollutant levels may offer an inexpensive way to monitor what's in the air all over the world.

How honey serves as a sensitive pollution detector:

- The chemistry of different samples can reveal where the honey came from.
- Volcanoes, river rocks, coal and other natural sources of lead have their own distinctive signatures, based on the ratio of different isotopes of the heavy metal in them.

Lichens can reveal local air pollution levels:

- Despite lichens' extraordinary adaptability and ability to survive in all kinds of environmental extremes, they are acutely sensitive to a major industrial atmospheric pollutant, sulphur dioxide.
- In the atmosphere, sulphur dioxide can be transformed into acid rain, which, surprisingly, does not damage lichens.
- Typically, lichens like it where the environment is moist and sunny at least some of the time, although many species of lichens can tolerate extremes of heat or cold, wetness or dryness.
- Slowly, the acids and other compounds produced and released by lichens, as well as the mechanical force of lichen growth, can disintegrate rocks and wood and turn them into soil.
- When conditions that favour growth are absent, they simply lie dormant until the condition improves.
- Approximately half the 20,000 known species of lichens produce compounds with antibiotic properties, many of which are used medicinally by native populations.

Tree-Rings and the coded messages they convey:

- A team led by scientists at the University of Arizona has attempted to connect the ongoing drought to an expansion of the tropics caused by climate change.
- The study reported that the northern edge of the tropics has moved up to 4 degrees north and 4 degrees south of its standard location of 30 degrees north latitude.
- This means that the dry regions at the edge of the tropics are becoming larger.
- Changes in the Earth's climate system affect the movement of the tropics.
- The team used the annual rings of trees from five different locations across the Northern Hemisphere to track the tropical belt's movement from the year 1203 to 2003.
- Each annual growth ring of a tree reflects the climate in the tree's location that year.

INDIAN FOREST ACT

• CONTEXT:

• The Ministry of Environment, Forest and Climate Change (MoEF&CC) has finalised the first draft of the comprehensive amendments to the Indian Forest Act, 1927 (IFA).

• ABOUT: Major highlights of the Draft:

- The idea behind this legislation is to facilitate increase of forest cover from about 24% now to 33% (a stated directive of government policy).
- Forest is defined to include "any government or private or institutional land recorded or notified as forest/forest land in any government record and the lands managed by government/community as forest and mangroves, and also any land which the central or state government may by notification declare to be forest for the purpose of this Act.





- The amendment defines community as "a group of persons specified on the basis of government records living in a specific locality and in joint possession and enjoyment of common property resources, without regard to race, religion, caste, language and culture
- "Village forests", according to the proposed Act, may be forestland or wasteland.
- It will be the property of the government and would be jointly managed by the community through the Joint Forest Management Committee or Gram Sabha.
- The legislation has proposed a forest development cess of up to 10% of the assessed value of mining products removed from forests, and water used for irrigation or in industries.
- This amount would be deposited in a special fund and used "exclusively for reforestation; forest protection and other ancillary purposes connected with tree planting, forest development and conservation.
- The amendment also introduces a new category of forests production forest.
 These will be forests with specific objectives for production of timber, pulp, pulpwood, firewood, non-timber forest produce, medicinal plants or any forest species to increase production in the country for a specified period.

Other provisions:

- The amendments specifically deal with the Forest Rights Act, 2006 (FRA).
- If the state government, after consultation with the central government, feels that the rights under FRA will hamper conservation efforts, then the state "may commute such rights by paying such persons a sum of money in lieu thereof, or grant of land to maintain the social organisation of the forest dwelling communities or alternatively set out some other forest tract of sufficient extent, and in a locality reasonably convenient, for the purpose of such forest dwellers.

Indian Forest Act, 1927

- The act sought to consolidate and reserve the areas having forest cover, or significant wildlife.
- It also aimed to regulate movement and transit of forest produce, and duty leviable on timber and other forest produce.
- It also defined the procedure to be followed for declaring an area as Reserved Forest, Protected Forest or a Village Forest.
- The act has detailed definition of what a forest offence is, what are the acts prohibited inside a Reserved Forest, and penalties leviable on violation of the provisions of the Act.

NEED TO GIVE PERMANENT STATUS TO FINANCE COMMISSION

O CONTEXT

• Reserve Bank of India governor Shaktikanta Das called for a permanent status to Finance Commission and a robust expenditure planning without compromising on fiscal consolidation as fiscal federalism gathers momentum in the era of uniform goods and services tax (GST).

ABOUT Background:

- Over past several decades, Finance Commissions have adopted different approaches
 with regard to principles of tax devolution, grants to be given to states and fiscal
 consolidation issues.
- While at one level, there has to be a framework for fresh and innovative thinking by every Finance Commission; at another level, there is a need to ensure broad consistency



between Finance Commissions so that there is some **degree of certainty** in the flow of funds, especially to the states.

• This has become even more critical in the post GST scenario and there has been a demand to bring in continuity as well as change between Finance Commissions.

Fifteenth Finance Commission

- The Government of India, with the approval of President of India, has constituted Fifteenth Finance Commission in pursuance of clause (1) of article 280 of the Constitution, read with the provisions of the Finance Commission (Miscellaneous Provisions) Act, 1951 w.e.f. 27th November, 2017.
- The Commission will make recommendations for the five years commencing on April 1, 2020.
- Shri. N.K.Singh is the head of 15th Finance Commission.

How this permanent status accord intends to boost local governance:

- The principle of decentralisation works better when powers and functions are delegated based on which tier of governance is best suited to fulfil that responsibility.
- State Finance Commissions are constituted every five years as per the mandate in Article 243I of the Constitution.
- Although the provision under Article 243I is identical to the provision under Article 280, its implementation has fallen short.

What could be the model (to be replicated) by FC if given Permanent status?

- Co-operative federalism has opened new chapters in co-operation between Centre and States. The GST Council is functioning on the principle of shared sovereignty.
- The sacrifice of **fiscal autonomy** at both levels of government in favour of the Council needs to be seen as a **'trade-off'** so as **to reap the benefits of tax harmonisation.**
- Indian model of GST preserves the essence of Indian federalism.

How would the FC work (Post availing the status of Permanency):

- The Commission can function as a leaner entity in the intervening period till the next Finance Commission is set up in a full-fledged manner.
- This would be similar to the role of Lok Sabha Speaker who otherwise does not resign from the post and continues to discharge positional functions till the newly constituted Lok Sabha meets for the first time.
- During the intervening period, the FC can also address issues arising from implementation of the recommendations of the Finance Commissions.
- This will also help add knowledge and capacities and boost Fiscal prudence. The upcoming FC will be able to get a clear hearing on the challenges and rate of effectiveness of its likely recommendations.
- If the Union Finance Commission gets permanent status, it will boost the dismal conditions of various State Finance Commissions. In their effectiveness, lies the efficiency and effectiveness of the state, PRI and Municipalities' financial health.
- To reciprocate, the government can mull over equating FC with that of Election Commission of India.

RBI, NCLAT AND NPA

CONTEXT

• The Reserve Bank of India requested the National Company Law Appellate Tribunal to modify its order restraining banks from classifying IL&FS and its group companies as NPAs, contending that there was an overlap of power.



ABOUT

What is the 'order' in question?

 On February 25, NCLAT had said "We make it clear that due to non-payment of dues by the 'Infrastructure Leasing & Financial Services Limited' or its entities including the 'Amber Companies', no financial institution will declare the accounts of 'Infrastructure Leasing & Financial Services Limited' or its entities as 'NPA' without prior permission of this Appellate Tribunal".

IL&FS case, NCLAT and RBI:

- The Reserve Bank moved the NCLAT seeking modification of its order that restrained banks from declaring accounts of IL&FS and its group companies as NPAs.
- The NCLAT pressed that the RBI cannot restrict it from prohibiting banks from 'asset classification' and observed that any change in this order would upset the entire resolution process of the IL&FS and 300 group companies, which are sitting on the huge debt amounting to over Rs 90,000 crore.
- The NCLAT had asked the banking sector regulator (RBI) to clarify if its NPA norms and powers come in the way of successful resolution of IL&FS companies.
- National Company Law Appellate Tribunal (NCLAT) was constituted under Section 410
 of the Companies Act, 2013 for hearing appeals against the orders of National Company
 Law Tribunal(s) (NCLT), with effect from 1st June, 2016.
- NCLAT is also the Appellate Tribunal for hearing appeals against the orders passed by NCLT(s) under Section 61 of the Insolvency and Bankruptcy Code, 2016 (IBC),
- NCLAT is also the Appellate Tribunal to hear and dispose of appeals against any direction issued or decision made or order passed by the Competition Commission of India (CCI)

IBC and NPA:

- The entire resolution process is based on the principles enunciated in the Insolvency and Bankruptcy Code.
- Under the plan, the government has categorised IL&FS group companies into green, amber and red based on their respective financial positions.
- Companies under the green category would be those that continue to meet their payment obligations.
- Amber category would be for those companies that will not be able to meet their obligations but can meet only operational payment obligations to senior secured financial creditors.
- Amber category entities "are permitted to make only payments necessary to maintain and preserve the going concern".
- Companies falling in the red category are the entities which cannot meet their payment obligations towards even senior secured financial creditors.

Non-performing assets (NPA)

- An asset, including a leased asset, becomes non-performing when it ceases to generate income for the bank. A 'non-performing asset' (NPA) was defined as a credit facility in respect of which the interest and/ or instalment of principal has remained 'past due' for a specified period of time.
- An amount due under any credit facility is treated as "past due" when it has not been
 paid within 30 days from the due date. Due to the improvements in the payment
 and settlement systems, recovery climate, upgradation of technology in the banking
 system, etc., it was decided to dispense with 'past due' concept, with effect from
 March 31, 2001.
- Accordingly, as from that date, a Non-performing Asset (NPA) shall be an advance where interest and/or instalment of principal remain overdue for a period of more than 180 days in respect of a Term Loan.



GRAPES 3 MOUN TELESCOPE

O CONTEXT

• For the first time in the world, researchers at the GRAPES-3 muon telescope facility in Ooty have measured the electrical potential, size and height of a thundercloud that passed overhead on December 1, 2014.

ABOUT

More on news

- At 1.3 gigavolts (GV), this cloud had 10 times higher potential than the previous record in a cloud.
- This is not because clouds with such high potentials are a rarity, but rather, because the methods of detection have not been successful so far.
- Clouds have negative charges along their lower side and positive charges on top and can be several kilometres thick.
- Using a computer simulation and the observed muon intensity variations, the group worked out the relationship with the electric potential of the cloud.
- Scientists calculated that the potential of the cloud they were studying was approximately
 1.3 GV.
- Until now, no one has ever measured potential, size and height of a thundercloud simultaneously. That is the reason for all the excitement.

What is GRAPES 3 Experiment?

- The GRAPES-3 experiment located at Ooty in India started as a collaboration of the Tata Institute of Fundamental Research, Mumbai, India and the Osaka City University, Osaka, Japan.
- At present many institutions from India and Japan are in collaboration.
- GRAPES-3 (Gamma Ray Astronomy PeV EnergieS phase-3) is designed to study cosmic rays with an array of air shower detectors and a large area muon detector.
- It aims to probe acceleration of cosmic rays in the following four astrophysical settings. These include acceleration of particles to, (i) $\sim \! 100$ MeV in atmospheric electric fields through muons, (ii) $\sim \! 10$ GeV in Solar system through muons, (iii) $\sim \! 1$ PeV in our galaxy through nuclear composition of cosmic rays, (iv) $\sim \! 100$ EeV in nearby universe through measurement of diffuse γ -ray flux.
- The GRAPES-3 is located at N11.4o, E76.7o, and 2200m above mean sea level. The observations began with 217 plastic scintillators and a 560 m² area muon detector in 2000
- The scintillators detect charged particles contained in extensive air showers produced by interaction of high energy cosmic rays in the atmosphere.
- At present the array is operating with \sim 400 scintillators that are spread over an area of 25,000 m². The energy threshold of muon detectors is 1 GeV.

Mouns

- Muons and other particles are produced when cosmic rays bombard air particles surrounding the earth.
- The muons produced can have positive or negative charge. When a positively charged muon falls through a cloud, it loses energy.
- If its energy falls below 1 giga electron volt (GeV), which is the threshold of detection of the GRAPES-3 muon telescope, it goes undetected.
- On the contrary, a negatively charged muon gains energy when falling through the cloud and gets detected.





• Since there are more positive than negative muons produced in nature, the two effects don't cancel out, and a net change in intensity is detected.

HAYABUSA 2 MISSION OF JAXA

© CONTEXT

- Japan's Hayabusa2 spacecraft will follow up last month's touchdown on a distant
 asteroid with another risky mission dropping an explosive on the asteroid to make
 a crater and then collect underground samples for possible clues to the origin of the
 solar system.
- Hayabusa2 made history on 22 February when it successfully touched down on the boulder-strewn asteroid and collected some surface fragments.

ABOUT

More on news

- Hayabusa2 is to drop a copper impactor the size of a baseball and weighing 2 kilograms (4.4 pounds) on the asteroid on April 5 to collect samples from deeper underground where they had not been exposed to the sun or space rays.
- The new mission will require an immediate evacuation of the spacecraft to the other side of the asteroid so it won't get hit by flying shards from the blast.
- While moving away, Hayabusa2 will leave a camera to capture the outcome.
- The mission will allow JAXA scientists to analyze details of a crater to find out the history
 of the asteroid.
- Hayabusa2 will start descending toward the asteroid the day before to carry out the mission from its home position of 20 kilometers (12 miles) above.
- It will drop a cone-shaped piece of equipment containing explosives that will blast off a copper plate on the bottom.
- It will turn into a ball and slam into the asteroid at the speed of 2 kilometers (1.2 miles) per second.

What is Hayabusa 2 Mission?

- Hayabusa2 is an asteroid Hyugu sample-return mission operated by the Japanese space agency, JAXA.
- It follows on from Hayabusa mission which returned asteroid samples in 2010.
- It was launched in December 2014 and rendezvoused with near-Earth asteroid 162173 Ryugu in June 2018.
- It is in the process of surveying the asteroid for a year and a half, departing in December 2019, and returning to Earth in December 2020.
- Hayabusa2 carries multiple science payloads for remote sensing, sampling, and four small rovers that will investigate the asteroid surface to inform the environmental and geological context of the samples collected.

Asteroid 162173 Ryugu

- It is a primitive carbonaceous near-Earth asteroid.
- Carbonaceous asteroids are expected to preserve the most pristine materials in the Solar System, a mixture of minerals, ice, and organic compounds that interact with each other.
- It is expected to provide additional knowledge on the origin and evolution of the inner planets and, in particular, the origin of water and organic compounds on Earth, all relevant to the origin of life on Earth.



DRY EYE SYNDROME

O CONTEXT

- For the first time, a large-scale, hospital-based study in India involving over 14.5 lakh patients had found the **incidence** (number of new cases occurring each year) **of dry eye disease to be 21,000 (1.46%).**
- With a large ageing population, growing middle-class and chronic nature of the disease, India is on the verge of a dry eye disease epidemic.

ABOUT

Dry Eye Syndrome

- It is caused by a chronic lack of sufficient lubrication and moisture on the surface of the eye.
- Consequences of dry eyes range from subtle but constant eye irritation to significant inflammation and even scarring of the front surface of the eye.
- The disease tends to be progressive with age.
- The onset of dry eye disease is early in men than in women. In men, the age of disease onset is early 20s and 30s compared with 50s and 60s in women.
- Hormonal imbalance could be a likely reason for higher cases in women in their 50s and 60s
- Once corneal damage becomes irreversible it can lead to visual impairment and even blindness. Early diagnosis and treatment is therefore important.
- The disease is hugely underdiagnosed in India.

Causes:

- Age, urban residence, occupation and socio-economic affluence were taken as high risk-factors for developing the disease.
- It could occur due to inadequate tear production (aqueous deficient), tear film instability due to evaporation or mixed type.
- Over 20.5% had dry eye disease caused by inadequate tear production, 35.5% due to tear film instability (evaporative) and 40% being mixed.

Factors Associated With Dry Eye Syndrome:

- **Computer use:** When working at a computer or using a smartphone or other portable digital device, one tends to blink eyes less fully and less frequently, which leads to greater tear evaporation and increased risk of dry eye symptoms. At over 12,500 cases, the incidence in urban areas was higher than in rural areas (over 8,700 cases).
- Indoor environment: Air conditioning, ceiling fans and forced air heating systems all can decrease indoor humidity and/or hasten tear evaporation, causing dry eye symptoms
- Outdoor environment: Arid climates and dry or windy conditions increase dry eye risks.
- **Aging:** Dry eye syndrome can occur at any age, but it becomes increasingly more common later in life, especially after age 50.

ICE STUPA STAMP

© CONTEXT

• The Chief Postmaster General, Jammu & Kashmir Circle released a 'Special Stamp Cover on Ice Stupa' during a function organised at the Ice Stupa site at Gangles in Leh.

ABOUT

More on news

 Over 12 villages in Ladakh have built ice Stupas this year to create awareness about depleting glaciers and effect on the ecology around the Himalayas.



 Ramon Magsaysay and Rolex award winner Sonam Wangchuk conceptualised this technique of water conservation.

Why Ice Stupas?

- Ladakh is a trans-Himalayan mountain desert in the extreme north of India with villages located at 2,700m to 4,000m altitudes.
- It is a cold desert with winter temperatures touching -30° C, and an average annual rain/snow fall of only 100 mm.
- Human settlements are almost always located around glacial streams which feed into the Indus and other rivers as tributaries.
- The key to human settlement in this cold desert is the art of diverting water from the streams through meticulously built canals toward deserts to grow crops like barley, wheat, vegetables and trees like apricots, apples, willow and poplar.
- Most villages face acute water shortage, particularly during the two crucial months of April and May when there is little water in the streams and all the villagers compete to water for their newly planted crops.
- By mid-June there is an excess of water and even flash flooding due to the fast melting of the snow and glaciers in the mountains.
- By mid-September all farming activities end, and yet a smaller stream flows throughout the winter steadily but wastefully going into the Indus River without being of use to anybody.
- The problem is getting worse with time as Himalayan glaciers are disappearing due to global warming and local pollution.

Ice Stupa Project

- The Students' Educational and Cultural Movement of Ladakh (SECMOL) Alternative
 Institute are making the ice stupa from artificial glaciers which store the wasting winter
 water in the form of Ice Mountains that melt and feed the farms when water is most
 needed by the farmers.
- This project has been initiated by His Holiness Drikung Skyabgon Chetsang Rinpochey and executed in partnership with SECMOL.
- To provide a platform for further innovations, the Himalayan Institute of Alternatives, (HIAL) has been established which has mandate to create Ice Stupas across the Ladakh region.

Technique

- The concept of artificial glaciers is not new to Ladakh. In earlier times people in the region
 used to have a process of 'grafting glaciers' in the very high reaches of mountains.
- The idea behind artificial glaciers is to freeze and hold the water that keeps flowing and wasting away down the streams and into the rivers throughout the winter.
- However, since these are based on horizontal ice formation, they need very high altitude locations (above 4,000m), constant maintenance and a north-facing valley to shade the ice from the spring sun.
- Seeing these problems and after discussions with Mr Norphel Sonam Wangchuk started working on a new approach in which the glaciers would be free of location, frequent maintenance and shading requirement etc.
- In the new model, this is achieved by freezing the stream water vertically in the form of huge ice towers or cones of 30 to 50m height that look very similar to the local sacred mud structures called Stupa or Chorten.
- These ice mountains can be built right next to the village itself where the water is needed.
 Very little effort or investment would be needed except for laying one underground pipeline from a higher point on the stream to the outskirts of the village.



WORLD HAPPINESS REPORT

OCONTEXT

The United Nations has released the World Happiness Report- 2019.

ABOUT

More on news

- The report was released by the Sustainable Development Solutions Network for the **United Nations**
- March 20 was designated as the World Happiness Day by the UN General Assembly in 2012.
- This is the 7th World Happiness Report. The first was released in April 2012 in support of a UN High level meeting on "Wellbeing and Happiness: Defining a New Economic Paradigm".
- That report presented the available global data on national happiness and reviewed related evidence from the emerging science of happiness.
- The report ranks countries on six key variables that support well-being: income, freedom, trust, healthy life expectancy, social support and generosity.
- The happiness study ranks the countries of the world on the basis of questions from the Gallup World Poll. The results are then correlated with other factors, including GDP and social security.
- This year's focus is on happiness and community: how happiness has been changing over the past dozen years, and how information technology, governance and social norms influence communities.
- In 2018 report, the theme was migration as one important source of global change, which revealed that each country's life circumstances, including the social context and political institutions were such important sources of happiness that the international ranking of migrant happiness was almost identical to that of the native born.

Highlights of the 2019 Report

- Indians are not as happy in 2019 as they were in 2018 and the country figures at 140th place, seven spots down from last year.
- The overall world happiness has fallen over the past few years, which has mostly been fuelled by a sustained drop in India.
- Finland has topped a global happiness ranking for the second year in a row.
- It beat Nordic peers Denmark, Norway and Iceland in a ranking of 156 countries by the United Nations Sustainable Development Solutions Network.
- The UN's seventh annual World Happiness Report also noted that there has been an increase in negative emotions, including worry, sadness and anger.
- Pakistan is ranked 67th, Bangladesh 125th and China is place at 93rd.
- People in war-torn South Sudan are the unhappy with their lives, followed by Central African Republic (155), Afghanistan (154), Tanzania (153) and Rwanda (152).

What is Gallup Poll?

- It is a global analytics and advice firm that helps leaders and organizations solve their most pressing problems.
- It focuses on the choices and mood of employees, customers, students and citizens in countries of the world.
- It tries to know what matters most to them at work and in life and how those priorities change over time.





United Nations Sustainable Development Solution Network

- The UN SDSN has been operating since 2012 under the auspices of the UN Secretary-General.
- SDSN mobilizes global scientific and technological expertise to promote practical solutions for sustainable development, including the implementation of the Sustainable Development Goals (SDGs) and the Paris Climate Agreement.
- The aim is to accelerate joint learning and promote integrated approaches that address the interconnected economic, social, and environmental challenges confronting the world.
- SDSN works closely with United Nations agencies, multilateral financing institutions, the private sector, and civil society.
- The organization and governance of SDSN aims to enable a large number of leaders from all regions and diverse backgrounds to participate in the development of the network
- It acts as the board of SDSN. Much of SDSN's work is led by National or Regional SDSNs, which mobilize knowledge institutions around the SDGs.
- Several Thematic Networks mobilize experts from around the world on the technical challenges of implementing the SDGs and the Paris Climate Agreement.
- SDSN has a small secretariat with offices in New York, New Delhi, and Paris.





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