

VISION IAS

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CURRENT AFFAIRS APRIL 2018

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1. POLITY AND CONSTITUTION

1.1. SIMULTANEOUS ELECTIONS

Why in News?

Recently, Law Commission has released a white paper on Simultaneous Elections.

About Simultaneous Elections (SE)

- It means structuring the Indian election cycle in a manner that elections to Lok Sabha and State Assemblies are synchronized together under which voters in a particular constituency vote for both State Assembly and Lok Sabha the same day.
- It does not mean that voting across the country for Lok Sabha and State Assemblies needs to happen on a single day

Related Information

- The idea of SE remerged in first Annual Report of Election Commission of India (1983) and later was furthered by Law Commission's report (1999) and 79th report of Parliamentary Standing Committee (2015).
- In 2017, a paper by NITI Aayog on SE was released discussing the relevance of the idea.
- Earlier, SEs were held in India till 1967 which was disrupted due to premature dissolution of Assemblies.
- Election to the third tier of democracy cannot be included in SE because-
 - It is a part of state list.
 - The number of local bodies is huge.

Some recommendations of the draft paper

- A definition of "simultaneous elections" may be added to Section 2 of the 1951 Act.
- Article 83 and 172 of the constitution (dealing with duration of both houses and state legislatures respectively) along with sections 14 and 15 of the 1951 Act (dealing with notification of general elections in both houses and state assemblies respectively), be appropriately amended. This would mean that the new Lok Sabha and assembly, constituted after mid-term elections, shall be only for the remainder of the term.
- The **Anti-defection Law'** laid down under paragraph 2(1) (b) of the **Tenth Schedule of the Constitution** be removed as an exception to prevent stalemate in the Assembly due to Hung Parliament.
- Sections 14 & 15 of RPA, 1951, be amended to extend the statutory limit of 6 months for the issuance of notification of general elections to provide the flexibility to Election Commission in conducting the SE.
- An **alternative to premature dissolution** of assembly due **to no-confidence motion** could be that the members while moving such an option may also put forward an option for forming an alternative government.
- Prime Minister/Chief Minister may be elected to lead the Lok Sabha/Assembly, by full house like electing the speaker of the Lok Sabha, providing stability to the government.

Need for SE

- Frequent elections lead to imposition of MCC over prolonged periods of time which often leads to policy paralysis and governance deficit in the form of suspended development programs, welfare schemes, capital projects etc.
- Elections lead to huge expenditures by various stakeholders like political parties, individual candidates, etc. The urge to spend more (than the set limit) to win elections is blamed as one of the key drivers for corruption and black-money in the country.
 - o On the part of government, elections require a whole set of administrative machinery. Consequently, frequent elections add a huge **event management administrative cost**.
- Also, the deployment of security forces (particularly the CAPF) is normally throughout the elections and
 frequent elections takes away a portion of such armed police force which could otherwise be better
 deployed for other internal security purposes.
- Frequent elections hamper legislative work, because compulsion to win the next impending election makes short-term political imperatives an immediate priority.

Model Code of Conduct (MCC)

- It is a set of norms, evolved with the consensus of political parties, that lays down several dos and don'ts that political parties, contesting candidates, party(ies) in power have to strictly abide by during the process of elections.
- It is enforced from the date of announcement of election schedule and is operational till the process of elections is completed.

- Other issues- Frequent elections lead to disruption of normal public life and impact the functioning of essential services.
 - o Since during elections caste, religion and communal issues gain attention, frequency in the process **perpetuates such dividing issues** across the country.

Criticisms of SE

- The synchronization of terms would require reduction or expansion of term of various assemblies which will
 not be supported either by the ruling party (in case of contraction of term) or the opposition (in case of
 expansion of term).
- Further it is debatable that **whether it is practically feasible** for the Election Commission of India to conduct elections at such a massive scale.
- Even if SE is achieved it would be difficult to sustain it because the fact that (under Art 83(2) & 172(1)) Lok
 Sabha and state assemblies do not have fixed term.
- Ill-informed voters' choices may lead to- a) National issues impacting electorate's behaviour for voting in State Assembly elections; or b) State issues impacting electorate's behaviour for voting in Lok Sabha elections.
- Frequent elections bring the politicians back to the voters and enhance accountability of politicians to the public. This keeps the politicians in touch with 'pulse of the public' and the result of elections at various levels can ensure the government the necessary 'course correction'.

Way forward

Implementing the herculean task of SE in India would require coordination and consultation among all the stake holders. Further, a phase-wise synchronization of tenures of Lok Sabha and Assemblies (as **suggested by a Parliamentary Committee**) may be undertaken instead of a one-shot mechanism. Efforts should be made to hold simultaneous elections in those state assemblies which are completing their tenure together rather than forcing simultaneous elections by law.

1.2. EXPANSION OF SCHEDULED AREAS IN RAJASTHAN

Why in News?

Recently, Union Cabinet has approved to expand the Scheduled Areas under **Schedule-V** of the **Constitution** of India in some areas of Rajasthan.

More on News

- After the last expansion of scheduled areas in Rajasthan in 1981, another expansion was approved in 2014 due to reorganization in state as per the 2011 Census.
- The areas will now be a part of the Tribal subplan within the existing schemes of central and the state governments.

The Fifth Schedule (Article 244)

- The interests of Schedule Tribes outside the North east are protected by Fifth Schedule. It designates "Scheduled areas" in large parts of India in which the interests of the "Scheduled Tribes" are to be protected. The Scheduled area has more than 50 percent tribal population.
- Powers of Governor under 5th Schedule-Various powers of the Governor include-

Related Information

Article 244

The provisions of the Fifth Schedule shall apply to the administration and control of the Scheduled Areas and Scheduled Tribes in any State other than the States of Assam Meghalaya, Tripura and Mizoram

The criteria for declaring an area as Scheduled Area

- preponderance of tribal population
- compactness and reasonable size of the area
- under-developed nature of the area

marked disparity in economic standard of the people.

These criteria are **not spelt out in the Constitution** of India but have become well established.

States with scheduled areas

Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan and Telangana, are under provision of scheduled areas.

Tribal Sub Plan

- It is a strategy for the rapid Socio-economic development of tribal people forming a part of annual Plan of a State/UT.
- The benefits given to the tribals and tribal areas from the TSP are in addition to what percolates from the overall Plan of a State/UT.
- The funds provided under the Tribal Sub Plan have to be at least in proportion to the ST population of each State/UT.

- To make regulation for peace and good governance of any area in a state which is a Scheduled Area like prohibiting or restricting the transfer of land by or within members of the Scheduled Tribes in Scheduled areas; regulating the allotment of land to members of the Scheduled Tribes in those areas; regulating the money lending business by those who lend money to people of the Scheduled Tribes in such area.
- To direct about non-application of any act which has been passed by Parliament or Legislature of the State to a Scheduled Area.
- In the process of making such regulation discussed above, the Governor may repeal or amend any Union or State law.
- The Governor can make such regulations only after consultation with the TAC of the state.
- Tribes Advisory council (TAC)- Under 5th schedule it shall be the duty of TAC to advice the Governor on such matters pertaining to the welfare and the advancement of the STs in the State, as may be referred to them by the Governor.
- President and the Schedule Areas- The President possesses the power to alter the boundaries of any Schedule area after consulting with the Governor.

Tribal Advisory Council

- It will be established on the direction of the President in a State having Scheduled areas, also in any State having Scheduled Tribes but not Scheduled Areas therein.
 - Consisting of twenty members of which three-fourths must be representatives of Scheduled Tribes in the Legislative Assembly of that State.
 - The Governor may make rules for regulating into number of members of these councils, mode of their appointment, appointment of the chairman, officers and servants of these councils, conduct of its meeting and general business.
- The regulations made by the Governor come into effect only when they are accepted by the President.
 Governor is required to submit annually the reports regarding administration of the Scheduled areas to the President
- Amendment of the Schedule- Parliament through a law can amend any of the provisions of this Schedule by
 way of addition, variation or repeal. Any such law is not deemed to be an amendment under Article 368 of
 the Constitution.
- The provisions of the Fifth Schedule have seen further legal and administrative reinforcement in the form of **Provisions of Panchayats (Extension to Scheduled Areas) Act, 1996.**
- Other important features of the Schedule are:
 - o It deals with provision for the constitution of a Tribes Advisory Council
 - It also deals with the extension of direction by the Union to a State for the administration of the Schedule Areas.

(Note: Refer February Current Affairs 2018, For Tribal Sub-Plan)

1.3. SCHEDULED CASTES AND THE SCHEDULED TRIBES (PREVENTION OF ATROCITIES) ACT

Why in news?

Supreme Court has issued directions regarding Scheduled Castes and Scheduled Tribes (Prevention of Atrocities act), 1989.

Background

 In a complaint filed under the Atrocities Act, Supreme Court of India felt the need of procedural safeguards and issued the

Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act 1989

- It prohibits the commission of offences against members of the SCs and STs and establishes special courts for the trial of such offences and the rehabilitation of victims.
- It outlines actions (by non SCs and non STs) against SCs or STs to be treated as offences.
- The Act specifies that a non-SC or ST public servant who **neglects his duties** relating to SCs or STs shall be punishable.
- **Investigation** of an offence committed under the SC/ST Act cannot be investigated by an officer not below the rank of Deputy Superintendent of Police (DSP)
- For certain offences the Act also provides for capital punishment and confiscation of property. Repeated offences under the Act attract enhanced punishments.

The act was amended in 2016 to add new offences to atrocities such as garlanding with footwears etc., addition of chapter on the 'Rights of Victims and Witnesses', defining 'willful negligence' of public servants clearly and addition of presumption of offence.

following directions in Subhash Mahajan vs State of Maharashtra vis a vis PoA act:

- There is **no absolute bar against grant of anticipatory bail** in cases under the Atrocities Act if no prima facie case is made out or where on judicial scrutiny, the complaint is found to be prima facie mala fide.
- o In view of acknowledged abuse of law of arrest in cases under the Atrocities Act, arrest of a public servant can only be after approval of the appointing authority (Prior Sanction) and of a non-public servant after approval by the S.S.P. which may be granted in cases considered necessary and Such reasons must be scrutinized by the Magistrate for permitting further detention.
- To avoid false implication of an innocent, a preliminary enquiry may be conducted by the DSP concerned to find out whether the allegations make out a case under the Atrocities Act and that the allegations are not frivolous or motivated
- Any violation of above directions will be actionable by way of disciplinary action as well as contempt.
- Subsequently, Centre moved to Supreme Court challenging the ruling that prevented automatic arrests on complaints filed under PoA act but Supreme Court upheld the directions it had issued.

Arguments in favour of Judgement

- **Protection of innocents:** The judgement does not stand in the way of the rights of members of the scheduled castes and scheduled tribes but was concentrating on **protecting false implication of an innocent** person.
- Freedom from arbitrary Arrest: The Court in Vilas Pandurang Pawar and Shakuntla Devi cases also held that the bar against anticipatory bail was not absolute especially when no case is made out or allegations are patently false or motivated as freedom from arbitrary arrest is one of the fundamental facets of the rule of law.
- **Misuse of the Act:** NCRB data states that 75 % of cases under the Atrocities Act have resulted in acquittal or withdrawal which is evidence of **misuse of the Act**.
- Standing Committee of Parliament on the Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Amendment Bill, 2014 had also stressed on the need for safeguards against arrest under the Atrocities Act.

Arguments against the ruling

- The judgement led to possible **dilution of the law** meant to protect the marginalized and it would further result in depriving the community of their constitutional rights especially under Article 17 i.e. abolition of Untouchability.
- Introducing additional procedural requirements would result in impeding strict enforcement of the 1989 Act which already suffers impermissible delay in registration of cases thereby diluting the efficacy of the enactment.
- **Separation of Powers:** The court cannot enlarge the scope of the legislation or the intention of the legislature as it amounts to encroachment of its power leading to Judicial Overreach.
- Low conviction rates are high in terror cases as well and it shows poor investigation and incompetence of prosecution because witnesses turn hostile in such cases. Also, filing of false cases has declined and conviction rates under SC/ST act have also improved over time.
- NCRB data shows that over the last ten years (2007-2017), there has been a 66% growth in crimes against Dalits. The judgment may further have an adverse **effect on the already underreported crimes** against Dalits.

Conclusion

Parliamentary standing committees' demand for an inbuilt provision in defence of accuse must be considered to balance the rights of SCs/STs vis a vis Innocents and reforms in criminal justice system must also be undertaken alongside to ameliorate the concerns regarding conviction rates.

1.4. NATIONAL COMMISSION FOR MINORITY EDUCATION INSTITUTIONS

Why in news?

Recently, Supreme Court has held that National Commission for Minority Education Institutions (NCMEI) has **original jurisdiction** to determine an establishment as a minority education institution.

More from the news

- Supreme Court also held that the only Commission had the power to decide on granting a 'no objection' certificate to an institution that wanted to convert into a minority institution.
- The judgment also states that the Commission will be empowered to declare the status of the minority institution at all stages.
- The SC overruled the Calcutta High Court Judgement which had ruled that NCMEI had no original jurisdiction to declare minority status.

About NCMEI

NCMEI under the Ministry of Human
Resource Development was established through an ordinance promulgated in 2004 which was replaced by NCMEI Act later.

Constitutional safeguards for Minorities in India Article 29

- Any section of the citizen residing in the territory of India or any part thereof having a distinct language, script or culture of his own shall have right to conserve the same.
- No citizen shall be denied admission into any educational institution maintained by the state or receiving aid out of state funds on grounds only of religion, race, caste, language or any of them.

Article 30

- All minorities whether based on religion or language shall have the right to establish and administer educational institution of their choice.
- The compensation amount fixed by the state for the compulsory acquisition of any property of a minority educational institution shall not restrict or abrogate the right guaranteed to them.
- In granting aid, the state shall not discriminate against any educational institution managed by a minority.

Article 30 also includes the right of a minority to impart education to its children in its own language.

- Types of Minority educational institutions:
 - Seeking aid as well as recognition by the state
 - Seeking only recognition by the state
 - o Seeking neither recognition nor aid
- The institutions of the first and second type are subject to the regulatory power of the state w.r.t. syllabus prescription, academic standards, discipline, sanitation, employment etc.
- The institutions of the third type are free to administer their affairs but subject to operation of general laws like contract law, labour law, industrial law etc.
- Commission is composed of a Chairman and three other members.
 - o The Chairman should have been a judge of High Court and must belong to a minority community.
 - The members shall also belong to a minority community and are persons of eminence, ability and integrity.
- The Central Government has notified six minority communities namely Muslim, Christian, Sikh, Buddhists, Parsi and Jain. However no linguistic minority has been notified till date.
- Therefore linguistic minorities remain outside the jurisdiction of the Commission.
- The Commission is a quasi-judicial authority which has been endowed with the powers of a civil court.
- Only Supreme Court exercising writ jurisdiction under Article 32 and High Courts under Articles 226 and 227
 of the Constitution of India can entertain any suit, application or proceedings in respect of any order made
 by the Commission.
- The Commission has adjudicatory and recommendatory functions such as:
 - o to advise the Central Government and the State Governments on any question relating to the educational rights of the minorities referred to it.
 - enquire, suomotu, or on a petition presented to it by any Minority Educational Institution, or any person
 on its behalf into complaints regarding deprivation or violation of rights of minorities to establish and
 administer educational institutions of their choice and any dispute relating to affiliation to a University.
 - o review the safeguards provided by or under the Constitution, or any law for the time being in force, for the protection of educational rights of the minorities and recommend measures for their effective implementation.

- o specify measures to promote and preserve the minority status and character of institutions of their choice established by minorities.
- o make recommendations to the appropriate Government for the effective, implementation of programmes and schemes relating to the Minority Educational Institutions.
- The Commission has also been granted appellate jurisdiction in cases where the State Government refused to provide the NOC for establishing a minority institution.

1.5. RIGHT TO CONVERT IS A FUNDAMENTAL RIGHT

Why in news?

The **Supreme Court** recently gave a judgement regarding a person's right to choose a religion.

More about the news

- The observations are part of judgment the Supreme Court in the case of Hadiya, a 26-year-old Homeopathy student. Supreme court has given following judgement in the case:
 - Right to choice: Freedom of faith is essential to individual's autonomy. Choosing a faith is the substratum of individuality without which the right of choice becomes a shadow.
 - Liberty: Matters of belief and faith, including whether to believe, are at the core of constitutional liberty and the Constitution exists for believers as well as for agnostics.
 - Identity: Matters of dress and of food, of ideas and ideologies, of love and partnership are within the central aspects of identity. Society has no role to play in determining our choice of partners

Constitutional provisions Regarding Right to Freedom of Religion:

Article 25: All persons are equally entitled to "freedom of conscience and the right freely to profess, practise and propagate religion." **subject to public order, morality and health,** and to the other fundamental rights guaranteed in the Constitution.

Article 26: gives every religious group a right to establish and maintain institutions for religious and charitable purposes, manage its affairs, properties as per the law. This guarantee is available to only Citizens of India and not to aliens.

Article 27: This Article mandates that no citizen would be compelled by the state to pay any taxes for promotion or maintenance of particular religion or religious denomination.

Article 28: This Article mandates that No religious instruction would be imparted in the state funded educational institutions.

- Constitutional Protection: Constitution protects the ability of each individual to pursue a way of life or faith to which she or he seeks to adhere.
- Further SC held that Right to choose religion and marry is an intrinsic part of meaningful existence. Neither the State nor "patriarchal supremacy" can interfere in person's decision.
- This is a change from SC's earlier interpretation of the word "propagate," to mean "to transmit or spread one's religion by an exposition of its tenets," but to not include the right to convert another person to one's own religion.

Conclusion

The judgement reinvigorates freedom of religion and freedom of conscience which has been recognized under the international law under the Universal Declaration on Human Rights recognizing fact that the entire humanity enjoys certain alienable rights. India is also a signatory of the same.

1.6. FAKE NEWS

Why in News?

• The Union Information and Broadcasting Ministry constituted a committee to frame rules to regulate news portals and media websites after withdrawal of its guideline on fake news.

About Fake News

- Fake news refers to news, stories, informations, data and reports which is or are wholly or partly false.
- Fake news can be related to anything-
 - Commercially driven sensational content

- Nation-state sponsored misinformation
- Highly-partisan news site
- Social media itself
- Satire or parody
- Fake news can be propagated through any media- print, electronic and social.
- Some checks and balances, though largely ineffective, exist in the mainstream media against fake news, but social media does not have such mechanism.
- Only few mechanisms exist such as defamation suit, filing of FIR, complaints to bodies like News Broadcasters Association (NBA), Broadcasting Content Complaint Council (BCCC), Press Council of India (PCI) etc.

Issues Associated with Fake News

- **Trust in media**: Citizens view any news published by mainstream media as true and also very few citizens try to ascertain the authenticity of news spread on social media.
- **Impact on social harmony**: Fake news exploits the freedom allowed to media in a democracy to spread misinformation that has a deleterious impact on society-
 - **Swinging public opinions** based on misinformation campaigns to gain popularity or to malign the image, character of certain individuals or opponents or to defame them.
 - Creating a sense of mistrust between people and government. For example- the news of tampering of
 electronic voting machine which was based on misrepresentation of facts
 - Inciting violence and hatred among communities by using morphed photographs to show riots, insult to religious symbols or deities. For example- Muzaffarabad riots; exodus of North-east people from Bangalore etc.
 - Radicalization of youths through false propaganda spread through social media sites.

Challenges in Controlling Fake News

- **No standard definition**: The term 'fake news' is vague and there is no official definition of what constitutes fake news.
- Lack of regulation: Self-regulation by mainstream media has largely been ineffective. Any direct effort by the government to control fake news is prone to be seen as an assault on the freedom of media which functions as the fourth pillar of democracy.
- **Difficult to achieve balance**: The efforts to control fake news should not threaten to cramp legitimate investigative and source-based journalism or freedom of expression as guaranteed in Article 19 of the Constitution. Also, distinguishing between conscious fabrication of news reports and news reports put out in the belief that they are accurate.
- Tracking fake new on social media: The vastness of the internet users (over 35 crore in India) and social media users (over 20 crore WhatsApp users alone) makes tracing the origin of fake news almost impossible.

Way Forward

- **Bring out policy**: The government should bring out a draft seeking opinion from stakeholders regarding issues of controlling fake news. Any future guidelines on 'fake news' should target 'fake news' and not try to regulate media in the name of 'fake news'.
- **Regulatory mechanism**: The PCI needs to be reformed and empowered in a way so as to enable it to strike a balance between the freedom of media and speech on the one hand, and right to know on the other.
- **Awareness**: People must be made aware about the menace of fake news, their dissemination and to practice caution while believing on any such items.
- **Authentic news**: Official accounts of government organizations should also be present on social media to spread authentic news.
- Social media houses should also come forward to bring in measures to curb the menace of fake news such as
 Facebook recently announced that it has tied up with Boom Live, an Indian fact-checking agency, to fight
 fake news during the Karnataka elections.

1.7. RASHTRIYA GRAM SWARAJ ABHIYAN

Why in News?

The PM of India launched restructured Rashtriya Gram Swaraj Abhiyan on the Panchayati Raj Day.

About Rashtriya Gram Swaraj Abhiyan (RGSA)

- It is a revamped version of Rajiv Gandhi Panchayat Sashaktikaran Abhiyan
- It is a centrally sponsored scheme which aims at making rural local bodies self-sustainable, financially stable and more efficient.
 - The Central component of the Scheme includes national level activities such as 'National Plan of Technical Assistance', 'Mission Mode project on e-Panchayat', 'Incentivisation of Panchayats'. This will be fully funded by Central Government.
 - o The State component includes 'Capacity Building of Panchayati Raj Institutions (PRIs)'.
- The **State Governments** will formulate the **Annual Action Plans for seeking assistance** from the Central Government.
- This scheme will extend to all States and UTs of the Country and will also include institutions of rural local government in non-Part IX areas, where Panchayats do not exist.
- It will be implemented in a **demand driven mode** and activities under the scheme will be aligned for **achieving the Sustainable Development Goals (SDGs)** with main thrust on Panchayats identified under **Mission Antyodaya and 115 Aspirational districts** as identified by NITI Aayog.
- It focuses on:
 - o Promoting devolution of powers and responsibilities to Panchayats according to the spirit of the Constitution and PESA Act.
 - o Creating and strengthening democratic local self-government in areas where Panchayats do not exist.
 - Strengthening Gram Sabhas to function effectively as the basic forum of people's participation, transparency and accountability within the Panchayat system.

1.8. FINANCE COMMISSION TO USE 2011 CENSUS

Why in news?

Finance ministers from four southern states have opposed Terms of reference (ToR) of the 15th Finance commission to use the 2011 Census to calculate population for allocation of Union tax revenue in place of 1971 Census.

Arguments against using 2011 census

- This would lead to penalizing those states which have focused on family planning and population control after 1971 census figures showed a dramatic increase in population. This, states in the south feel, will result in penalising
 - them. Thus, may result into north-south divide.
- The TOR have been framed unilaterally without consulting the States
- The concerns expressed by the States in 1976 which necessitated the freezing of seat allocation on the basis of 1971 population figures hold good even today.

Arguments in favour of 2011 census

• The Fourteenth Commission also after examining various factors to represent demographic changes, chose population figures of 2011 and assigned 10% weightage in addition to the 17.5% weightage given to the 1971 population data.

Other issues with TOR

- Second thoughts on increased devolution: as TOR "The impact on the fiscal situation of the Union Government of substantially enhanced tax devolution to States following recommendations of the 14th Finance Commission" reflects an unease of central government about revenue sharing.
- Control or lack of it in incurring expenditure on populist measures: This TOR seems to be going against the spirit of cooperative federalism as it questions the choices made by states in expenditure.
- Find ways to Encourage the Ease of Doing Business: This index has many problems, especially as it always scores less regulations better than more regulations. This may promote race to the bottom among states to dismantle all regulation, good or bad, which is not in India's overall interests.

- The ToR balances the "needs" represented by the latest Census and "progress towards population control".
- A relatively more advanced state is supposed to contribute more in taxes so that a relatively more backward state is cross-subsidised for balanced and equitable regional development.

Constitutional provisions on Finance Commission

- Article 280 of the Constitution of India provides for a finance commission as a quasi-judicial body. It is constituted by the President of India every fifth year.
- It consists of a chairman and four other members to be appointed by the president.
- It makes recommendations about the following to the President of India:
 - The distribution of the net proceeds of taxes between the centre and the states and the allocation between the states of the respective shares of such proceeds
 - The principles that should govern the grants in aid to the states by the centre
 - The measures needed to augment the consolidated fund of states to supplement the resources of the local governments in the states on the basis of the recommendations made by the State Finance Commissions.
 - Any other method referred to it by the President in the interests of the sound finance.
- Using the last provision in the Constitution, the Union government has been including in the terms of reference (TOR) to successive Finance Commissions, provisions that reflect the Union government's view of the States' fiscal situation.
- The recommendations made by finance commission are only advisory in nature and hence, are not binding on the government.

Four areas in constitution where population is used as a factor

- Manner of Election of President (Article 55)
- Composition of the House of the People (Article 81)
- Composition of the Legislative Assemblies (Article 170)
- Reservation of seats for Scheduled Castes and Scheduled Tribes in the Legislative Assemblies of the States (Article 330).

1.9. COMPETITION COMMISSION OF INDIA (CCI)

Why in news?

Central Government has decided to reduce the members appointed by it in the CCI.

More on news

- The number of members has been reduced from one chairperson and six members to one chairperson and three members.
- Under the CCI Act, all members in office have to sign on an order. Large numbers make this difficult to implement. The reduced strength makes the CCI a potentially faster decision-making body.
- It would reduce government interference in CCI and would stimulate business process of corporates and generate job opportunities by speeding up hearings and approvals.

Criticism of the move

In a four-member body, tie becomes a complicated situation because the chairperson cannot go for a

casting vote as well as normal vote. Casting two votes by chairperson in adversarial proceedings may not

stand the judicial scrutiny of a writ court.

- The change of composition of the CCI from seven to four seems to be ending the era of 'dissent' decisions.
- There could be a demand for members to be experts in new disciplines in the future, which would be difficult to fulfil due to smaller size.

Competition Commission of India:

- It was established under CCI Act, 2002 with following functions:
 - To Prevent practices having adverse effect on competition
 - O To Promote and sustain competition in markets
 - To Protect the interests of consumers
 - To ensure freedom of trade carried on by other participants in the markets of India.
- It was initially envisioned as a 10-member Commission and supposed to have had benches in different cities.
- However, later the provision for creation of benches was removed and it was made a 7 member body to be appointed by the central government.
- Competition Appellate Tribunal (COMPAT) was subsumed into NCLAT (National Company Law appellate Tibunal) in 2017. Now, it is the Appellate Tribunal to hear and dispose off appeals against any direction issued or decision made or order passed by the Competition Commission of India (CCI).

1.10. NITI FORUM FOR NORTH EAST

Why in news?

The first meeting of the newly constituted 'NITI Forum for North East' took place in Agartala, Tripura.

More on news

- The forum was constituted in February 2018 with an aim to ensure sustainable economic growth of the North Eastern Region (NER) of the country and periodically review the development status in NER.
- It is co-chaired by the Vice-Chairman of NITI Aayog and Minister of State (I/C), Ministry of Development of Northeastern Region (DoNER)
- The forum will base projects in the NER on the concept of "HIRA" (Highways, Inland Waterways, Railways and Airways).
- In the meeting, following five development missions in different sectors have been outlined:
 - Horticulture
 - o Tourism
 - Food processing
 - o Bamboo-based handicrafts
 - Medium scale industries

1.11. IMF FRAMEWORK ON GOVERNANCE AND CORRUPTION

Why in news?

The **International Monetary Fund (IMF)** has recently revised its 20-year-old policy and given new guidelines to systematically address corruption and its impacts on economic growth.

IMF analysis of Corruption

IMF has defined Public corruption as an abuse of public office for private gain, afflicts economies at all stages of development. It has following impacts:

- Inequality- Corruption and poor governance sap economic growth and exacerbate inequality.
- **Economic impact** IMF analysis suggests falling 25 notches on a corruption index could lead to loss of around 0.5 percentage points off a country's annual growth.
- Political impact- Corruption weakens the state's capacity to raise revenue and perform its core functions. By harming the culture of compliance, corruption also increases tax evasion. In the extreme cases, systemic corruption can lead to political instability and conflict.
- **Social impact** Corruption hurts the poor, hinders opportunity and social mobility and causes social cohesion to unravel. Reduced allocations for social programs and the resources lost through corruption limit the build-up of human capital.
- **Institutional impact** It undermines trust and credibility of institutions and erodes the ethical standards of private citizens.

Mitigating strategies

- **Transparency** Countries need to adopt international standards on fiscal and financial transparency including corporate ownership. A free press can also play a key role in exposing corruption.
- **Effective Laws** An effective anti-money laundering framework must be in place to minimize the laundering of proceeds of corruption. e.g. Lokpal act
- **Strong enforcement** Rule of law must be enhanced, a **credible threat of prosecution** must exist with new specialized institutions to ensure implementation if existing ones are corrupt.
- **Effective governance- De-regulation** and **simplification** are cornerstones of efficient anti-corruption strategies. And implementation is all about effective institutions.
- Competent bureaucracy- A cadre of competent public officials who are independent of both private influence and political interference must be recruited.
- **Leadership-** Leadership plays a critical underlying role. Leaders must set a personal example and ensure decisive action is taken when needed.

Significance of new guidelines:

- The new policy has highlighted **rich countries' contribution to corruption in the developing world** by failing to prevent bribery and money laundering or by allowing anonymous corporate ownership.
- Moving on, the new policy also focusses on **Enhanced engagement** on governance and corruption that aims for a more systematic, even-handed, effective and candid engagement with member countries.
- IMF will also help in providing **common standards for institutions** to tackle Corruption and poor governance which affect economic growth and exacerbate inequality.
- IMF will assist countries to deter corruption through better design and transparency of public financial management systems and by supporting stable and transparent economic and regulatory environments that limit the scope for arbitrary and preferential treatment.

1.12. E-VIDHAN MISSION MODE PROJECT

Why in news?

A new office of Central Project Monitoring Unit for the e-Vidhan project of the Government was inaugurated recently.

About e-vidhan project

- It is a mission mode project to digitize and make the functioning of State Legislatures in India paperless.
- It is a software suite of **public website**, **secure website**, **house applications and mobile apps** that fully automate the functioning of legislative assembly
- The Ministry of Parliamentary Affairs is the Nodal Ministry for the project.
- One of the key component of the strategy devised for implementation of the project is to create Project Monitoring Units both at Central as well as State levels.
- Himachal Pradesh became the first state to use e-vidhan site and launch a mobile app.



2. INTERNATIONAL RELATIONS

2.1. WUHAN SUMMIT

Why in news?

Recently the leaders of China and India held an informal summit at Chinese city of Wuhan.

Major Outcomes of Wuhan Informal Summit

- Border dispute- On the bilateral front, they decided to issue strategic guidance to their militaries to strengthen communication and enhance predictability and effectiveness in the management of border affairs.
- Trade deficit- Both sides addressed measures to better balance the ballooning trade deficit of about \$52 billion (of about \$84 billion bilateral trade), mostly by encouraging agricultural and pharmaceutical exports to China.

PM's new Panchsheel to bolster ties with China

These are to be based on

- Shared vision,
- Better communications,
- Strong relationship,
- Shared thought process and
- Shared resolve

Further the need of people to people exchanges between India and China is to be emphasised through **STRENGTH strategy i.e.** Spirituality; Tradition, trade and Technology; Relationship; Entertainment; Nature conservation; Games; Tourism and Health and Healing.

- **Terrorism-** Both the countries recognized the common threat posed by terrorism and reiterated their strong condemnation of and resolute opposition to terrorism in all its forms and manifestations.
- **Afghanistan-** Both leaders discussed a joint economic project in Afghanistan. The proposed joint economic project in Afghanistan could be instrumental in mitigating the trust deficit between the two sides.
- On Global Challenges- They agreed to jointly contribute towards sustainable solutions for global challenges
 including climate change, sustainable development, food security etc. and underline the importance of
 reform of multilateral financial and political institutions to make them representative and responsive to the
 needs of developing countries.
- Unresolved Issues- Finally, they attempted to reduce the heat over unresolved issues and so-called "irritants" in the relationship, such as China's block on India's NSG membership bid or the UN's terror designation for Pakistan-based groups, and India's opposition to the Belt and Road Initiative or its use of the Tibet issue. For this, existing mechanisms of dialogue will be strengthened, not allowing broader bilateral movement to be hit.
- India also offered to host the next informal summit with Mr. Xi in India next year.

Significance

- The change in the phrase "all areas of the India-China border region", instead of the "on the India-China border" means china's agreement that Doklam is very much part of India's concerns.
- The "early settlement" of the border dispute was classified as a "strategic objective" by China in May 2015; the emphasis now was more on managing the border than resolving it.
- The opposition of terrorism in all forms assumes significance as China had earlier prevented designation of JeM Chief Masood Azhar as a global terrorist at UN.
- India and China collaborating on saving globalization, defending the WTO, promoting a multipolar world, emphasizing 'strategic autonomy' and Chinese resetting of ties towards Asian neighbors is also due to changing USA's policies on trade and security.
- The informal summits may help agreement on reducing **trade deficit** between two countries, India's entry to Chinese markets in pharmaceuticals and agricultural products with simultaneous reduction of major non-tariff barriers.
- Further for the first time India and China agreed to work on a "joint economic project" in Afghanistan which assumes all the more significance considering:
 - Pakistan is already wary of India's projects in Afghanistan and considers China as an "all weather ally" but China is unwilling to get cramped up by Pakistani reservations for India.
 - o India has been advocating a regional approach and the continued international assistance in Afghanistan to prevent taking over by Taliban which may have found resonance in China as well.

2.2. INDIA-NEPAL RELATIONS

Why in news?

PM of Nepal recently paid an official visit to India on a three-day official visit after Parliamentary elections in Nepal in December 2017.

Background of India Nepal Relations

India and Nepal share a unique **relationship of friendship and cooperation** characterized by open borders and deep-rooted people-to-people contacts of kinship and culture. Under the provisions of **India-Nepal Treaty of Peace and Friendship of 1950** Nepalese citizens have availed facilities and opportunities at par with Indian citizens. Further our relations have been based on:

- High Level exchanges: Apart from high level visits the two countries cooperate through forums such as SAARC, BIMSTEC etc. and through bilateral institutional dialogue mechanisms like India-Nepal Joint Commission.
- Humanitarian Assistance and Disaster relief: India dispatched National Disaster Response Force (NDRF) teams, rescue and relief materials and extended New Line of Credit agreement for US\$ 750 mn for post-earthquake reconstruction projects in Nepal.
- **Economic:** Since 1996, Nepal's exports to India have grown more than eleven times and **bilateral trade** more than seven times. Also, there are about 150 **Indian ventures** operating in Nepal in manufacturing, services (banking, insurance, dry port, education and telecom), power sector and tourism industries.
- Water Resources: Around 250 small and large rivers flow from Nepal to India forming a part of the Ganges river basin which can become major sources of irrigation and power. A **three-tier bilateral mechanism** is working since 2008 relating to cooperation in water resources and hydropower.
- India's Development Assistance to Nepal: India is providing substantial financial and technical development assistance to Nepal such as:
 - Assistance to Nepal in development of border infrastructure through upgradation of roads in the Terai areas.
 - Development of cross-border rail links
 - Establishment of four Integrated Check Posts
 - o Lines of Credit for undertaking infrastructure development projects.
- **Defence Cooperation:** India has assisted Nepalese Army (NA) in its modernization through provision of equipment and training and cooperation in areas of disaster management. Further there is large scale presence of Gorkha soldiers in Indian army and both armies have been awarding honorary ranks of General to Army Chiefs of each other.
- **Power:** An Agreement on 'Electric Power Trade, Cross-border Transmission Interconnection and Grid Connectivity' was signed in 2014 to facilitate and further strengthening cross border power trade between India and Nepal.
- Education: GOI provides around 3000 scholarships/seats annually to Nepali nationals.
- **Culture:** GOI promotes people-to-people contacts, organize cultural programmes, and conferences and seminars. India and Nepal have also signed **three sister-city agreements** for twinning of Kathmandu-Varanasi, Lumbini-Bodhgaya and Janakpur-Ayodhya.

Outcomes and Assessment of Recent Visit of Nepalese PM

- The visit is termed significant since India Nepal relations have been going through turbulent phase since 2015.
- A **12-point regular joint statement**, three special statements on agriculture, rail linkages up to Kathmandu, and inland waterways, were issued during the visit which included:
 - o Agreement to conduct "feasibility studies" regarding construction of a Raxaul-Kathmandu railway line.
 - Agreement to operate Nepalese steamers to transport goods and people from Nepal to other countries
 which is likely to enable cost-effective and efficient movement of cargo, and greatly impact the growth
 of business and economy of Nepal.

- o Develop the **inland waterways** for the movement of cargo, within the framework of trade and transit arrangements, providing additional access to sea for Nepal.
- o Conducting a pilot project on organic farming and soil health monitoring in Nepal
- Further the joint statement **did not mention internal issues of Nepal** such as amendments to the new constitution, inclusion of minorities, Madhesi, etc. thus helping remove the mistrust between the two countries.

Challenges

- India held that new **Nepalese constitution** did not address the concerns of the people of the Terai and backed a blockade by Madhesis to cripple supplies to generate pressure on Nepal.
- Nepal wants to amend 1950 Treaty of Peace and Friendship which enjoins it to consult India before buying weapons or enter into any security relationship with a third country.
- There is a trust deficit in Nepal because of the India's **delay in implementation of various projects** in Nepal more so vis-a-vis China and its implementation of agreed-upon projects.
- India holds that it won't buy power from **dams built by China** (China's Three Gorges Corporation was given a second dam project to build in Nepal recently) and Indian companies must be involved for this to happen.

Potential Areas of Cooperation

Although China is increasing economic cooperation with Nepal, India continues to remain Nepal's largest trading and business partner. Further, India is the only transit country for Nepal's third country trade despite having signed a transit agreement with China.

- Nepal needs massive **developmental assistance** for infrastructure development and also to implement federal provisions of new constitution through the creation of the necessary administrative infrastructure in the provincial capitals.
- **Hydel Cooperation:** Nepal's installed hydel capacity of 700 MW is much lesser than potential of over 80,000 MW. Further considering 60% of the Ganga waters come from Nepal's rivers and 80% of these flows take place in monsoon months, effective water management for both irrigation and power generation cannot be underemphasised.
- India also needs **effective delivery on the pending projects**, the remaining ICPs, the five railway connections, postal road network in the Terai and the petroleum pipeline so that connectivity is enhanced and 'inclusive development and prosperity' assumes reality.

2.3. INDIA-UK BILATERAL TALKS

Why in news?

Indian and UK held bilateral talks on side-lines of multilateral Commonwealth summit.

Major areas of cooperation

 Post Brexit Cooperation- Britain has sought to emphasize the potential for growth in trade with non-EU partners once Britain

Major MoUs/Agreements Signed

- Cyber-relationship framework
- Rejuvenation of Ganga
- Skill Development, Vocational education and Training.
- Regulation of safe nuclear energy use for peaceful purposes.
- Explore potential technology co-operation in various areas.
- Animal Husbandry, Dairying and Fisheries Sectors.

leaves the EU. India also pledged that there would be no dilution in the importance of the UK to India post-Brexit.

- U.K. also seeks to develop a roughly \$700 billion **economic zone** with such former colonies as India and Australia by 2020, aiming to plug the hole created by its impending divorce from the European Union.
- The two countries also agreed on prioritising **freedom and openness in Indo-Pacific** area, boosting defence and security cooperation, combat terrorism, radicalisation and online extremism.
- **Technology-** Technology cooperation formed one of the basic themes encompassing:
 - India-UK Tech initiatives such as Technology Summit II, UK India Tech Alliance (A NASSCOM and techUK partnership), UK-India Tech Hub, UK-India Tech Cluster Partnerships, FinTech Rocketship Awards (first-of-its-kind mentoring programme).
- Trade, Investment and Finance

- Green Growth Equity Fund (GGEF)- An initial investment of £240m from both governments was announced which will invest in renewable energy, clean transportation, water and waste management in India as part of India's flagship National Investment and Infrastructure Fund (NIIF).
- UK-India Dialogue on Investment- to improve our mutual understanding of priorities and review future opportunities for cooperation.
- **UK-India multilateral trade dialogue** to support a shared commitment to the global rules-based system and to the WTO's role in underpinning it.
- o Fast Track Mechanism- to support Indian investments into the UK.
- o **Commitment to transition EU-India Third Country Agreements-** to ensure continued application to the UK of EU-India Agreements during period following the UK's departure from the EU,

Other Major Areas

- o **International Solar Alliance** The UK signed the Framework Agreement of the International Solar Alliance and became the 62nd signatory member country.
- However, an MoU on the return of illegal migrants could not be signed and remains a contentious issue among the countries.

2.4. COMMONWEALTH HEADS OF GOVERNMENT MEET

Why in news?

Recently London hosted the Commonwealth Heads of Government Meet (CHOGM) with the theme "Towards a Common Future" for 2018.

More about the news

- Commonwealth Heads of Government Meeting (CHOGM) is a biennial meeting of heads of states of Commonwealth countries.
- The four main goals for the summit were:
 - Prosperity: Boosting intra-Commonwealth trade and investment.
 - Security: Increasing cooperation to deal with security challenges including global terrorism, organized crime and cyberattacks.

 Relation
 - Fairness: Promoting democracy, fundamental freedoms and good governance across the Commonwealth.
 - Sustainability: Building the resilience of small and vulnerable states to deal with the effects of climate change and other global crisis.
- It saw the release of Blue Charter on Ocean Governance which emphasized fair ocean governance, more prosperous maritime and marine industries, sustainable ocean use, and secure marine space across the Commonwealth.
- Commonwealth Connectivity Agenda for Trade and Investment, which could together counter China's Belt and Road Initiative was announced.

Commonwealth or the Commonwealth of Nations

- It is a group of 53 states, all of which (except for two i.e. Rwanda and Mozambique) were formerly part of the British Empire. Further Myanmar and Aden (now part of Yemen) are the only former British colonies who elected not to join the Commonwealth
- Queen Elizabeth II is the Head of the Commonwealth.
- It was created in the early 1900s when nations began to secede from British Empire to ease the process of British decolonization.
- It was seen as a way of maintaining global unity through shared language, history, and culture despite growing independence and self-governance

Related Information

Commonwealth Cyber Declaration

• It is the world's largest and most geographically diverse intergovernmental **commitment on cybersecurity** cooperation.

Commonwealth Innovation Index

- It was launched as **part of a new Commonwealth Innovation Hub** on the sidelines of the CHOGM.
- It has been **created in partnership with** the United Nations World Intellectual Property Organisation (WIPO) and its annual Global Innovation Index (GII).
- India was ranked 10th on the new Index, topped by the UK, Singapore and Canada.

Commonwealth Innovation Fund

- The Global Innovation Fund (GIF) will also host a new Commonwealth Innovation Fund (CIF) with size of 25 million pounds with financial commitments from member-countries.
- It will deploy grant, equity and debt investments to support innovators across the Commonwealth to accelerate the development, testing and scaling up of evidence-based and market-tested innovations.

• Further the Commonwealth Cyber Declaration, Commonwealth Innovation Fund and Commonwealth Innovation Index were also announced (See Box)

• It was also announced that Prince Charles would 'succeed' Queen Elizabeth as the head of the Commonwealth.

Issues with the Commonwealth

- The grouping has no political or economic power, and even former immigration advantages between Commonwealth countries have also ceased to exist.
- Considering its declining importance former PM Manmohan Singh skipped two CHOGM meets, while Narendra Modi didn't attend the last one, held in Malta in 2015.
- Amidst the calls for the position of Commonwealth Head to be more democratically shared or rotated the announcement of Prince Charles as the successor has also put a dent on its democratic credentials.

Importance of Commonwealth

- From the Indian perspective, the Commonwealth offers opportunities to reach out to small states, that
 make up around 60% of Commonwealth members. In some of these states, India has no diplomatic
 presence, and forging relations with these countries could help India secure crucial votes during UN or
 multilateral contests it is involved in.
- It is also a **larger network of countries** than any other, except for UN, which gives a chance for smaller countries to have their voices heard and make their projects and concerns known.
- On a geo-political scale, the Commonwealth of Nations continues to be an impressive show of the force of a
 peaceful alliance. Also, for India it provides an excellent opportunity to give shape to a model of
 international co-operation and partnership distinct from that of China.
- It also remains a great platform for **development aid, democratic values and educational opportunities**, but its relevance is unlikely to increase unless it adopts a more egalitarian and inclusive attitude to its next generation of Commonwealth citizens.

2.5. INDIA-NORDIC SUMMIT

Why in news?

The first India-Nordic Summit took place in Stockholm.

Importance of Nordic countries for India:

- Nordic countries support India's NSG membership, its permanent candiadature in UNSC and demands for UNSC reforms.
- India can gain from strong people-to-people contacts through education, culture, labour mobility and tourism.
 (Nordic Sustainable Cities Project supports the Smart Cities Program of the Government of India)

Other Facts

- Nordic countries include Sweden, Norway, Finland, Denmark and Iceland.
- India had proposed the idea of this summit.
- The only instance when Nordic Countries had held such a summit was with the then President Barack Obama of USA.
- This exercise by Delhi will be first of its kind in Europe as traditionally India has been engaged in talks with EU (European Union).
- Nordic solutions in clean technologies, maritime solutions, port modernisation, food processing, health, lifesciences and agriculture; and Nordic approach to innovation systems, characterised by a strong collaboration between public sector, private sector and academia can be useful for New India.

2.6. INDIA-WIESBADEN CONFERENCE 2018

Why in news?

India hosted the India-Wiesbaden Conference, 2018 with the theme- Securing Global Supply Chains through Government-Industry Partnerships towards Effective Implementation of UNSC Resolution 1540.

Details

 The conference was held in cooperation with Ministry of External Affairs, Government of **UN Office for Disarmament Affairs (UNODA)** is an Office of the United Nations Secretariat established in January 1998 as the Department for Disarmament Affairs

- Its goal is to promote nuclear disarmament and nonproliferation and the strengthening of the disarmament regimes in respect to other weapons of mass destruction, chemical and biological weapons.
- It also promotes disarmament efforts in the area of conventional weapons, especially landmines and small arms, which are often the weapons of choice in contemporary conflicts.

- Germany and the United Nations Office for Disarmament Affairs (UNODA).
- The Conference provides an opportunity to participants to **share experiences** on their export control systems and to identify legal & technical assistance, action plans & challenges in national implementation of UNSC 1540.
- Federation of Indian Chambers of Commerce and Industry (FICCI) is the industry partner for the event.

What is UN Security Council Resolution 1540?

- It was adopted in 2004 under United Nations Charter and affirms that the proliferation of nuclear, chemical and biological weapons and their means of delivery constitutes a **threat to international peace and security.**
- It imposes **binding obligations** on all States to adopt legislation to prevent the proliferation of nuclear, chemical and biological weapons and their means of delivery, and establish appropriate domestic controls over related materials to prevent their illicit trafficking.
- India has established legally backed robust export control system to implement UNSC 1540 as part of its long standing commitment to international non-proliferation through The Weapons of Mass Destruction And Their Delivery System (Prohibition Of Unlawful Activities) Act, 2005. However, it has not signed Non-Proliferation Treaty (NPT) and Comprehensive Test Ban Treaty (CTBT) due to their differentiating nature.
- The mandate of the 1540 Committee is due to expire on 28 April, 2021.

2.7. PANMUNJOM DECLARATION

Why in News?

Recently, North Korea and South Korea signed Panmunjom Declaration.

Key issues discussed during the Declaration

- **Nuclear weapons-** The two Koreas confirmed the common goal of realizing, through complete denuclearisation, a nuclear-free Korean Peninsula and "greed to carry out their respective roles and responsibilities in this regard.
- **Peace deal** Both sides pledged to seek a peace treaty replacing the Korean War armistice via multilateral consultations with China and the United States.
 - o Both reaffirmed the **Non-Aggression Agreement** that precludes the use of force in any form against each other and agreed to strictly adhere to this Agreement.
 - o Both country will work for a **maritime peace zone** in order to prevent accidental military clashes and guarantee safe fishing activities.
- **Family visits-** The two sides agreed to hold "reunion programmes" (for families divided due to war in the two countries) on 15 August, the day both Koreas celebrate their independence from Japanese colonisation.
- **Demilitarised zone-** The declaration said each side would cease propaganda broadcasts, hold regular military meetings, and take other measures to reduce tensions along the border and turn this zone into a "peace zone".
- Inter-Korean communication- Both pledged to increase direct inter-Korean exchanges and dialogue, including between lower-level political officials.

Significance of the meet

- Since Pyongyang has renewed its commitment to the 1992 Joint Declaration on the Denuclearization of the Korean Peninsula, it could potentially be used in future nuclear negotiations to prevent Northern delegations from stalling.
- N.Korea's commitment for phased disarmament may raise eyebrows because the S. Korean military is numerically inferior to the Korean People's Army and any force reduction might weaken the South to the North's advantage.
- The declaration substantiates N. Korea's **agreement to attend another summit** with S. Korea, hence giving South Korea at least another five months of stability. This should **boost southern business confidence.**

Way Forward

• The declaration gives a ray of hope for reducing the nuclear threat that looms over the world and bringing peace to one of the most distressed areas.

- However, the idea of "complete denuclearisation of the Korean peninsula" seems only a vague commitment without specifics on how that key goal would be achieved. There may be other steps that might strengthen this promising situation like-
- North Korea should allow the International Atomic Energy Agency to assess its nuclear program. This will generate a sense of progress under **Panmuniom Declaration** for Global Community.

2.8. AFRICAN ASIAN RURAL DEVELOPMENT ORGANIZATION (AARDO)

Why in news?

African Asian Rural Development Organization (AARDO) held a workshop recently in Kochi that focused on food security, agriculture, and fisheries.

More about the news

The workshop was organized by the Central Marine Fisheries Research Institute (CMFRI) to train researchers and officials from 13 member countries of the AARDO.

African-Asian Rural Development Organization (AARDO)

- AARDO was established in 1962 as an autonomous inter-governmental organization and has 33 memberstates from Africa and Asia.
- The group is devoted to developing understanding among members for better appreciation of each others' problems and to explore, collectively, opportunities for coordination of efforts for promoting welfare and eradication of thirst, hunger, illiteracy, disease and poverty amongst rural people.
- Training was given in areas including marine fisheries development, fish stock estimation, assessment of the impact of climate change on fisheries, training in responsible marine development, and mariculture.
- Development of fisheries and aquaculture sectors can play a major role in generating more plentiful and nutritious food, as well as better incomes and livelihoods for hundreds of millions of people in Africa and Asia.

2.9. CLARIFYING LAWFUL OVERSEAS USE OF DATA ACT (CLOUD ACT)

Why in news?

Recently, U.S. President has brought the Clarifying Lawful Overseas Use of Data Act (CLOUD Act).

About CLOUD Act

The CLOUD Act establishes processes and procedures for law enforcement requests for data in other countries. Most significantly:

- The Act expressly provides that U.S. law-enforcement orders issued under the Stored Communications Act (SCA) may reach certain data located in other countries.
- The Act also allows certain foreign governments to

Condition for CLOUD Act

- **Bilateral Agreement:** U.S. requires the foreign states to share a common commitment in the form of bilateral agreement/data sharing agreement to be abided by the rule of law and the protection of privacy and other civil liberties
- Procedure and Review Mechanism: The partner country will need to ensure that its authorities collect, retain, use and share data as per an established procedure and electronic data requests to be reviewed by a court or other independent authority.
- enter into new bilateral agreements with the United States. This new agreement will enable foreign nations to make data requests directly to U.S. companies rather than via U.S. government under a mutual legal assistance treaty.
- The Act formalizes the process for companies to challenge a law enforcement request.
- The Act imposes certain limits and restrictions on law enforcement requests to address privacy and civil liberty concerns.

Before the CLOUD Act, the U.S. could only access data stored overseas through mutual legal-assistance treaties (MLATs).

Analysis

While on one hand there are individual country laws that prohibit service providers from disclosing user data to foreign law enforcement agencies, and on the other any data sharing law, if, exists, it is cumbersome and outdated. This law may be a step forward, especially in today's world where cross border crimes are increasing.

However, there are speculations relating to data sharing around the world. Until a true international set of standards for data security and privacy controls is developed, meaningful protections for data — both domestic and international — will remain an issue of privacy.

2.10. CHINA PLANS A CANAL TO RESHAPE INDIAN OCEAN

Why in news?

China has decided to build a 100-km canal cutting Thailand into two parts.

Details of the project

- The new Thai Canal project comprises of two portions-
 - The first portion is seen as a counter to the "Malacca Dilemma." The canal will link the South China Sea to the Andaman Sea, connecting the Pacific Ocean to the Indian Ocean respectively.
 - The second portion is the establishment of a Special Economic Zone (SEZ). The new zone includes the addition of cities and artificial islands, which will enhance new industries and infrastructure in the region. This would make Thailand into a "logistic hub" and link Thailand to countries from all over the world.

Malacca Dielemma

The "Malacca Dilemma" is a term coined by Chinese President Hu Jintao (2003) on the over-reliance on the Malacca Straits where 80% of China's energy needs (oil imports) from the Middle East, Africa etc. passes through the Malacca Straits which is also known as China's maritime lifeline.

The closest alternatives, the **Straits of Lombok** and **Makassar**, are slower and already heavily utilized by the Very Large Crude Carriers that cannot safely navigate the Malaccan route.

Thus, China is vulnerable to a wide range of potential natural and political interference due to it being highly dependent on a chokepoint that it

Impact

- Energy Security: The Thai canal will drastically diminish transit time across the busiest maritime shipping
 - route and Chinese companies are extremely interested in speeding up the project as over 80 percent of Chinese oil imports and 30% of world trade pass through the Malacca Strait.
- Strategic Importance: The canal will slash 1,200 km off the route Chinese warships by bypassing Malacca straights to reach South Asian ports and will dramatically enhance Beijing's ability to intervene in the region.
- Security Architecture: As China continues to expand its presence across the maritime domain through BRI, the establishment of infrastructure projects, like the Kra Canal, is further likely to influence the new emerging security architecture in the Indo-Pacific.
- Some experts also say that the Kra Canal could benefit India and other economies in the region whose ships ply through the region by taking pressure off the overcrowded Malacca Straits.



Challenges

- The division of the isthmus will have considerable environmental implications on the flora and fauna of the
 region, and also on tourism and fishing industry in Thailand as the proposed canal route would run past
 tourist areas in the Andaman Sea that generate about 40 per cent of the total revenue from the tourism
 industry.
- It may also lead to an **erosion of the country's sovereignty** as was the experience of Egypt and Panama, where the development of Suez and Panama canals led to decades of foreign control.

2.11. ASIAN PREMIUM

Why in news?

India would coordinate with China and other Asian countries to raise voice against the "Asian premium" being charged by the **Organisation of the Petroleum Exporting Countries (OPEC).**

About Asian Premium

- Asian Premium is the extra charge being collected by OPEC countries from Asian countries when selling oil.
- It has its roots in the establishment of **market oriented crude pricing** in 1986.
- There are 3 important benchmarks in global market, representing the cost of oil produced in respective geographies.
 - ✓ **Brent:** Light sweet oil representative of European market
 - ✓ West Texas Intermediate(WTI): US market
 - ✓ **Dubai/Oman:** Middle East and Asian Market.
- For Europe and the US, there emerged domestic crude markets and spot prices. These two markets reflected the cost of crude produced in the respective geographies.
- But for Asia, there was no such indigenous market/ production location for importers except the **export-oriented Gulf markets**. Hence, the Dubai/Oman market
- The US and Europe had an advantage because their markets and prices were **based on future trading and reflected every trend in the crude market**. On the other hand, since Asia represented by Dubai/Oman do not have any derivative trading, doesn't have that edge.
- Hence, price charged from Asian countries remained \$1-\$2 dollar higher than that from Europe and the US. This price differential is termed as 'Asian Premium'.

2.12. SOUTH ASIAN CLIMATE OUTLOOK FORUM (SASCOF)

price was taken as the marker. But it has failed to indicate the cost of production.

Why in news?

Recently, 12th edition of SASCOF was held in Pune.

About SASCOF

- It was established in 2010 by the South Asian members of the World Meteorological Organization (specialised agency of UN for Meteorology, operational hydrology and related geophysical science).
- It is a platform where the members of SAARC along with Myanmar could discuss common weather and climate related matters.
- It is coordinated by Indian Meteorological Department.
- It also reviews the progress made in understanding and long range prediction of South Asian monsoons both regionally and globally.
- It aims to initiate capacity building/human resource development activities for the South Asian region, particularly in seasonal prediction.

About OPEC

Organization of the Petroleum Exporting Countries (OPEC) is an intergovernmental organization of 14 nations, founded in 1960.

- Headquarters: Vienna, Austria
- Type: International cartel
- Members of the Organization:
 - ✓ Middle East: Iran, Iraq, Kuwait, Saudi Arabia, Qatar, the United Arab Emirates,
 - ✓ Africa: Libya, Algeria, Nigeria, Angola, Equatorial Guinea, Gabon
- ✓ **South America**: Venezuela, Ecuador India sources about 86 per cent of crude oil, 75 per cent of natural gas and 95 per cent of LPG from OPEC member nations.

South Asia Association for Regional Cooperation (SAARC)

- It is a regional organisation which was established in 1985.
- The main objective of setting up of SAARC was to promote the welfare of the people of South Asia, improve the quality of life and accelerate economic growth, social progress and cultural development in the region.
- Member countries India, Pakistan.
 Bangladesh, Nepal, Sri Lanka, the Maldives, Afghanistan and Bhutan.

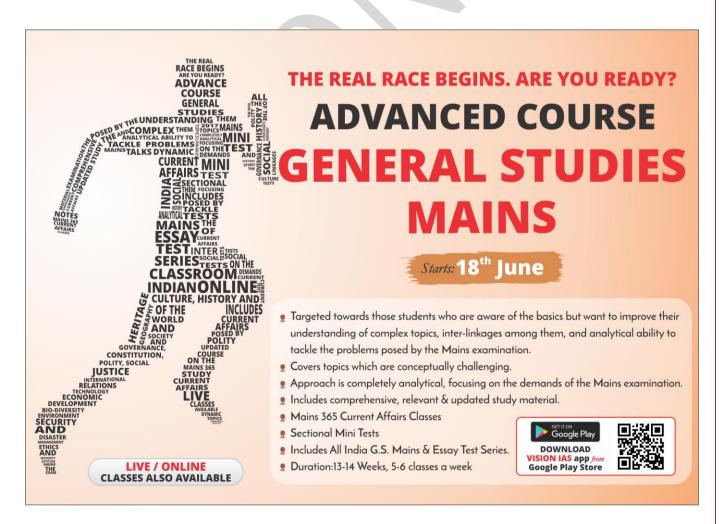
2.13. E-FOREIGNERS REGIONAL REGISTRATION OFFICE SCHEME (E-FRRO)

Why in news?

Recently, Ministry of Home Affairs launched e-FRRO in the country.

What is e-FRRO Scheme?

- It is a web-based application introduced by Indian Bureau of Immigration, aimed at providing fast and efficient services to foreigners visiting India.
- On the new system, the foreigners would get 27 Visa and Immigration related services in India by using e-FRRO service and obtain services through email or post without being physically present barring exceptional cases.



3. ECONOMY

3.1. INTEGRATION OF COMMODITY SPOT AND DERIVATIVES MARKET

Why in News?

 Report of Expert Committee on Integration of Commodity Spot and Derivatives Market headed by Ramesh Chand was put into public domain.

Structure of the Commodity Markets

- The trading in the commodities market can be broadly categorized into two major segments viz., spot/physical segment and derivatives segment.
- The commodity derivatives markets are well regulated under a statutory regulator while the spot markets are fragmented, geographically dispersed and primarily regulated by the state governments of the country

STRUCTURE OF COMMODITY MARKETS IN INDIA Markets Spot/Physical markets Derivatives Markets Primary sales-APMCs for Seconday Regulated sales-Absence regulated Exchanges agri products of regulated platform platform for futures no plantform for forwards and options for non-agri porducts

Integrating Spot and Derivative Markets

Need for integration of spot and derivative markets

- Although Spot and Derivative Markets operate in same ecosystem but on different market principles and function differently from each other, they have a symbiotic relationship.
- The commodity derivatives markets provide a platform for discovery of future prices of a commodity and also offer the participants in the spot market an opportunity to hedge themselves against fluctuations in future prices of the underlying commodities.
- Since the derivatives market ensures that the future and spot price of a commodity converges on the day the derivative contract expires for settlement, the discovery of realtime spot prices of a commodity on

Related Information

- **Spot Markets** The spot is a market for financial instruments such as commodities and securities which are traded immediately or on the spot. In spot markets, spot trades are made with spot prices. It is also referred to as the "physical market" or the "cash market"
 - spot markets for agriculture are of two types namely primary markets where mainly producers sell their commodities to traders and secondary market where transactions happen between traders.
- Derivatives- A derivative is a financial security with a value that is derived from an underlying asset or group of assets. Some common form of derivatives includes:
 - Futures contracts: It is an agreement between two parties for the sale of an asset at an agreed upon price. One would generally use a futures contract to hedge against risk during a particular period of time.
 - o **Forward contracts**: It is similar to futures contracts, but they are not traded on exchange, rather only over-the-counter.
 - Options: It is similar to a futures contract in that it is an agreement between two parties granting one the opportunity to buy or sell a security from or to the other party at a predetermined future date. The key difference is that with an option, the buyer is not obligated to make the transaction if he or she decides not to, hence the name "option."

a pan-India electronic spot exchange will certainly strengthen the convergence of spot and future prices of a commodity thereby enhancing efficiency of both spot and derivatives market.

Challenges for integration of spot and derivative markets

- **Legal Challenges-** There is no specific central law for setting-up of or regulation of pan-India electronic spot market platform, spot exchanges in agricultural or non-agricultural commodities.
- Multiple regulators and regulations-
 - SEBI is regulator for the commodity derivatives markets for agricultural as well as non-agricultural commodities.
 - The spot markets for the agricultural commodities are within the purview of the respective state governments. As regards nonagricultural commodities there is no dedicated central agency.

- **Storage** The capacity of the available warehousing infrastructure is inadequate and the industry is localized, unorganized, and fragmented.
- Lack of ancillary infrastructure such as adequate transport system, regulated assaying and refining and testing facilities, trained and certified human resources, uniform quality standards etc.

Action Plan for integration of spot and derivative markets

Spot Markets

- o Agricultural Spot Markets -
 - States should change their existing APMC Acts on the lines suggested in Model Agricultural Produce and Livestock Marketing (Promotion and Facilitating) Act (APLM) Act, 2017.
 - Providing multiple modes to the farmer for selling his farm produce, encourage formation of Farmer Producer Organizations (FPOs), scientific storage of commodities, institution for developing grades and standards of commodities, Improvements in eNAM etc.
- Non- Agricultural Spot markets
 - Regulated warehouse and ancillary infrastructure, developing India delivery standards and aligning with global standards, dedicated Ministry / Department for Precious metals, Gems and Non-ferrous Metals and recycling of non-agricultural commodities.
- Other issues include reviewing Free Trade Agreements (FTA) as reportedly some are having adverse impact on the growth of the domestic sector and developing formal and regulated structure of spot exchanges.
- Derivatives Markets Increasing participation of different stakeholders (institutions such as banks, mutual funds and entities like FPOs), introduction of new products (e.g.- weather derivatives), linkages with the Global commodities market etc
- Integration of commodity Spot and Derivatives collection and dissemination of data with regard to spot and derivative market, warehousing and development of storage infrastructure, certification requirements for skilled workforce, robust dispute resolution mechanism etc.

3.2. ALGORITHM TRADING

Why in news?

Recently, Securities and Exchange Board of India (SEBI) has relaxed restrictions on algorithm trading at commodity derivatives exchanges.

What is algorithm trading?

- Algorithmic trading or 'algo' in market parlance refers to orders generated at a super-fast speed by use of advanced
 mathematical models that involve automated execution of trade, and it is mostly used by large institutional investors
 accounting for 35-40 per cent of turnover on the Indian exchanges.
- It helps institutional investors increase the efficiency of trade execution and spot fleeting trading opportunities.
- However, there are concerns also that it may trigger a large volume of trades that magnify the trend causing wild swings and crashes in the market.
- Lack of explicit guidelines from SEBI has prevented many brokers from providing algo trading platforms to retail investors giving institutional investors an unfair advantage over retail investors.
- However, SEBI has proposed various measures to reduce disadvantage faced by retail investors such as:
 - Minimum Resting Time for Orders
 - o Random Speed Bumps or delays in order processing / matching which would affect High Frequency Trading but not non-algo order flow.
 - o Maximum order message-to-trade ratio requirement which requires a market participant to execute at least one trade for a set number of order messages sent to a trading venue.
 - Separate queues for colo orders and non-colo orders to ensure fair and equitable access to the stock exchange's trading systems
 - o Review of Tick-by-Tick data feed which provide details relating to orders and trades on a real-time basis.

Details about SEBI's recent move

• SEBI raised the limit to process up to 100 orders per second by a user for algo trade from the existing limit of 20 orders per second per user. It has asked exchanges to ensure that the limit it provides is subject to its ability to handle the load.

• It has also decided to do away with the requirement of listing of system auditors by the exchanges for system audit of algorithmic trading.

Other regulations by SEBI in algo trading

- Penalty levied on algo orders placed more than 0.75 per cent away from the last traded price, to check price swings.
- Introduction of shared co-location services to cut costs. In order to minimise or eliminate delay in the
 execution of trade orders, stock exchanges offer co-location or proximity hosting services. Through this, a
 broker or a data-vendor is permitted to be located within or at close proximity with the stock exchange and
 can connect to the trading platform through a direct and private network.
- The exchanges where algos are used, need to get their programmes approved by SEBI, before they are put to use.

3.3. EXEMPTION FROM ANGEL TAX

Why in news?

Recently, the government has put in place a mechanism for start-ups to secure exemption from the 'angel tax' with retrospective effect.

Background

- Under Section 56 of I-T law, a startup receiving equity infusion in excess of fair value faces tax, named as angel tax. Fair value is a rational and unbiased estimate of the potential market price of a good, service, or asset.
- The law treated such equity infusion as other income and is accordingly taxed.
- Many startups have received tax notices for this 'angel tax'.

Recent changes

- Startups with total investment including funding from angel investors up to Rs 10 crore can seek approval from an eight-member government board for exemption from tax.
- Angel investment tax, a hefty amount of 30.9%, is a huge setback for startups. Exempting startups from this
 would provide easy access to funding, which in turn will ensure ease in starting of new businesses, promote
 startup eco-system, and encourage entrepreneurship.
- However, Startups will still have to meet stringent conditions to avail the tax exemption such as
 - Need to obtain a report from a merchant banker specifying fair market value of shares under income-tax rules increasing their costs.
 - o Recognisation as an innovative startup by the inter-ministerial board of certification.

3.4. REITS AND INVITS

Why in news?

Recently, the Securities and Exchange Board of India (SEBI) has decided that REITs and InvITs will have to provide a mechanism for resolution of disputes with their shareholders and partners.

What is a 'Real Estate Investment Trust – REIT?

- It is a company that owns, operates or finances income-producing real estate.
- An REIT works very much like a mutual fund. It pools funds from a number of investors and invests them in rentgenerating properties.
- In India, the Real Estate Investment Trusts were introduced by the Securities and Exchange Board of India (Sebi) in 2007

What are angel investors?

Angel investors invest in small startups or entrepreneurs. The capital angel investors provide may be a one-time investment to help the business propel or an ongoing injection of money to support and carry the company through its difficult early stages.

The DIPP notification has defined a startup as an entity that is incorporated or registered in India with following criteria:

- Up to a period of seven years from the date of incorporation/registration. For biotechnology firms, that period is ten years
- An annual turnover not exceeding Rs 25 crore in any preceding financial year, and
- If it works towards innovation, development or improvement of products or processes or services, or if it's a scalable business model with a high potential of employment generation or wealth creation.

• There are primarily two types of REITs — equity and mortgage. Real Estate Investment Trusts are extremely beneficial for the development of an economy as they allow dormant investable funds to be channelled into real estate projects.

What is an infrastructure investment trust -InvITs?

- It is to facilitate investment into the infrastructure sector in India.
- They are designed to pool small sums of money from a number of investors to invest in infrastructure assets that give cash flow over a period of time.
- Part of this cash flow would be distributed as dividend back to investors. They too work like mutual funds.

Details about the news

- It will make real estate investment trusts (REITs) and infrastructure investment trusts (InvITs) more attractive investment options.
- The regulator had notified REITs and InvITs Regulations in 2014, allowing setting up and listing of such trusts which are very popular in some advanced markets.
- However, despite various earlier relaxations, only two InvITs have got listed on stock exchanges so far and not a single REIT has been listed in the country due to many challenges such as low yield when compared with other developed markets; regulatory risk, tax risk, litigation risk and business risk in India etc.

3.5. MUTUAL AGREEMENT PROCEDURE

Why in news?

Recently, India and Finland have reached an accord on the tax dispute with Nokia under the Mutual Agreement Procedure (MAP)

More on news

- Tax demands were raised on two entities Nokia India as well as Nokia Corp (Finland).
- Tax authorities issued the tax notice of Rs 2,500 crore to Nokia India for violating withholding tax norms since 2006 while making royalty payments to its parent company in Finland. This was later rectified and amounted to Rs.1600 crore
- A Rs 10,000 crore tax was raised on Nokia Corp. also for the same transaction on the grounds that it had a permanent establishment in the country. However, this was later dropped. This was done under the provisions in the India-Finland tax treaty that provided for withholding tax at the rate of 10% on payments made from India as royalty.
- However, Nokia India claimed that payments were made for the purchase of software from the parent company and were not royalty payments. Also, software was embedded in the phone and an inherent part of its hardware
- Recently, proceedings resulted into tax payment of Rs 1,600 crore. This resolution of dispute would open the company's frozen asset for sale as well as boost foreign investments and investor confidence in India.

What is Mutual Agreement Procedure (MAP)?

- MAP is an alternative available to taxpayers to resolve disputes giving rise to double taxation (taxes paid twice on the same source of earned income at national or international level).
- The MAP resolution, once accepted, eliminates all litigations.
- It is increasingly seen as the preferred mode for settling cross-border disputes.
- Some of the instances giving rise to double taxation are:
 - Adjustment arising from transfer pricing assessment
 - Issues relating to the existence of permanent establishments
 - o Characterisation or classification of income
 - Attribution of profits to permanent establishments
 - Withholding tax is levied beyond the allowance limit within an applicable tax convention
 - When a taxpayer is considered to be a resident of two treaty countries.

3.6. FOREIGN PORTFOLIO INVESTMENT

Why in news?

The Reserve Bank of India (RBI) has relaxed its rules for investments by Foreign Portfolio Investors (FPIs) in Indian bonds.

The New norms

- RBI has **withdrawn the clause** that forced FPIs to buy government bonds and state development loans with at least three years of **residual maturity**. However, investment in bonds with maturity below a year must not exceed 20% of the total investment of that FPI.
- It has **increased aggregate FPI investments** in a single government bond to 30% of outstanding stock from 20% earlier.
- The central bank also removed the three-year residual maturity rule for **corporate bond investments** by allowing FPIs to buy securities with at least one year maturity.
- It has also **Withdrawn the Auction Mechanism**, wherein FPIs were required to purchase investment limits once the limit utilisation breached 90 per cent of the permitted quota. **The Clearing Corporation of India Ltd (CCIL) will monitor utilisation of G-sec limits online.**

Reasons for relaxing the norms: The bond market is struggling with lower demand and rising bond yields (negative sentiments in the market, falling rupee, uncertainty over interest rate trajectory).

Clearing Corporation of India Ltd. CCIL:

- The CCIL was set up in April, 2001 to provide guaranteed clearing and settlement functions for transactions in Money, G-Secs, Foreign Exchange and Derivative markets.
- It also provides **non-guaranteed settlement** for Rupee interest rate derivatives and cross currency transactions through the CLS (Continuous Linked Settlement) Bank.
- It has been recognised as a Qualified Central Counterparty (QCCP) by the Reserve Bank of India in 2014.
- It has also set up a Trade Repository to enable financial institutions to report their transactions in OTC (Over-the-counter) derivatives.

G-Secs or Government Securities: These are debt obligations issued by Central or State Governments for short (Treasury Bills) or long terms (Bond or dated securities). These securities have lower interest rates and are considered more secure. State Governments can only issue Bond or dated securities called **State Development Loans.**

Bond Yield: As investors sell bonds, prices drop and yields increase (inversely proportional). A higher bond yield indicates greater risk. If the yield offered by a bond is much higher than what it was when issued, there is a chance that the company or government that issued it is financially stressed and may not be able to repay the capital.

3.7. STATEMENT ON DEVELOPMENTAL AND REGULATORY POLICIES

Why in News?

Recently, Reserve Bank of India (RBI) released its Statement on Developmental and Regulatory Policies.

Important developmental and regulatory policy measures include

- Framework on countercyclical capital buffer (CCCB): It has been decided that it is not necessary to activate CCCB at this point in time.
 - Aim of the CCCB
 - It requires banks to build up a buffer of capital in good times which may be used to maintain flow of credit to the real sector in difficult times. The main objective is to protect banks from the effects of the financial cycle.

is difference between creditto-GDP ratio and the long term trend value of credit-to-GDP ratio at any point in time.

Credit-to-GDP gap (credit gap)

IndAS are recommended by National Advisory Committee on Accounting Standards (NACAS) to the Ministry of Corporate Affairs, which then issues them. These standards on an par with International Financial Reporting Standards (IFRS). Corporate entities started complying with IndAS with effect from 2016.

- It achieves the broader macro-prudential goal of restricting the banking sector from indiscriminate lending in the periods of excess credit growth that have often been associated with the building up of system-wide risk.
- Credit-to-GDP gap will be the main indicator in the CCCB framework in India.
- **Deferment of Indian Accounting Standards (IndAS)** implementation for scheduled commercial banks from April 1, 2018 to April 1, 2019.
- Storage of Payment System Data/ Data Localisation

- Under it, payment system operators must store the data they collect on transactions in India within databases located in the country within a period of 6 months.
- As a regulator, RBI can seek "unfettered" access to financial and transaction data of Indians under Payments and Settlement Systems Act of 2007.
- Move is aimed at ensuring safety and security of users' information.

• Introduction of Rupee Swaptions to effectively manage interest rate risk.

- Swaptions are basically options that give the holder the right but not the obligation to enter into an underlying swap. A swap is a contract through which two parties can exchange financial instruments.
- o It gives better **timing flexibility** in managing interest rate risks
- Aim: To tap into the active offshore rupee interest rate swap market to add depth and liquidity to the domestic interest rate swap market

• Review of Separate Trading of Registered Interest and Principal Securities (STRIPS) directions

- As is stated in the acronym, STRIPS are simply bonds that have had the interest payments stripped away and sold separately, while the principal amount is still paid out at maturity.
- Traditional bonds and fixed-income securities pay interest according to a set schedule and then return
 the investor's principal amount at maturity. However, they are only available as a single security that
 pays both interest and principal.

Currency management

• Central Bank Digital Currency:

- RBI has constituted an inter-departmental group to study and provide guidance on the feasibility to introduce a central bank digital currency.
- The rationale behind exploring the option of introducing fiat digital currencies include rapid changes in the landscape of the payments industry along with factors such as emergence of private digital tokens and the rising costs of managing fiat paper/metallic money.

• Banning Virtual currency dealing

- RBI has asked all the regulated entities, including banks, not to provide services to any individual or business dealing in digital currencies and has given three months to banks to end all existing relationships with bitcoin players
- Finance Minister in his Budget speech 2018, also said that digital currencies cannot be recognized as a legal tender

Financial Inclusion and Literacy

Tailored Financial Literacy Content

RBI has developed tailored financial literacy contents for five specified target groups viz. Farmers, Small
entrepreneurs, School children, Self Help Groups and Senior Citizens, that can be used by the trainers
for imparting financial education

Revamping of the Lead Bank Scheme

- Scheme would be revisited based on the recommendation of the "Committee of Executive Directors" to make it more relevant to changes that have taken place in the financial sector over the years.
- About scheme: Launched in 1969 on the recommendation of DR Gadgil study group, it envisages lead roles of individual banks (both in public sector and private sector) for the development of districts allotted to them.
 - Lead bank acts as a leader for coordinating the efforts of all credit institutions in the allotted districts to increase the flow of credit to agriculture, small-scale industries and other economic activities included in the priority sector in the rural and semi-urban areas.

3.8. RBI DECIDES TO USE GDP INSTEAD OF GVA

Why in news?

Reserve Bank of India has decided to use Gross Domestic Product (GDP), instead of Gross Value Added (GVA) to measure economic activity in the country.

Background Information and Key Definitions

- Through revision of National Accounts statistics in 2015 by following changes were made:
 - Gross Value Added (GVA) from different sectors will be calculated at basic prices.
 - o GDP of the country is to be estimated in terms of Market Price
- GDP means the total value of a country's annual output of goods and services and GDP at factor cost represents what the producers in the economy make from industrial activity — wages, profits, rents and capital — called 'factors of production'.
- Gross value added (GVA) is the value addition done to a product resulting in the production of final product.
 GVA provides the rupee value of the amount of goods and services that have been produced, less the cost of

all inputs and raw materials while producing these goods and services.

GVA at factor cost + (Production taxes - Production subsidies) = GVA at basic prices GDP at market prices = GVA at basic prices + Product taxes- Product subsidies

There can be GVA for a firm, industry, sector or the entire economy.

- GVA at basic prices include production taxes and exclude production subsidies available on the commodity and GDP at market prices include both production and product taxes and excludes both production and product subsidies.
- GVA gives a picture of the state of economic activity from the producers' side or the supply side. GDP gives the picture from the consumers' side or the demand perspective.

Reasons for switching over to GDP

- GVA is considered a closer representative of economic activities because it provides sector wise breakdown
 measure and helps policymakers decide which sectors need incentives or stimulus and accordingly formulate
 sector specific policies.
- However, RBI has decided to shift to GDP as it is the measure of economic performance used not only by
 multilateral institutions, international analysts and investors but it is also in consonance with international
 practice and thus facilitates easy cross-country comparisons.
- Even CSO has started using GDP as the main measure of economic activity from this year.

3.9. LIBERALISED REMITTANCE SCHEME

Why in news?

Reserve Bank of India has recently, tightened reporting norms for the Liberalized Remittance Scheme (LRS) Scheme.

Highlight

Prevalent Situation

- Transactions LRS are being permitted by authorised dealer (AD) banks based on the declaration made by the remitter.
- However, it is difficult for the authorised dealer banks to monitor/ensure that a remitter has not breached the prescribed limit by approaching multiple authorised dealer banks.

Changed situation

- Banks will be required to upload daily transaction-wise information undertaken by them under LRS.
- Move is aimed at improving the monitoring and ensuring compliance with the LRS ceilings.

The Liberalized Remittance Scheme (LRS)

- It's a facility provided by the RBI for all resident individuals including minors to freely remit upto \$ 250,000 per person per year for current and capital account purposes or a combination of both.
- Regulations for the scheme are provided under the FEMA Act 1999.
- Under LRS, remittances can be made for overseas education, travel, medical treatment, apart from maintenance of relatives living abroad, gifting and donations. The money can be remitted for the purchase of shares and property as well.

Restriction on Remittance – Individuals are not allowed

- to send money to countries identified as 'non-cooperative jurisdictions' by the Financial Action Task Force.
- to entities identified as posing terrorist risks. etc
- for trading on the foreign exchange markets, purchase of Foreign Currency Convertible Bonds issued by Indian companies abroad.

3.10. PARAMPARAGAT KRISHI VIKAS YOJANA

Why in news?

 Recently, Ministry of Agriculture and Farmer welfare has revised the guideline of Paramparagat Krishi Vikas Yojana.

About the move

- Under revised guidelines farmers will be eligible for an assistance of Rs 48,700 per hectare for a three-year period for adopting the traditional methods of cultivation and standard organic farming practices like zerobudget natural farming and permaculture.
- These measures include a focus on natural practices.
- These Traditional methods include: yogik farming, gou mata kheti, Vedic farming, Vaishnav kheti, Ahinsa farming, Adhvoot Shivanand farming, and rishi krishi.

Paramparagat Krishi Vikas Yojana(PKVY)

- It is an elaborated component of Soil Health Management (SHM) of major project National Mission of Sustainable Agriculture (NMSA).
- Its objectives are-
 - To support and promote organic farming and thereby improving soil health.
 - o Reduce farmer's dependence on fertilizers and agricultural chemicals to improve yields.
 - Motivate the farmers for natural resource mobilization for input production.
 - Plans to form around 10 thousand clusters in three years and cover an area of 5 Lakh hectares under organic farming.
- Every farmer will be provided Rs. 20,000 per acre in three years for seed to harvesting of crops and to transport produce to the market.

3.11. PM FASAL BIMA YOJANA

Why in news?

Recently centre allowed States to set up their own insurance companies for implementing Pradhan Mantri Fasal Bima Yojana (PMFBY).

More on news

- The move comes after several requests from states as well as observations made by the Comptroller and Auditor General (CAG) in its 2017 report that old crop insurances schemes which have now been merged with PMFBY, were poorly implemented during 2011-2016.
- Presently, five public sector insurers and 13 private insurance companies are empanelled for implementation of the scheme
- The public insurers include Agriculture Insurance Company of India (AIC), United India Insurance Company (UICC), National Insurance Company (NIC), Oriental Insurance Company (OIC) and New India Assurance Company (NIAC).

Challenges faced in the implementation of PMFBY

- Delayed compensation the delay in settlement of the claims of farmers was due to state governments delaying the payment of their share of premium and further delay in carrying out crop cutting experiments to estimate crop yield.
- Crop Cutting Experiment used to assess losses are not being done in a timely manner and also the data collected is questionable as they reflect the gap between the claims approved by them and losses estimated by the states.

Pradhan Mantri Fasal Blma Yojana (PMFBY) Objectives of the scheme

- To provide insurance coverage and financial support to the farmers in the event of natural calamities, pests & diseases.
- To stabilise the income of farmers to ensure their continuance in farming.
- To encourage farmers to adopt innovative and modern agricultural practices.
- To ensure flow of credit to the agriculture sector.

Features of PMFBY

- It was launched in 2016 replacing the existing two schemes National Agricultural Insurance Scheme (NAIS) as well as Modified NAIS.
- A uniform premium of only 2% to be paid by farmers for all Kharif crops and 1.5% for all Rabi crops and 5% for horticultural crops.
- The balance premium was to be paid by state and central government in equal proportions.
- There is no upper limit on Government subsidy so farmers will get claim against full sum insured without any reduction.
- The PMFBY is compulsory for loanee farmers availing crop loans for notified crops in notified areas and voluntary for non-loanee farmers.
- Yield Losses Natural Fire and Lightning, Storm, Hailstorm, Cyclone, Typhoon, Tempest, Hurricane, Tornado. Risks due to Flood, Inundation and Landslide, Drought, Dry spells, Pests/ Diseases. It also includes Post Harvest losses.
- It also includes mandatory use of technology such as smart phones, drones etc. while assessing losses.

- **High Insurance charged** There was an increase in the premium being charged by the private companies whereas it was expected to be reduced even though they are allotted areas with less risk.
- **Inadequate Data collection** The data hasn't been collected adequately as specified in the scheme guidelines i.e. no use of smart phones and drone in assessing the losses.
- **Poor capacity to deliver:** There has been no concerted effort by the state government and insurance companies to build awareness of farmers on PMFBY. Insurance companies are not putting in place any ground infrastructure required for grievance redressal and assessing crop losses in individual plots.
- **Problems with internal functioning of insurance companies** Due to the complexities in agriculture insurance the complete understanding takes time and the senior positions in insurance do not function till the tenure is complete and some posts have been vacant.
- Lack of manpower The Implementing agencies have been functioning in an ad-hoc manner and face severe staff shortage.

Way forward

Following steps can be taken to improve the implementation of the scheme:

- Farmers must be informed before deducting crop insurance premium. They must be given a proper insurance policy document, with all relevant details.
- Robust assessment of crop loss should be done through capacity building of state governments, involvement
 of PRIs and farmers.
- PMFBY timelines from insurance coverage to claim payment should be strictly adhered to
- Coverage of tenants and sharecroppers should increase.
- All PMFBY related data related to farmers must be available in the public domain and shared openly with farmers.

3.12. NATIONAL BAMBOO MISSION

Why in news?

Recently, Cabinet has approved restructured National Bamboo Mission under National Mission for Sustainable Agriculture (NMSA) for 2018-2020.

Background

- National Bamboo Mission (NBM) was launched by Government as a Centrally Sponsored Scheme in 2006-07 and was subsumed under Mission for Integrated Development of Horticulture (MIDH) during 2014-15.
- Government has taken out bamboo from the tree category (in non-forest areas) to encourage people to grow bamboo on private lands, thus, enhance the green cover and carbon stock of the country.
- According to government in the FY 2016-17, Export value of Indian bamboo stand at Rs 18 crore while it's import value is around Rs 25 crore.

About the Mission

Objectives of Restructured NBM

- To increase the area under bamboo plantation in non-forest Government and private lands to supplement farm income and contribute towards resilience to climate change.
- To improve post-harvest management through establishment of innovative primary processing

National Mission for Sustainable Agriculture (NMSA)

- It is one of the eight Missions outlined under National Action Plan on Climate Change (NAPCC)
- Aim: Promoting sustainable agriculture through a series of adaptation measures focusing on ten key dimensions encompassing Indian agriculture namely; Improved crop seeds, livestock and fish cultures, Water Use Efficiency, Pest Management, Improved Farm Practices, Nutrient Management, Agricultural insurance, Credit support, Markets, Access to Information and Livelihood diversification.
- **Focus**: To infuse the judicious utilization of resources of commons through community-based approach.

Bamboo in India

- India has 125 indigeneous and 11 exotic bamboo species belonging to 23 genera, in which more than 50% of the Indian bamboo resource is confined to North-East.
- India is only second to China in bamboo reserves, accounting for 20 per cent of the global production
- Bamboo Area: According to India State of Forest Report (ISFR) 2017, bamboo-bearing area in country is estimated at 15.69 million ha.
- Applications of Bamboo: use in building materials, agricultural implements, furniture, musical instruments, food items, handicrafts, large bamboo based industries (paper pulp, rayon etc.), packaging, etc.

units, treatment and seasoning plants, primary treatment and seasoning plants, preservation technologies and market infrastructure.

- o To promote product development at micro, small and medium levels and feed bigger industry.
- o To rejuvenate the under developed bamboo industry in India.
- o To promote skill development, capacity building, awareness generation for development of bamboo sector.

Implementation strategy and targets of Mission

- The Mission will focus on development of bamboo in limited States where it has social, commercial and economical advantage with focus on genetically superior planting material of bamboo species of commercial and industrial demand.
- Adoption of end to end solution in bamboo sector i.e. complete value chain approach starting from bamboo growers to consumers would be emphasized.
- o Mission has been developed as a platform for integration of Ministries/Departments/Agencies with implementation responsibilities given based on their mandate.
- o Capacity building of the officials, field functionaries, entrepreneurs and farmers through skill development and trainings will be emphasised.
- o Focus will be given on Research & Development (R&D) to increase the production and productivity of bamboo.
- State covered: North Eastern region and States including Madhya Pradesh, Maharashtra, Chhattisgarh, Odisha, Karnataka, Uttarakhand, Bihar, Jharkhand, Andhra Pradesh, Telangana, Gujarat, Tamil Nadu and Kerala.
- **Empowerment of Executive Committee** for formulation of guidelines of the NBM and to make the changes therein.

Significance

- Sustainable Growth: It serve as a potential instrument for enhancing income of farmers (including small & marginal farmers) by optimizing farm productivity and contributing towards climate resilience and environmental benefits
- **Increasing Production**: It's expected to establish about 4000 treatment/ product development units and bring more than 100000 ha area under plantation.
- **Enhancing Local Economy**: It will directly and indirectly benefit the farmers, local artisans, handicraft entrepreneurs and associated personnel engaged in bamboo sector.
- **Employment Potential**: About one lakh farmers are expected to be directly benefitted in terms of plantation in both skilled and unskilled areas.
- **Region based Strategy**: promoting holistic growth of bamboo sector by adopting area-based, regionally differentiated strategy and to increase the area under bamboo cultivation and marketing.
- Promoting Exports: By addressing forward integration to strengthen marketing of bamboo products, especially those of handicraft items

3.13. RURAL ELECTRIFICATION

Why in news?

Recently, Government has achieved village electrification targets under 'Deen Dayal Upadhyaya Gram Jyoti Yojana' (DDUGJY).

Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY): Launched in 2014, components of DDUGJY include:

- separation of agricultural and non-agricultural electricity feeders to improve supply for consumers in rural areas.
- improving sub-transmission and distribution infrastructure in rural areas.
- rural electrification by carrying forward targets specified under the RGGVY.
- The central government provides 60% of the project cost as grant, the state power distribution companies (discoms) raise 10% of the funds, and 30% is borrowed from financial institutions and banks.
- Rural Electrification Corporation Ltd (REC), is the nodal agency for executing DDUGJY

GARV II APP: Power ministry launched GARV app to provide real time data about rural electrification in all villages of the country.

Rural Electrification Corporation

- Established in 1969, it is a Navratna company under the Ministry of Power.
- It is also the nodal agency for the implementation of DDUGJY (Deen Dayal Upadhyay Gram Jyoti Yojana) and contributing agency for rolling out UDAY (Ujjwal Discom Assurance Yojana).

National Rural Electrification Policy, 2006

- It was notified in compliance with the Electricity Act, 2003 by the Central Government.
- According to it, an electrified village is defined as one that has the following:
 - o provision of basic infrastructure such as distribution transformers and lines in the inhabited locality,
 - provision of electricity in public places like schools, panchayat office, health centers, dispensaries, and community centers, and
 - At least 10% of the total numbers of households in the village are electrified.

More about news

- As per Government of India, out of 18,452 villages in India that were power deprived 3 years ago, 17,181 have been electrified. Others are uninhabited or classified as grazing reserves.
- According to **DDUGJY website**, 99.8% of census villages have been electrified by February, 2018, while "**intensive electrification**" (household electrification) has been completed in around 80% of villages.

Significance

- **Socio-Economic benefit**: Providing electricity helps in improving education, health, and connectivity apart from having a multiplier effect on increased economic activities and job creation.
- **Gender Empowerment**: It mainly affects women and girls more as they have to bear the primary responsibility for collecting firewood, cooking and other domestic work
- It will help **in improving India's per capita power consumption** of around 1,200 kWh which is among the lowest in the world.
- **Improving Discoms Health**: Electricity access to households with meters will create demand which in turn will help in improving the financial health of the respective discoms.
- **Better Policy Formulation**: It will help in appropriately estimating, planning and budgeting for complete household electrification over the next two years.
- **Boost to rural demand**: There is a direct correlation between improving electricity access and business environment in country. Electrification, therefore, would provide a fillip to rural demand.
- Achieving Climate Commitment: It will lead to decline in black marketing of kerosene oil and meeting country global climate change commitments as electricity will substitute kerosene for lighting.
- **Sustainable Development Goal**: Access to energy services is critical for advancing human development, furthering social inclusion of the poorest & most vulnerable in society and to meeting many of the SDGs.

Concern

- Vague Definitions Of Electrification: It only create a false sense of achievement, While all inhabited villages out of them have now been electrified, only 1,321 have access to power for all their households.
- Quality of Electricity Access: Electricity access is about affordability and reliability. However, some States in India have struggled to provide less than ten hours with electricity access per day to households.
- Rural-Urban gap in access: In India only around 71% of all households have electricity with considerable rural-urban gap. Further, DDUGJY website shows that only six states had 24-hour power supply in rural areas in December 2017.
- Transmission and Distribution (T&D) or Aggregate Technical & Commercial (AT&C) losses are around 20% in 2015-16 with huge disparity in T&D losses across the states mainly due to poor grid connectivity. States with high T&D losses are relatively slow in electrifying rural households.

Way Forward

- Electrification of Household (Intensive Electrification): Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya) strives to provide electricity connections to more than 40 million families in rural and urban areas by December 2018.
- Augmenting Generation capacity: According to NITI AAYOG, the energy demand in India is likely to go up by 2.7-3.2 times between 2012 and 2040.

- Proper Accountability and **Monitoring** mechanism is critical for the government to achieve objectives of Draft National energy Policy.
- Reduce T&D losses for Reliable Supply of **Electricity:** It can generate social and economic benefits like improving women's participation in labour markets, enhancing labour productivity etc.
- Adopting **Energy** Plus approach recommended by United Nations Development Programme (UNDP), which emphasizes on energy access in combination with productive use of electricity for income generation and livelihood upliftment.
- Improving Capacity building of Discoms through implementing appropriate measures such as smart meters, infrastructure development, franchisee arrangements with local self-help-groups (for more

effective billing, monitoring and collection)

Eliminating political interference would also allow discoms to improve billing and revenue collections, revise tariffs to reflect costs and crack down on electricity theft.

Pradhan Mantri Sahaj Bijli Har Ghar Yojana / 'Saubhagya'.

- **Objective**: to provide electricity to all families in India.
- Funding Pattern: 60% by central grants, 30% by bank loans and 10% by states.
- **Identification of beneficiaries**: The government will use Socio Economic and Caste Census (SECC) 2011 data to identify the beneficiaries for free electricity connections.
- Implementation The Rural Electrification Corporation Limited will be the nodal agency for the operationalization of the scheme throughout the
- For those household where the national electricity grid can't reach, households will be provided with solar power packs along with battery banks.

SAUBHAGYA PORTAL - It would disseminate information on household electrification status (state, district, villagewise), and household progress on live basis.

3.14. FAME SCHEME PHASE I EXTENDED

Why in news?

Recently, the first phase of the Faster Adoption and Manufacturing of Hybrid and Electric Vehicles in India (FAME India) Scheme has been extended till September 2018 or till the Phase II of the scheme is approved.

FAME-India Scheme

- It was formulated by the Department of Heavy Industry as a part of National Electric Mobility Mission Plan 2020.
- It aims to support the hybrid/electric vehicles market development and its manufacturing ecosystem to achieve self-sustenance.
- The scheme has four focus areas Technology Development, Demand Creation, pilot projects and charging infrastructure.

National Electric Mobility Mission Plan 2020

It was launched by the Government to achieve national fuel security by promoting hybrid and electric vehicles in the country.

The plan has set an ambitious target to achieve 6-7 million sales of hybrid and electric vehicles every year from 2020 onwards.

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- It is aimed at incentivising all vehicle segments i.e. 2 wheelers, 3 wheeler auto, passenger 4 wheeler, Light Commercial Vehicles and Buses.
- The scheme also covers also covers Hybrid & Electric technologies like Mild Hybrid, Strong Hybrid, and Plug in Hybrid & Battery Electric Vehicles.
- It also provides demand incentive for buyers (end users/consumers) in the form of an upfront reduced price purchase to enable wider adoption.
- Taking into account the environmental pollution and fossil fuel usage in road transport in high density urban areas the first phase of the scheme is restricted to: Cities under Smart Cities Initiative, major metro agglomerations, state capitals, cities with more than 1 million population, cities of north eastern states.
- The FAME scheme is significant in the current scenario as it will help to reduce vehicular carbon emission, reduce India's import bill, help achieve INDC under the Paris Convention and increase investment in the manufacturing sector due to various financial and fiscal incentives.

3.15. OIL AND GAS EXPLORATION

Why in News?

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Recently, Cabinet has delegated its power to approve award of block for exploration and production of oil and gas, to the Ministry of Finance and Ministry of Petroleum and Natural Gas.

www.visionias.in

About the move

- The delegation of power is for open acreage licensing policy (OALP) bid rounds under the Hydrocarbon Exploration and Licensing Policy (HELP).
- Aforesaid ministries, will approve the award based on the recommendations of a panel of secretaries, called the **empowered committee of secretaries (ECS)**.

Significance of the move

- Ease of doing business- It will expedite the decision-making process on awarding blocks and give a boost to the initiative of ease of doing business.
- **Increase Domestic Production-** Simplifying the process may help the country to step up its domestic production and in realising the **aims to reduce import dependency** in oil and gas by 10% by 2022.
- **Eliminating Bureaucratic hurdles**-The action would facilitate the timely allocation of energy resource by eliminating bureaucratic hurdles and thus in turn reduce **energy supply-demand gap.**
- **Employment opportunities** The increased development activities for exploration and exploitation of CBM gas reserves in and around the block will generate economic activities which, in turn, has potential to create employment opportunities in energy operations and in the industries.

Hydrocarbons Exploration and Licensing Policy (HELP)

- Its Objectives are
 - o To make India **business and investor friendly** by reducing regulatory restrictions.
 - Double India's existing oil production by 2022.
 - o **Identification of areas** where exploration of different hydrocarbons can be made possible.
- Main Features of the Policy includes Uniform Licensing, Open Acreage Policy, easy to administer revenue Sharing, Marketing and Pricing Freedom, and marketing and pricing freedom for the crude oil and natural gas produced.

Comparison between HELP and NELP

Policy category	Help	Pre-Help	
TYPE OF HYDROCARBON	Covers all conventional and unconventional oil and gas	NELP covered only conventional oil and gas; Coal Bed Methane Policy covered coal bed methane	
LICENSE	A single license for exploration and extraction of all types of oil and gas	Separate license required for conventional oil and gas, coal bed methane, shale oil and gas, and gas hydrates	
REVENUE MODEL	Revenue-sharing model under which revenue will be shared with the government in the ratio submitted by bidders	Production-sharing model under which government received a share in the profits	
COVERAGE	Open acreage policy under which exploration companies can apply to explore any block not under exploration	Exploration was restricted to blocks opened for bidding by the government	
OIL AND GAS PRICING	Companies have the freedom to sell their production domestically without government intervention	Crude oil price was based on import parity; gas price was fixed by the government	
ROYALTY	Concessional royalty for deep water (5 percent) and ultra-deep water (2 percent) areas, which are difficult to explore, and reductio of royalty in shallow waters (from 10 percent to 7.5 percent)	12.5 percent for the onshore areas and 10 percent for offshore areas; 10 percent for coal bed methane	

3.16. EXPLORATION OF COAL BED METHANE (CBM)

Why in news?

The Cabinet Committee on Economic Affairs chaired by the Prime Minister gave its approval for issuing a notification amending Oil Fields (Regulation and Development) Act, 1948 (ORD Act, 1948).

More on news

- Government had earlier issued a notification in 2015 granting rights to CIL and its subsidiaries for exploration and exploitation of CBM from all coal bearing areas for which they possess mining lease for coal. However, permission was required for Mining Lease (ML) for CBM by Ministry of Petroleum and Natural gas.
- Now with new amendment, requirement of permission has been done away with for CIL and its subsidiaries.

About Coal Bed Methane

- Coal Bed Methane (CBM) is an unconventional form of natural gas found in coal deposits or coal seams.
- It is formed during the process of coalification, the transformation of plant material into coal.
- It can be recovered from underground coal before, during, or after mining operations.
- It can also be extracted from "unminable" coal seams that are relatively deep, thin or of poor or inconsistent quality.
- It is a cleaner and more efficient fuel than coal or furnace oil
- In CBM, as opposed to conventional oil and gas, the production increases gradually till it hits it peak, and so it is best suited for small and medium enterprises (SMEs) who require smaller amounts of fuel.

Significance of the amendment

- It is in line with the Government's initiatives of 'Ease of Doing Business'.
- It will expedite the exploration and exploitation of CBM, enhance the availability of natural gas and reduce the gap in demand and supply of natural gas.
- Since most of CBM regions are in backward regions of the country, it can encourage development by providing employment.

3.17. UTTAM APP

Why in News?

The Union Minister for Railways and Coal launched UTTAM App for Coal Quality Monitoring.

About Unlocking Transparency by Third Party Assessment of Mined Coal (UTTAM)

- The Ministry of Coal and Coal India Limited (CIL) has developed the app to facilitate a bidirectional channel between Coal India Limited and common citizens
- It is aimed at ensuring transparency and efficiency in the coal quality monitoring process
- The salient features of UTTAM APP are: (i) provides for Third Party Sampling (ii) holistic coverage of coal quality across subsidiaries (iii) Comparison between Declared and Analysed Gross Calorific Value (iv) reflects the trend of complaints pertaining to quality of Coal (v) represents the trend of coal imported over the years.

3.18. PRADHAN MANTRI GRAM SADAK YOJANA (PMGSY)

Why in news?

Recently, Public Accounts Committee (PAC) has found issues in the implementation of PMGSY.

Issues highlighted by the Report

 Delay in Execution: It found that in 26 states, around 4,500

Related information

- **Core Network** is the network of all the Rural Roads that are necessary to provide basic access to all the Habitations. **Basic access** is defined as single all-weather road connectivity to each Habitation.
- The effort under the PMGSY is to provide single all-weather road connectivity to each eligible Habitation by way of connecting it to another Habitation having allweather connectivity or to an all-weather road, in such a way that there is access to, inter alia, Market Centres.
- Core Network is extracted out of the total Network mentioned in the DRRP and consists of existing roads as well as the roads required to be constructed to the yet unconnected Habitations.
- However, it will not consist of all the existing roads of the DRRP since the objective is to establish 'basic access' i.e., one all-weather road connectivity to each habitation.
- It is primarily intended to mark out the essential network that is required to be maintained in good condition at all times.

- projects were delayed by one month to 129 months owing to land disputes, lack of forest clearances, delay in getting permission for mining operations and paucity of funds among host of other reasons.
- States deviated from the prescribed procedures while preparing **District Rural Road Plan (DRRP)** and **Core Network**. Consequently, eligible habitations were either left out or wrongly shown as connected.
- It was also found that no state has implemented the online fund processing and even after 13 years of introduction on **online management, monitoring and accounting system (OMMAS)**, the Rural Development Ministry was still relying on manual monthly progress reports for decision making.
- Other issues highlighted include no mechanism evolved by the ministry to ensure utilization of funds for intended purposes due to which diversion is taking place, delay in transfer of funds by State Govts, lack of rural road maintenance policy by certain states, etc.
- Some measures to be initiated urgently to address the shortcomings –
 - Replicating the modalities of social audit in the PMGSY

About Public Accounts Committee

- It is a joint committee consisting of 15 members from Lok Sabha and 7 from Rajya Sabha.
- Since 1967, its chairman by convention is selected from the Opposition parties.
- Primary Functions of the Committee: In scrutinizing the Appropriation Accounts and the Reports of the Comptroller and Auditor-General.
- Constant monitoring to ensure that guidelines issued are scrupulously followed and implemented by the States
- Create a comprehensive **Geographical Information System (GIS)** database of Rural Road Information System for sharing with different agencies involved in construction and maintenance.
- Preparation of Comprehensive New Connectivity Priority List/ Comprehensive Upgradation Priority List (once the Core Network is ready) with involvement of panchayats.

About Pradhan Mantri Gram Sadak Yojana (PMGSY)

- It's a centrally sponsored flagship scheme of the Ministry of Rural development.
- **Objective**: to provide all-weather rural road connectivity and to access eligible unconnected habitations as a strategy for poverty alleviation and to overcome deficiencies in rural road planning, inadequacy and unpredictability of funds and lack of maintenance of rural roads.
- **Criteria for Habitation**: Habitations with 500 populations in plain areas and 250 in hilly areas had to be connected by all-weather roads.
- Out of a total of 1,78,184 eligible habitations under PMGSY, 1,45,158 habitations have been connected till 2017, achieving 82% of the target.
- It is aggressively encouraging **use of "Green Technologies**" and non-conventional materials like waste plastic, cold mix, geo-textiles, fly-ash, iron and copper slag etc. in rural roads.
- **Mobile Application "Meri Sadak**" is launched to enable citizens to register complaints regarding the quality and pace of construction of PMGSY roads.
- **PMGSY-II** aims to cover upgradation of existing selected rural roads based on a criterion to make the road network vibrant.
- **PMGSY-III** is also proposed for upgradation of 1.07 lakh kilometers of rural roads. For this, the annual funding support of Rs. 19000 crore from the Central Government will be maintained upto 2022.

3.19.IMF WORLD ECONOMIC OUTLOOK

Why in news?

The International Monetary Fund (IMF) has published its World Economic Outlook (WEO), 2018 Report.

More on news

- WEO is a survey by the IMF staff economists, usually **published twice a year**.
- It presents an analysis of global economic developments during the near and medium term; considers
 issues affecting industrial countries, developing countries, and economies in transition to market; and
 addresses topics of pressing current interests.
- It has projected that **India will grow** (7.4% in 2018 and 7.8% in 2019) **faster than China** due to **strong private consumption.**

3.20. GLOBAL FINDEX REPORT 2017

Why in news?

Recently, World Bank has released Global Findex Report.

About Global Findex Report

- It is world's most comprehensive data set on how adults save, borrow, make payments, and manage risk. It has been prepared in partnership with Gallup Inc. with funding of Bill &Melinda Gates Foundation.
- The 2017 report shows that financial inclusion has increased worldwide to 69% from 62% in 2014. However in developed countries 94% of adults have an account.
- Gender gap in account ownership is persistent in developing countries with a gap of 9% point. As compared to 65% women 72% men have bank accounts worldwide.
- The report lists that the number of account holders in India has risen from 35% in 2011 to 80% in 2017. During 2014-17, 51.4 crore bank accounts were opened worldwide out of which 55% were in India.
- Globally only 76% of account holders resort to digital payments as compared to 91% in developed countries and 44% in developing countries. However, only 36% of account holder in India make or receive digital payments.

2.21. GSP ELIGIBILITY REVIEW OF INDIA

Why in news?

Recently, United States Trade Representative (USTR) formally announced that it is reviewing the eligibility of India, Indonesia, and Kazakhstan in the Generalized System of Preferences (GSP)

Reasons for the review

- Due to concerns related to its compliance with the GSP market access criterion.
- The petitions filed by the U.S. dairy industry and the U.S. medical device industry which requested a review of India's GSP benefits, citing Indian trade barriers affecting U.S. exports in those sectors.
- Last year, the Indian government decided to cap the prices of cardiac stents and knee implants by almost 70 percent.

What is GSP?

- GSP is a preferential treatment that US government gives when products are imported from one of the 120 designated developing and developed countries.
- The benefits under the GSP includes duty free entry of certain goods like chemicals, gems, textiles among others to the US market.
- In 2017, India was the biggest beneficiary of the GSP with subsidies worth \$5.6 billion.
- GSP benefits India's exports and US industries get cheaper intermediate

Impact on India

- The GSP programme allows duty-free entry of 3,500 products from India, denial of which would impact exporters of textiles, engineering, gems and jewellery and chemical products.
- India would find it difficult to ensure availability of cheap medical devices and to protect its dairy sector which employs nearly 6 crore farmers.

3.22. US CURRENCY WATCH LIST

Why in News?

Recently, United States Treasury
 Department has added India to the currency practices and macroeconomic policies monitoring list.

More about news

 About Report: Treasury report is used by Congress to identify

Three pre-conditions for being named currency manipulator

- A trade surplus of over \$20 billion with the US,
- A current account surplus of 3% of the GDP with rest of the world.
- Persistent foreign exchange purchases of 2% plus of the GDP over 12 months.

Why do Central banks intervene?

- To reduce volatility in the exchange rate and often to build foreign exchange reserves or to manage these reserves.
- To ensure that their currencies are neither overvalued or undervalued.
- To reassure global financial markets that a country is resilient to external shocks, particularly hot money outflows

countries that are trying to **artificially manage** the value of their currency **to gain a trade advantage**, for example by keeping the exchange rate low to promote cheaper exports.

- Countries on list: In addition to India, five other countries on the list are China, Germany, Japan, South Korea and Switzerland.
- Reason for Inclusion: India met two of the three criteria a significant bilateral surplus with the US (\$23 billion) and net purchase of foreign currency was 2.2% of gross domestic product (GDP).
- **Possible impact** After being designated as a Currency Manipulator, a **25% tariff onto imports** into the U.S can be imposed to discourage cheap import.





4. SECURITY

4.1. DEFENCE PLANNING COMMITTEE

Why in news?

Recently, government has established a Defence Planning Committee (DPC) under the chairmanship of the National Security Adviser (NSA).

Concern with current defence planning structure

 present defence planning in India is very disjointed, with lopsided emphasis on acquisitions and less than required focus on new technological advancements.

Chiefs of Staff Committee (CoSC) – It comprises the Army, Navy and IAF chiefs, with the senior-most of

them acting as the "rotational" chairman till he retires.

- little coordination between ministries, and the bureaucracy and the military are often not on the same page.
- Provision of less than adequate resources to meet numerous security challenges.
- Chasing goals that were not of immediate priority.
- Duplication and wastage of scarce resources.
- A defence R&D and manufacturing base losing its sight on self-reliance.

Salient feature of DPC

- **Nature:** DPC will be a permanent interministrial body.
- Composition: It will consist of the Chairman of the Chiefs of the Staff Committee (COSC), other service chiefs, Defence Secretary, Foreign Secretary and Secretary (expenditure) in the Finance Ministry.
 - ✓ NSA is also empowered to co-opt other members as and when required
- Committee will operate through four sub-committees: on Policy and Strategy, Plans and Capability Development, Defence Diplomacy, and Defence Manufacturing Ecosystem

• Chief of Integrated Staff in the Defence Ministry will be the member secretary of the DPC, and his headquarters will be the secretariat.

Functions

- Formulation of national security strategy, strategic defence review and doctrines; international defence engagement strategy; roadmap to build defence manufacturing eco-system; strategy to boost defence exports; and prioritised capability development plans for the armed forces over different time-frames in consonance with the overall priorities, strategies and likely resource flows
- Analysis and Evaluation of national defence and security priorities, foreign policy imperatives, operational directives and associated requirements, relevant strategic and securitydefence acquisition related doctrines, infrastructure development plans, including the 15-year Long-Term Integrated Perspective Plan (LTIPP), defence technology and development of the Indian defence industry technological advancement.
- It will identify the "means" and "ways" across ministries, obtain Cabinet Committee on Security approval for a capability development plan & guidance for budgetary support etc. to achieve its objective.
- DPC will submit all its reports to the defence minister.

MANDATE for **SUB-COMMITTEES**



- Assess external security risks, define defence and security priorities
- Formulate and review military and national security strategy



PLANNING & CAPABILITY DEVELOPMENT (



- Identify how different ministries can come together for national security issues
- Create a capability development plan (CDP) and monitor its timely implementation
- Obtain Cabinet approval and help secure budgetary support



- Evaluate foreign policy needs and create a defence engagement strategy
- Identify foreign acquisitions and sales to achieve strategic leverage



- Draft comprehensive policy for research and development
- Draw out road map for indigenisation
- Formulate policy, institute structural framework to boost defence exports

Significance

- Defence-planning process has remained an arbitrary, sporadic and neglected activity in India. Previous
 attempts which include 'defence planning cell' (1962), Committee for Defence Planning (1977 under the
 Cabinet Secretary), Defence Planning Staff (headed by a 3-star Director-General) and failure in creation of a
 Chief of Defence Staff (CDS) bear testimony to this.
- The composition of the committee reflects its goal of bringing both military and civilian components of
 defence planning on one platform. This is absolutely vital for a modern defence strategy that is nimble and
 adaptable to changing security realities.
- It will lead **to efficient resources distribution** among the services and within the various branches of each service
- Defence Manufacturing: It will help in streamlining of procurement process by speedy decision making and
 establishing a strong indigenous defence manufacturing base for meeting domestic need which can be later
 resulted into export of defence armaments.

4.2. AMENDMENTS TO PREVENTION OF MONEY LAUNDERING ACT

Why in news?

Government has recently amended the Prevention of Money-laundering Act, 2002 through Finance Act, 2018.

Money laundering as a separate offense

Central government is considering a proposal to make money laundering a separate criminal offence to be investigated by the Enforcement Directorate, irrespective of a probe by other agencies.

Context

- Money laundering can be regarded as a multiplier of criminal activities as it gives economic power to criminals.
- The current arrangements in India leave the fate of money laundering cases on probes and prosecution by multiple
 agencies because the definition of "proceeds of crime" is dependent on predicate offences listed under schedule of
 PMLA act.
- Thus fighting money laundering without fighting organized crime is a waste of time and efforts.
- Money laundering as a separate offence begins where the intention to conceal the illicit money ends and it needs to be treated separate offence to break the link between money laundering and organized crime and speed up investigations

Significance of treating as separate offence

- Financial Action Task force (FATF) in its review in 2010 and India's Special Investigation Team (SIT) on black money had also recommended the same as this will facilitate quick action against those indulging in money laundering.
- Further it will bring India's law in line with foreign practices such as U.K where money laundering is treated as a standalone crime and based on circumstantial evidence, they have to just establish that the proceeds had a criminal origin, rather than waiting for the outcomes of various other probes.

More on news

The Amendments in PMLA aims at further enhancing the effectiveness of the Act, widen its scope and take care of certain procedural difficulties faced by the Enforcement Directorate in prosecution of PMLA cases. It will also enable exchange of information among agencies and enhance effectiveness of efforts against black money.

Key Amendments

- Amendment in definition of "proceeds of crime" so that ED can attach and confiscate proceed against property equivalent to proceeds to crime held outside the country also.
- Amendment in bail provisions: The bail conditions will be made uniform for all the offences under PMLA, instead of only those offences which are liable to imprisonment of more than 3 years.
- Corporate frauds included as Scheduled offence: Section 447 (Corporate Frauds) of Companies Act is being included as scheduled offence under PMLA so that Registrar of Companies in suitable cases would be able to report such cases for action by Enforcement Directorate under the PMLA provisions.
- Measures to enhance effectiveness of investigations to provide further time to ED to file prosecution and pass a provisional attachment order.

• **Disclosure of Information:** to provide for clear guidelines to share the information relating to contraventions of other laws noticed during investigation by ED, with concerned authorities under the said Acts.

4.3. CONTAINING LEFT WING EXTREMISM

Why in news?

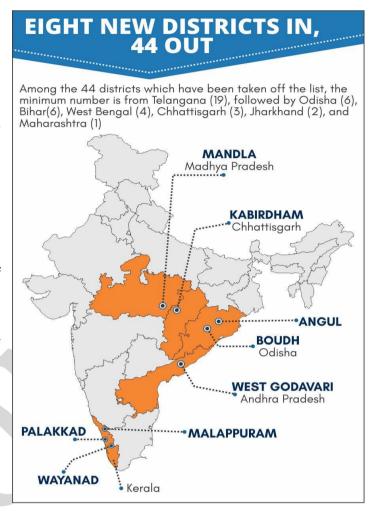
A recent report released by **Ministry of Home Affairs (MHA)** has claimed success in tackling Left Wing extremism.

More about the news

- MHA has recently redrew the red corridor by bringing down the number of districts affected with Naxal violence from 106 to 90, spread across 11 states and worst-affected district to 30 from 36. Chhattisgarh, Jharkhand, Odisha and Bihar are declared severely affected by LWE.
- The prime criteria for removing the districts and including new ones was "Incidents of violence".
- Incidents of violence have seen a 20% decline with a 34% reduction in related deaths in 2017 as compared to 2013 indicating success of government efforts.

Important Initiatives for LWE affected states

Police' and 'Public order' being State subjects, the primary responsibility of meeting the challenge of Left Wing Extremism (LWE) lies with the State Governments. However, the MHA and other central ministries supplement the security efforts of the State Governments through various schemes such as:



- National Policy and Action Plan implemented by MHA since 2015 is a multi-pronged strategy in the areas of
 - security, development, ensuring rights & entitlement of local communities etc. to combat Left Wing Extremism (LWE).
- Major Sub –Schemes under Scheme Modernization of Police Forces for 2017-20
 - Security Related Expenditure (SRE)
 Scheme (approved in 2017):
 - It aims at strengthening the capacity of the LWE affected States to fight against the LWE problem in an effective manner.
 - Under the Scheme, the central Govt. reimburses Security Related Expenditure of 106 districts relating

National Policy and Action Plan, 2015

- Security related measures include assistance to LWE affected States by providing CAPF Bns, helicopters, UAVs, construction of fortified police stations, funds for modernization of State Police forces, arms and equipment, training assistance, sharing of intelligence etc.
- Development related measures: Apart from flagship schemes of the Central Government several initiatives have been taken for development of LWE affected areas.
 These include focused schemes for development of roads, installation of mobile towers, skill development, improving network of banks and post offices, health and education facilities, particularly in the 35 worst affected districts.
- Rights and Entitlements related measures.

to ex-gratia payment to the family of civilians/security forces killed in LWE violence, training and operational needs of security forces, compensation to LWE cadres who surrendered, community policing, Security related infrastructure for village defence committees and publicity materials.

- Special Central Assistance (SCA) for 35 most LWE affected districts which have the main objective of filling the critical gaps in Public Infrastructure and Services, which are of emergent nature.
- Special Infrastructure Scheme (SIS) including construction of 250 Fortified Police Stations in LWE affected states. The Scheme aims at capacity building of states by strengthening the security apparatus of the States.
- o Assistance to Central Agencies for LWE management Scheme:- assistance is provided to Central Agencies like CAPFs, Commando Battalions for Resolute Action (CoBRA), Indian Air Force for anti LWE Operations where the States have constraints.
- o Civic Action Programme (CAP): being implemented since 2010-11 to bridge the gaps between Security Forces and local people through personal interaction and bring the human face of SFs before the local population. Under the Scheme, funds are released to the CAPFs, deployed in LWE affected areas, for conducting various civic activities in welfare of the local people.
- Media Plan Scheme: to counter the Maoist propaganda of misguiding and luring the innocent tribals/local population by their so called poor-friendly revolution.
- Road Requirement Plan-I (RRP-I): being implemented by Ministry of Road Transport & **Highways**, since 2009 for improving road connectivity in 34 LWE affected districts of 8 States.

SAMADHAN

It is a strategy of MHA to frame short term and longterm policies to tackle LWE. It includes:

- S- Smart Leadership
- A- Aggressive Strategy
- M- Motivation and Training
- A- Actionable Intelligence
- D- Dashboard Based KPIs (Key Performance Indicators) and KRAs (Key Result Areas)
- H- Harnessing Technology
- A- Action plan for each Theatre
- N- No access to Financing

The scheme envisages construction of 5,422 km road lengths and 08 Critical bridges in LWE affected States.

- Road Connectivity Project for LWE affected areas (RRP-II): It was approved in 2016 for further improving road connectivity in 44 districts of 9 LWE affected States. Ministry of Rural Development is the nodal Ministry for this project.
- **LWE Mobile Tower Project** to improve mobile connectivity in the LWE areas
- The National Technical Research Organization (NTRO) is assisting the Security Forces in anti-Naxal operations by providing Unmanned Aerial Vehicles (UAVs).
- Besides, two Skill Development related Schemes, namely, 'ROSHNI' and 'Skill Development in 34 Districts affected by Left Wing Extremism' are also being implemented by the Ministry of Rural Development and Ministry of Labour and Employment respectively.
 - ROSHNI is a special initiative under, Pandit Deen Dayal Upadhyaya Grameen Kaushalya Yojana which envisages training and placement of rural poor youth from 27 LWE affected districts.
 - Skill Development in 34 Districts affected by Left Wing Extremism" under implementation from 2011-12 aims to establish ITIs and Skill Development Centres in LWE affected districts.

4.4. COASTAL SECURITY SCHEME

Why in news

Recently, CAG found lacunae in the implementation of Coastal Security Scheme (CSS).

Institutional Setup for Coastal Security

- At the apex level the National Committee for Strengthening Maritime and Coastal Security (NCSMCS), coordinates all matters related to Maritime and Coastal Security and periodically reviews coastal security against threats from the sea with all stakeholders.
- At present, there is **three-tier security** for the coastal states of the country.
 - The Indian Coast Guard and the Indian Navy have jurisdiction over the entire maritime zone up to 200 nautical miles, including the 12 nautical miles of territorial waters.
 - The police forces of the respective coastal states and Union territories have jurisdiction of up to 12 nautical miles from the coast.

Indian Navy's Indian Maritime Security Strategy (IMSS) 2015

- Seamless Holistic Approach: It acknowledges the hybrid nature of maritime challenges and makes a case for greater coordination between different maritime agencies.
- Strong Security Role in Maritime Neighborhood and Safeguarding Economic Interest: to protect Indian and regional interests, particularly the security of the Indian Ocean sea lines of communication (SLOCs).

- Maritime Security Operations: For contemporary assessments of maritime terrorism, piracy, armed robbery, humanitarian crises, peace support operations and non-combatant evacuation missions.
- **Shape Favorable and Positive Atmosphere**: Through multilateral maritime engagement, strategic military assistance, local capacity building, technical cooperation and strategic communications.
- Maritime Force and Capability Development: From conceptual capability-building to human resource development to improve the Navy's strategic potential and pitches for MAKE IN INDIA.

About Coastal Security Scheme (CSS)

- It was launched by Government in 2005-06 on the recommendation of Kargil Review Committee.
- Aim: strengthening infrastructure of Marine Police Force of all coastal States/UTs for patrolling and surveillance of coastal areas, particularly shallow areas close to the coast.
- **Phase-I of the CSS** was implemented in nine coastal States and four coastal Union Territories during the period from 2005-2011.
- Phase-II of CSS duration is 2010 to 2020.

Feature of CSS

Patrolling:

- Under the scheme, coastal states and Union territories have operationalized 183 Coastal Police Stations (CPSs).
- o Coastal check posts have also been set up.
- 10 Marine Operation centres (MOCs) were to be set up as "nerve centres" to undertake patrolling, raids and surveillance in remote and scattered islands
- o Jetties to be built for berthing and maintenance of boats/interceptor boats at strategic locations

Surveillance:

- Modern technical measures have been implemented by way of a chain of 74 Automatic Identification System (AIS) receivers and a chain of overlapping 46 coastal radars, for gapless cover along the entire coast.
- **Joint operations centres** have been set up by the Indian Navy as command and control hubs for coastal security at Mumbai, Visakhapatnam, Kochi and Port Blair.
- Setting up of Marine Police Training Institutes (MPTIs): To improve shortage of Technical Manpower and lack of training facilities
- Registration of Vessels/Boats under Merchant Shipping Act, 1958.
- Constitution of **State Maritime Boards (SMBs)**: To facilitate development of the Maritime Sector in the States and give a major fillip to non-major ports.
- Monitoring: Steering Committee at the level of Secretary (Border Management), to oversee the
 implementation of the coastal security scheme and also to ensure better coordination among the various
 stakeholder.

Concern Related to Scheme

Missing target:

- Majority of the projects are far behind schedule and less than half of the allocated funds have been used.
- In Andamam and Nicobar island, only Rs 14 crore of the sanctioned Rs 32 crore has been utilised so far.

Procedural Delay

- Inadequate Vigilance at strategic location due to delay in procurement of surveillance vessel and other critical components.
- Only one out of the 10 planned MOCs could be operationalised in Kadamtala.

Recommendation of Parliamentary Standing Committee report on Coastal Security Scheme (2014)

- Raising a Marine Indian Reserve Battalion (MIRB) to improve coastal security infrastructure.
- Community Interaction Programmes under which Local fishermen may also be provided orientation programmes to impart necessary skills for intelligence gathering and keeping vigil on the coast while continuing with daily professional chores.
- Improving Financial Allocation to improve and strengthen coastal security preparedness and Infrastructure.
- Regular security audit of the minor ports also alongwith major ports as even after the Mumbai attack, 187 minor ports of the country lack standardized security cover
- Setting up National Maritime Domain Awareness (NMDA) project, for development of common operational picture of all maritime activities in the seas around India.

- CAG report found that sites for 10 planned jetties were yet to be finalised and work on upgradation of 20 coastal police stations was yet to commence.
- All scheme components of the **coastal scheme phase II** were lagging behind the original scheme targets without any financial constraint.

Way Forward

- National Commercial Maritime Security Policy Document: The government must promulgate a it to articulate its strategic vision for maritime security.
- **Need for a legislative framework**: Comprehensive legislations must be enacted to place systems and processes for the protection of India's maritime infrastructure, covering both the shipping and port sectors.

Refer to NOVEMBER CA for more on Coastal Security.

4.5. KEY ACCORD AGAINST CYBER ATTACKS

Why in news?

Recently, top 34 global technology and securities firms, led by Microsoft and Facebook, have signed a "Cybersecurity Tech Accord" to defend people from malicious attacks by cybercriminals and nation-states.

More on news

- Businesses and organizations of all sizes are becoming the victims of cyberattacks with economic losses expected to reach \$8 trillion by 2022.
- Thus, the companies made commitments in the following four areas.
 - **Stronger defense**: they pledged to protect all customers globally regardless of the motivation for attacks online.
 - No offense: they will not help governments launch cyberattacks against innocent citizens and enterprises and will protect against tampering or exploitation of their products and services.
 - **Capacity building:** they will do more to empower developers and the people and businesses that use their technology, helping them improve their capacity for protecting themselves.
 - o **Collective action:** They will build on existing relationships and together establish new formal and informal partnerships with industry, civil society and security researchers.

4.6. INDIAN OCEAN NAVAL SYMPOSIUM

Why in News?

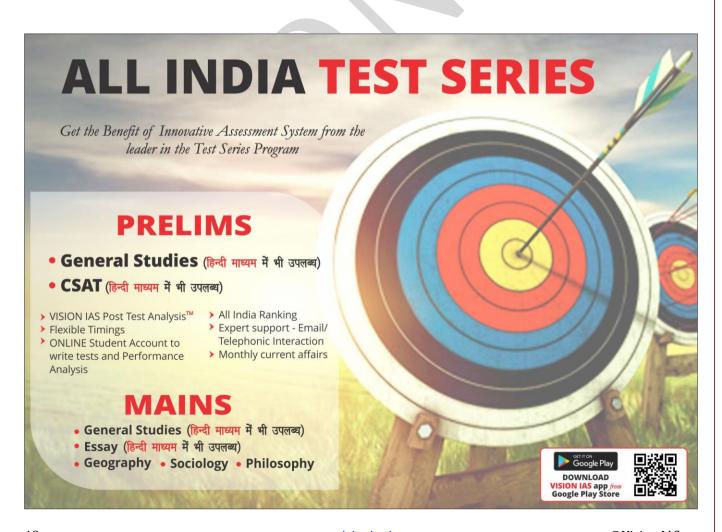
The 6th edition of Indian Ocean Naval Symposium (IONS) and Conclave of Chiefs was held in Tehran.

About IONS

- The first edition of IONS started in 2008 on **India's initiative** and is aimed at providing an open and inclusive forum for discussion of regionally relevant maritime issues.
- It is a **voluntary initiative** that seeks to increase maritime co-operation among navies of the littoral states of the Indian Ocean Region
- In the process, it endeavors to **generate a flow of information** between naval professionals that would lead to common understanding and possibly cooperative solutions on the way ahead.
- The IONS at present has 23 countries as members and nine nations as observers.
- Navies of the IONS have been **geographically grouped** into the four sub-regions: South Asian Littorals; West Asian Littorals; East African Littorals; South East Asian and Australian Littorals

4.7. SECURITY EXERCISES

- The military exercise name "Peace Mission" will be conducted by the Shanghai Cooperation Organisation (SCO) in Ural Mountains of Russia and will see participation of almost all member nations, including China. India and Pakistan will participate together for the first time in a multi-nation counter-terrorism exercise.
- Recently, a two-day Coastal Security Exercise 'Sagar Kavach' was held off the coast of Kerala, Mahe, and Lakshadweep and Minicoy (L&M) Islands.
- Recently, Indo-Malaysian joint defence training exercise "Harimau Shakti 2018" was held in Malaysia.
- Recently, Sahyog-HYEOBLYEOG 2018, a **joint bilateral Indo –Korean exercise**, was held off the Chennai coast on Bay of Bengal.



5. ENVIRONMENT

5.1. FOREST FIRES AND THEIR MANAGEMENT IN INDIA

Why in news?

National Green Tribunal has directed the Ministry of Environment, Forests and Climate Change to finalise the National Policy on Forest Fire.

Related information

- According to Global Forest Watch, India has witnessed a 125% spike in forest fires between 2015 and 2017.
 In 2017, 23 out of 33 states and union territories reported an increase in forest fires with maximum number of forest fires were reported in Madhya Pradesh (4,781) followed by Odisha (4,416) and Chhattisgarh (4,373).
- According to India State of Forest Report (ISFR)
 maximum number of forest fires occurs in Open
 Forest (OF) followed by Moderately Dense Forests
 (MDF). About 70% forest fires in India occur in the
 tropical dry forests encompassing scrub, savanna
 grassland, dry and moist-deciduous forests.
- Fire prone region: Himalayan regions and the dry deciduous forests of India, particularly in Andhra Pradesh, Assam, Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra and Odisha are ecologically sensitive areas and are most affected by these fires.
- According to State of India's Environment report, budget to fight forest fires has been reduced by 14-72% in 13 states in 2017.
- A report titled Forest Fire Disaster Management, prepared by the National Institute of Disaster Management, about half of India's forests were prone to fires. 43% were prone to occasional fires and 5% to frequent fires, and 1% were at high or very high risk.

Steps taken by the government for Forest Fire Management in India

- National Plan for forest fire management
 - Strengthening of organizational framework-Through appropriate modification and alteration in State Forest Departments' structural framework and providing sufficient human power.
 - National Forest Fire Danger Rating System-Designing uniform system of Forest Fire Danger Rating and reporting for all States/UT's
 - Effective fire fighting tools and machinery-Provisions of modern and effective tools and machinery e.g. Fire Beaters, Forest Fire Showel, Pulaskis Tools, etc.
 - Financial support to States- Provision of Aids/Loans from GOI to States/UT's according to their action plan for Systematic Forest Fire Management.

Forest fire management in India lacks a systematic and scientific approach. The key gaps in the system are enlisted as –

- Lack of appropriate policy and planning to tackle forest fire - Existing forest policy and other documents, including plans etc. lack clear guidelines for forest fire management.
- Lack of proper institutional mechanism In general forest fire management in the country is looked after by the forest department. There is no institutional mechanism available within the forest department, even in higher fire prone regions, with sole responsibility of fire management.
- Emphasis on response only Very less or negligible importance is given to other issues i.e. mitigation, preparedness, human resource development, awareness creation, etc.
- Lack of scientific approach to collect fire data and document it for forest fire management The Forest Survey of India has recently started compiling forest fire data, however, at State level still there is not much sincere effort to collect and document these data and use it in research and planning.
- Other issues include Not many initiatives to involve local community, lack of funding and coordination with minimal information sharing etc.

Forest Survey of India role in Forest Fire Monitoring

- Near real time forest fire Alerts through Forest Fire Alert System 2.0: It uses NASA's MODIS (Moderate Resolution Imaging Spectroradiometer) and VIIRS (Visible Infrared Imaging Radiometer Suite) satellites, data to pinpoint the location of forest fire boundary.
- Pre warning Alerts to State Nodal officer: It uses short term weather variable like forest cover, forest type, climate variables and recent fire incidences over the area for generating warning data.
- **Burnt Scar Assessment:** It's done to assess forest area affected measures by forest fires to assess damage to forest and bio-diversity as well as to plan restoration.

- Creation of a national forest fire control board- With the task of supervising the control of devastating forest fire in exigencies in fragile areas like Himalayan zone, Western Ghats etc.
- Promotion of people's participation-Through involvement of NGOs, Voluntary Organisations, Village Forest Committees (VFCs) etc.
- Other important provisions include Inclusion of Forest fire management in National Forestry Action Plan (NFAP), designing uniform formats for reporting, monitoring and evaluation, international coordination and transfer of technology, strengthening the existing and introducing new R&D institutions dealing with forest fire management, introduction of a chapter on Forest Fire Working Circle etc.

Forest Fire Prevention & Management Scheme (FFPMS)

- Intensification of Forest Management Scheme was revised and replaced as Forest Fire Prevention & Management Scheme in December 2017.
- o It's a **centrally sponsored scheme** with **an aim** to focus solely on the issue of forest fire prevention & management and related activities, to address growing concern over adverse effects of forest fire.
- Funding Pattern:
 - For Normal States: 60:40 between center and states.
 - NE and Himalayan states: 90:10 between center and states
 - For Union Territory: 100% central funding
- Objective of scheme
 - Long Term Objectives:
 - ✓ To minimise forest fire incidences, develop knowledge on impacts and dynamics of forest fire and assist in restoring productivity of forests in affected areas
 - ✓ To **institutionalise the partnership** with forest fringe communities for forest protection
 - ✓ To prepare fire danger rating system and devise forest fire forecasting system.
 - ✓ To encourage the states/UTs for optimal use of modern technology (such as Remote Sensing, GPS and GIS) in planning, developing and operationalising Fire prevention and management system.
 - ✓ To contribute to the larger goal of maintaining environmental stability.

Short Term Objectives:

- ✓ To carry out **effective awareness campaign** for prevention of forest fire
- ✓ To effectively prevent and control forest fires by improving the traditional practices and employing available modern methods
- ✓ To **impart suitable training** to the field staff and forest fringe communities on fire fighting with help of prescribed means and methods in the forest areas
- ✓ To encourage community participation in prevention and control of forest fire
- ✓ To develop and **strengthen Forestry Infrastructure** of the States and UTs that are required for effective prevention and management of forest fire.

Monitoring and Evaluation

- At National level, MoEFCC will review the scheme and will also carry out third party evaluation after every 3 years.
- At State Level: State Forest Department will be responsible for regular monitoring and review of achievement under the scheme.

5.2. WATER SCARCE CITIES

Why in News?

Recently, a report titled "Water Scarce Cities: Thriving in a Finite World" was released by World Bank Group that attempts to compile innovative approaches from the Water Scarce Cities (WSC) Initiative

About the problem of water scarcity

In the current scenario there is a need to **shift the paradigm** from traditional urban water practices to an integrated water management mindset that can help secure reliable and sustainable

Water Scarce Cities Initiative- World Bank's initiative that offers a holistic perspective to urban water security in scarcity conditions. It is working towards shifting mindsets across the world, demystifying urban water management, and engaging with water scarce cities to develop concrete solutions.

water supplies. Various such threats to urban water security include-

- Sharp increase in Urban water demand due to Increasing and changing population patterns.
- Progressive depletion and deterioration of water resources availability and quality.
- Unanticipated setbacks due to increasing climate change-related shocks and stresses.
- Historic water providers shifting priorities due to their own emerging local needs. For instance, shifting balances of power with competitive users in water basins (use of methods like lobbying to get higher share of basin water).

Successful experiences point to five key principles for Resilient Urban Water Scarcity Management

- Shift culture of abundant water to rationalized demand
- Hedging against risks through diversified and dynamic water resource portfolios
- Rely on **solutions that are not vulnerable** to climate change (such as desalination and wastewater reclamation)
- Ring Fencing Water Systems from External Competition, i.e., recognizing that water resources can, and should be harnessed within the city boundary
- Coping with Uncertainty and Variability through Adaptive
 Design and Operations like network of dams to store excess water from desalination plan.

Solution to operationalize the above Principles

- **Demand Management and Infrastructure Efficiency-** Rationalizing water demand should target two potential problems Inefficient water networks, and Profligate water consumption.
- Improving Water System Efficiency- To be implemented successfully, such programs require technical and operational know-how, which knowledge exchanges between utilities have proven helpful to build.
- **Promoting Water Conservation** which are typically **mandatory** (consumption restriction, constant or seasonal water pricing, drought surcharge etc) or **voluntary** (providing incentives, education and public outreach which may lead to behavioural changes).
- **Building on Conventional Approaches** Innovative Surface and Groundwater Management should be adopted such as:
 - > Optimizing Groundwater Management- Development of a clear urban water metabolism framework to account for the stock and flows, and—in turn—sound groundwater.
 - ➤ Water Banking and Virtual Transfers- Surplus water from one year can be stored locally—to avoid evaporative losses—in an unconfined aquifer, withdrawn in subsequent years by the "banker," and transferred to supplement the water resources of the "client" when needed.
 - > Other measures may include inflatable rubber dams used to maximize groundwater infiltration build infrastructure model to protect aquifer from saline intrusion.
- **Nonconventional Water Resources** such as storm water Management & Rainwater Harvesting, Wastewater Reuse and Seawater Desalination.
- **Cooperation with Other Users** This requires institutional capacity to negotiate water transfers from low-value uses toward higher value uses and realize associated trade-offs. Good local governance and strong coherence of water, energy, and food policies are key to the efficiency of water management programs.
- Adaptive Design and Operations: Detailed inventory of the city's water budget and corresponding vulnerabilities as baseline information for system planning and investments.

5.3. MAHARASHTRA PROJECT FOR CLIMATE RESILIENT AGRICULTURE

Why in news?

 Recently, Government of India, Government of Maharashtra and the World Bank signed a US\$ 420 million loan for Maharashtra Project for Climate Resilient Agriculture.

Related Information - National Innovations on Climate Resilient Agriculture (NICRA)

• It's a network project of the Indian Council of Agricultural Research (ICAR) launched in 2011.

Objectives

- To enhance the resilience of Indian agriculture covering crops, livestock and fisheries to climatic variability and climate change through development and application of improved production and risk management technologies.
- To demonstrate site specific technology packages on farmers' fields for adapting to current climate risks.

- To enhance the capacity building of scientists and other stakeholders in climate resilient agricultural research and its application.
- The project consists of **four components** viz. Strategic Research, Technology Demonstration, Capacity Building and Sponsored/Competitive Grants.

About the project

• To improve water harvesting structures and adopt **Climate Smart Agricultural Practices** in the water-starved Vidarbha and Marathwada regions of Maharashtra.

Climate Smart Agriculture (CSA)

• Food and Agricultural Organization of the United Nations (FAO), which defines CSA as "agriculture that sustainably increases productivity, enhances resilience (adaptation), reduces/removes GHGs (mitigation) where possible, and enhances achievement of national food security and development goals".

Three Pillars Of CSA

- **Productivity:** CSA aims to increase agricultural productivity and incomes from crops, livestock and fish, food and nutritional security through sustainable intensification.
- Adaptation: CSA aims to reduce the exposure of farmers to short-term risks and strengthening their resilience by building their capacity to adapt and prosper in the face of shocks and longer-term stresses.
 - o Particular attention is given to protecting the ecosystem services as these are essential for maintaining productivity and our ability to adapt to climate changes.
- **Mitigation:** CSA helps to reduce and/or remove greenhouse gas (GHG) emissions by avoiding deforestation from agriculture managing soils and trees in ways that maximizes their potential to acts as carbon sinks and absorb CO2 from the atmosphere.

5.4. PLASTIC WASTE MANAGEMENT (AMENDMENT) RULES, 2018.

Why in News?

 Recently, Ministry of Environment, Forest and Climate Change (MoEF&CC) amended the Plastic Waste Management Rules, 2016.

Highlights of the New Rule-

- New Central registration system- shall be established by Central Pollution Control Board (CPCB) for the registration of the producer/importer/brand owner.
- Automation- It provides that any mechanism for the registration should be automated and should take into account ease of doing business for producers, recyclers and manufacturers
- Pricing Mechanism- The rule for providing the plastic waste management fee, by the vendors/shopkeepers who are willing to provide plastic bags, has been removed.
- Non-recyclable multi-layered plastic- The 2016 Rules state that the manufacture and use of non-recyclable multi-layered plastic

About Plastic Waste Management Rule 2016

- It defines the minimum thickness of plastic carry bags i.e. 50 microns. This would increase the cost and the tendency to provide free carry bags would come down.
- Responsibility of local bodies: Rural areas are brought under the rules.
- Extended Producer Responsibility: Producers and brand owners are responsible for collecting waste generated from their products.
- **Record Keeping:** Producers are to keep a record of their vendors to whom they have supplied raw materials.
- Responsibility of waste generator: All institutional generators of plastic waste shall segregate and store their waste as per Waste Management Rules, and handover segregated wastes to authorized waste disposal facilities.
- Responsibility of street vendors and retailers: they shall not sell commodities to consumer in carry bags or plastic sheet or multi-layered packaging, which are not manufactured and labelled or marked.
- Road Construction: Local bodies shall encourage the use of plastic waste (preferably the plastic waste which cannot be further recycled) for road construction.

use of non-recyclable multi-layered plastic should be phased out in two years. In the 2018 Rules, non-recyclable multi-layered plastic has been replaced with multi-layered plastic which is non-recyclable or nonenergy recoverable or with no alternate use.

5.5. EIGHTH REGIONAL 3R FORUM

Why in news?

Recently, 8th Regional 3R Forum in Asia and Pacific was held.

More on news

- The United Nations Centre for Regional Development (UNCRD) has been organizing International Regional Forum on 3Rs since 2009 with the support of Government of Japan to promote the concept of Reduce, Reuse, Recycle in industry, service and agriculture sector.
- The Fourth Regional 3R Forum innovation, greadopted the Ha Noi 3R Declaration Sustainable 3R Goals for Asia and the Pacific for 2013-2023 .

The United Nations Centre for Regional Development (UNCRD): established in 1971 based on the agreement between the United Nations (UN) and the Government of Japan aims to achieve sustainable living environment for all - safe, secure, equitable and inclusive development in harmony with nature.

Mission ZERO Waste - Swachh Bharat Mission

Under the Swachh Bharat Mission (Urban), Government is approaching, Mission ZERO Waste which aims at sound management of the solid wastes generated in the country with special focus on Reduce, Reuse and Recycle (3Rs).

"Mission Zero Waste" complements the **Swachh Bharat Mission** of Government of India aiming at fostering creativity, innovation, green business, eco-education & consumerism.

- It is a legally non-binding and voluntary document which aims to provide a basic framework for Asia-Pacific
 countries to develop measures and programs to promote 3Rs including a set of 3R indicators for monitoring
 specific progress.
- The 8th Regional Forum was organised by Ministry of Housing and Urban Affairs, Government of India; Ministry of the Environment of the Environment of the Government of Japan and United Nations Centre for Regional Development (UNCRD).
- The Indore Municipal Corporation, Government of Madhya Pradesh, and Confederation of Indian Industry (CII) have been designated as the City Partner, Organizing State Partner and Industry Partner respectively.
- Theme 'Achieving Clean Water, Clean Land and Clean Air through 3R and Resource Efficiency A 21st Century Vision for Asia Pacific Communities,'.
- The Indore 3R Declaration of Asian Mayors on Achieving Clean Land, Clean Water and Clean Air in Cities was adopted during the forum.
- Through this forum India aims to further strengthen this focus through its 'Mission Zero Waste' approach thereby encouraging cities, industries and other stakeholders to see waste as a resource.

5.6. GLOBAL ENERGY TRANSFORMATION: A ROADMAP TO 2050

Why in news?

Recently, International Renewable Energy Agency's (IRENA's) launched its long-term renewable energy outlook 'Global Energy Transformation: A Roadmap to 2050'.

Background

- Paris climate accord 2015 seeks to limit average global temperature rise to below 2°C by 2100, compared to pre-industrial levels.
- Currently, emission trends are not on track to meet that goal as world would exhaust its energyrelated "carbon budget" (CO2) in under 20 years to keep the global temperate rise to well below 2°C.

Highlights of the report

 Achievable Paris Commitment: Keeping the global temperature rise below 2 degrees Celsius (°C) is technically feasible. However, the global energy

International Renewable Energy Agency (IRENA)

- It is an **intergovernmental organisation** that supports countries in their transition to a sustainable energy future.
- It serves as the principal platform for international cooperation, and a repository of policy, technology, resource and financial knowledge on renewable energy.
- It is **Permanent Observer** to United Nation.
- India is a founder Member of the International Renewable Energy Agency (IRENA).
- It has two main governing structures.
 - IRENA Assembly takes decisions at Macro level and gives policy guidance to IRENA.
 - IRENA Council which is the main governing body of the agency responsible for implementing various decisions of the assembly.

system must undergo a profound transformation, from one largely based on fossil fuels to one that enhances efficiency and is based on renewable energy. Together they can provide over 90% of the energy-related CO2 emission reductions that are required, using technologies that are safe, reliable, affordable and widely available.

- Renewable energy needs to be scaled up at least six times faster for the world to start to meet the goals set out in the Paris Agreement.
- Multidimensional impact: Transformation will not only support climate objectives, it will support positive
 social and economic outcomes all over the world, lifting millions out of energy poverty, increasing energy
 independence and stimulating sustainable job growth (offsetting job losses in the fossil fuel industry).
- **About India:** India is advancing towards its target to achieve 175 GW of renewable power capacity by 2022. In 2015, renewables accounted for 36% of India's final energy use, one of the highest shares in the G20 countries which would increase to 73% by 2050.

Way Forward

Report Identifies Six Focus Areas Where Policy and Decision Makers Need to Act

- Tap into the strong synergies between energy efficiency and renewable energy.
- Plan a power sector for which renewables provide a high share of the energy This is critical in the power sector, where timely infrastructure deployment and the redesign of sector regulations are essential conditions for cost-effective integration of solar and wind generation on a large scale.
- Increase use of electricity in transport, building and industry Regulations, plans and policies must be integrated, particularly to enable deep and cost-effective decarbonisation of the transport and heat sectors through electrification.
- **Foster system-wide innovation** Efforts to innovate must cover a technology's full life-cycle, including demonstration, deployment and commercialization and should include new approaches to operating energy systems and markets as well as new business models.
- Align socio-economic structures and investment with the transition The shorter the time to materialize the energy transition, the lower the climate change adaptation costs and the smaller the socio-economic disruption.
- Ensure that transition costs and benefits are fairly distributed.

5.7. GLOBAL COMMISSION ON THE GEOPOLITICS OF ENERGY TRANSFORMATION

Why in News?

• Recently, International Renewable Energy Agency (IRENA), launched the Global Commission on the Geopolitics of Energy Transformation.

About the Global Commission on the Geopolitics of Energy Transformation

- It will work to achieve a better understanding of the geopolitical **implications** of a large-scale **shift to renewable energy**.
- It will analyse how higher shares of renewable energy and increased energy efficiency will **impact relations** between states and thus reshape global energy diplomacy.
- It will suggest how countries can thrive in the new energy economy in line with the Paris Climate Agreement objectives and the SDGs.

5.8. INTERNATIONAL ENERGY FORUM (IEF)

Why in news?

Recently, the 16th International Energy Forum Ministerial (IEF 16) was hosted by India and co-hosted by China and S. Korea.

International Energy Forum

The IEF is an inter-governmental forum set up in 1991 and is based in Riyadh, Saudi Arabia.

- It serves as **neutral facilitator** of informal, open, informed and continuing global energy dialogue among its member countries.
- It includes **72 member countries** from all six continents and accounts for around 90% of global supply and demand for oil and gas.
- The IEF is unique in that it comprises not only consuming and producing countries of the IEA and OPEC but also Transit States and major players outside of their memberships, including Argentina, China, India, Mexico, Russia and South Africa.
- By virtue of being among the top 11 largest consumers of oil and gas (India is presently 4th), India has been the Permanent Member of its Executive Board.
- India had earlier hosted the 5th IEF Ministerial in 1996 at Goa.
- The Forum's **biennial Ministerial Meetings** are the world's largest gathering of Energy Ministers.
- The theme of IEF 16 was "Future of Global Energy Security: Transition, Technology, Trade and Investment".

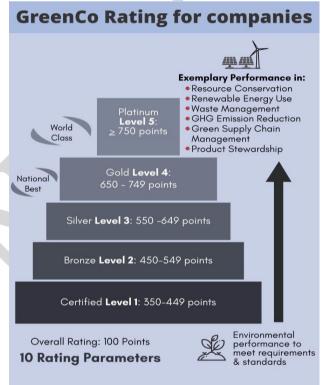
5.9. GREENCO RATING

Why in news?

Recently, Ministry of Railways in partnership with the Confederation of Indian Industry (CII) launched GreenCo Rating System in railways' production units, workshops and other units.

About GreenCo Rating

- GreenCo Rating System is a first-of-its-kind rating in the world to enhance green performance of companies.
- It is applicable to both manufacturing facilities and service sector units.
- The rating is implemented at unit or facility level (operation for a minimum period of 3 years). In case of new plants/ facilities minimum 2 years operation is required.
- It has four level of rating (see box) and ten performance parameters with assigned weight respectively out of 1000 points as follow;



Energy Efficiency (150)	Water Conservation	Renewable Energy	GHG Mitigation (100)	Waste Management
	(100)	(100)		(100)
Material Conservation,	Green Supply Chain	Product Stewardship	Material Conservation,	Life Cycle Assessment
Recycling and	(100)	(75)	Recycling and	(75)
Recyclability (100)			Recyclability (100)	

Benefits of GreenCo Rating

- Provides multiple Energy, Environmental and Resource conservation benefits
- Builds world class competitiveness and provides new opportunities for cost reduction
- Enhances Corporate Green image
- Helps implement the latest sustainability concepts and global best practices
- Makes companies future ready to meet stricter environmental needs / regulations
- Enhances credibility & creates transparency among stakeholders
- Extensive capacity building with the involvement of cross functional team
- Helps understand where the company stands compared to peers & competitors
- Excellent tool for top management to monitor green performance
- Builds strong long-term roadmap for ecologically sustainable business growth
- Drives innovation

5.10. SOLAR GEO-ENGINEERING

Why in news?

Developing Nations are planning to increase research in dimming Sunlight through man made Sun-Shade to prevent climate change.

What is Solar Geo-Engineering/Solar Radiation Management (SRM)

Solar Radiation Management Governance Initiative (SRMGI)

- It is an international, NGO-driven project, financed by Dustin Moskovitz (co-founder of facebook) for expanding the discussion of SRM climate engineering research governance to developing countries.
- The Royal Society, The academy of sciences for the developing world and Environmental Defense Fund (EDF) are its partners.
- It is a process through which the reflectivity (albedo) of the Earth's atmosphere or surface is increased, in an attempt to offset some of the effects of GHG-induced climate change.
- The technique mimics big volcanic eruptions that can cool the Earth by masking the sun with a veil of ash or similar other things.
- The methods include:
 - Space-Based Options/Space Sunshades e.g. using mirrors in space, placing vast satellites at Lagrange Point 1, space parasol, etc.
 - Stratosphere-Based Options such as injection of sulfate aerosols into the stratosphere.
 - Cloud-Based Options/Cloud Seeding e.g. Marine Cloud Brightening (by spraying a fine seawater spray in the air), seeding of high cirrus clouds with heterogeneous ice nuclei.
 - Surface-Based Options e.g. whitening roofs, growing more reflective crops, etc.

Possible Impacts of SRM

- It may stop the rise in global temperatures but would not directly reduce concentrations of greenhouse gases.
- Stratospheric aerosols might delay the regeneration of the ozone layer. It can also lead to decrease in rainfall
 in the Asian and African monsoons, thereby affecting food supplies, the flow of rivers like Ganges and
 Amazon etc.
- Local imbalances in radiative forcing could still lead to regional climate shifts.
- Impact of SRM on precipitation and the hydrologic cycle is not very well understood.
- There is no regulatory framework or international governing body to test the methods.
- The idea of SRM can push the talks on cutting of GHGs or adapting to the environment.

Way Forward

Physical potential and technical feasibility of the method, its environmental and political consequences must be understood properly. It must be an integrated research effort that considers the physical, ecological, technical, social, and ethical issues related to SRM.

5.11. ASIA PACIFIC REGIONAL WORKSHOP OF UNCCD

Why in news?

Recently, Asia Pacific Regional Workshop of the United Nations Convention to Combat Desertification (UNCCD) was hosted by **Ministry of Environment (MoEFCC)**.

More on news

 The workshop provides a multi-disciplinary knowledge sharing platform to address desertification, land degradation and drought (DLDD) issues and brings all key stakeholders from Asia Pacific region together to discuss key aspects of achieving Land Degradation Neutrality (LDN) by 2030.

United Nations Convention to Combat Desertification (UNCCD)

- Adopted in 1994 and entered into force in 1996, it is the only internationally legally binding framework set up to address the problem of desertification
- The Convention addresses specifically the arid, semi-arid and dry sub-humid areas, known as the drylands.
- 10-Year Strategy of the UNCCD (2008-2018): It was adopted in 2007 to forge a global partnership to reverse and prevent desertification/land degradation and to mitigate the effects of drought in affected areas in order to support poverty reduction and environmental sustainability.
- UNGA declared 2010 to 2020 as the United Nations **Decade** for **Deserts and the Fight Against Desertification.**

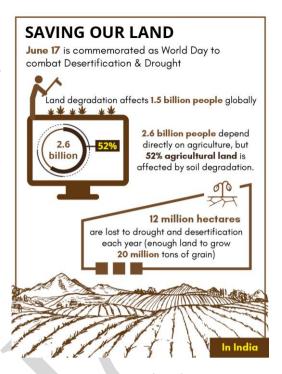
- The participants were trained in the use of a monitoring tool called 'Trends.Earth' developed by Conservation International,
- India also released a report on Study of Economics of Desertification, Land Degradation and Drought (EDLDD) conducted by TERI.

What is Land Degradation Neutrality (LDN)

- UNCCD defines LDN as a state whereby the amount and quality of land resources which is necessary to support ecosystem functions and enhance food security, remains stable or increases within specified temporal and spatial scales and ecosystems.
- It is a unique approach that counterbalances the expected loss of productive land with the recovery of degraded areas.

Steps taken to achieve LDN

- Achieving land degradation neutrality by 2030 is one of the targets within Sustainable Development Goals adopted in 2015.
- UNCCD is supporting interested countries in the national land degradation neutrality (LDN) target setting process, including the definition of national baselines, targets and associated measures to achieve LDN by 2030 through the LDN Target Setting Programme (TSP).
- An LDN fund promoted by UNCCD and managed by Mirova (a private Investment management firm) has also been created to invest in bankable projects on land rehabilitation and sustainable land management worldwide including sustainable agriculture, sustainable livestock management, agro-forestry, sustainable forestry, renewable energy, infrastructure development, and ecotourism.
- UNCCD releases the Global Land Outlook to demonstrates the central importance of land quality to human wellbeing, assesses current trends in land conversion, degradation and loss, identifies the driving factors and analyzes the impacts etc.
- The Land for Life Programme was launched at UNCCD Conference of the Parties (COP) 10 in 2011 to confront the challenges of land degradation and desertification.
- In India, National Action Plan (NAP) to combat desertification was launched in 2001 for 20 years.
- Schemes like Integrated Watershed Development Program, Per Drop More Cr op, Swachha Bharat Mission, National Afforestation Program, National Green Mission, etc have components to tackle DLDD.
- Desertification and Land Degradation Atlas (2016) of entire country was prepared by ISRO and 19 other partners using Indian remote sensing satellites data in GIS environment.



Major Reasons For Desertification In India



n Responsible for 10.98% desertification* Loss of soil cover mainly due to rainfall and surface runoff. Water erosion is observed in both hot & cold desert areas, across various land covers and with varying severity levels

Responsible for 5.55% desertification It denotes the spread of sand by various processes, even up to lofty altitudes of Himalayas. It removes the topsoil, which is rich in all plant nutrients and bacterial activites





luman-made/settlement Responsible for 0.69 desertification All land degradation processes which are induced directly or indirectly by human intervention. It includes developmental activities such as mining and urbanisation

on Responsible for 8.91% desertification It includes deforestation, shifting cultivation and degradation in grazing, grassland and scrub land. Destruction of vegetation, most often by humans, accelerates desertification





ty Responsible for 1.12% desertification Occures mostly in cultivated land, especially in the irrigated areas. Soil salinity refers to the water soluble salt present in soil. Salinity can develop naturally, or human-induced

Other Responsible for 2.07% desertification They include water logging, frost shattering, mass movement, barren and rocky land types



5.12. TASK FORCE ON BIOMASS MANAGEMENT

Why in news?

Recently, NITI Aayog released a report of Task Force, constituted under 'Cleaner Air Better Life' initiative on Biomass Management.

Background

- The farm burning, specific to the paddy-wheat cultivation cycle in the rural regions of Northern and North-Westerns states of India, has been identified as a major source of air pollution. It not only affects the airquality in rural areas but also causes an episodic rise in air-pollution during October and November in Delhi-NCR.
- Unlike other crop residues, paddy straw is utilised to a very small extent outside the field. This is mainly due to its low calorific-value compared to other crop-residues and high silica content which limits its use in many applications.

CII-NITI Aayog 'Cleaner Air Better Life' initiative

- It's an initiative for 'improving the air quality of Delhi-NCR'
- Aim: To bring together all relevant stakeholders for designing a set of solutions to the identified sources of air pollution
- This situation is further exacerbated by obsolete traditional uses of residue such as roof thatch, proliferation of mechanised farming and a very small window of transition for the farmers between harvesting paddy and sowing wheat.
- India is said to have an estimated 600 million tonnes of surplus agricultural biomass and roughly 39 million tonnes of paddy straw is burnt in Haryana, Punjab, Rajasthan and Uttar Pradesh.
- This report identifies solutions to address farm waste burning. In the long-run, recommended action would induce behavioural change in the farmers' community through adoption of in-situ and ex-situ options to utilise the crop residue.

Recommendation of Task Force

- Immediate Action Financial support to farmers for in-situ treatment of paddystraw using DBT system.
- Medium and Long-Term Actions -
 - Create 'Impact Fund' for air **pollution** - to support technologies and link it with the National Clean Energy Fund.
 - Upscaling technologies with

Biomass

- India has a potential of about 18 GW of energy from Biomass.
- Biomass energy constitutes wood fuels (including charcoal, wood waste wood), crop residues (such as bagasse, rice husk and crop stalks) and animal dung (including biogas).
- About 32% of the total primary energy use in the country is still derived from biomass and more than 70% of the country's population depends upon it for its energy needs.
- **Economy based on Biomass**: Biomass power industry attracts investments of over Rs.600 crores every year, generating more than 5000 million units of electricity and yearly employment of more than 10 million man-days in the rural areas.
- service-based shared economy and process-based incentives a shared economy could be created to cater the demand of all the farmers affordably for required machinery and it is also recommended that incentives are linked to performance in long-term to promote efficient utilisation of infrastructure.
- Rewarding and monitoring at local level with advanced remote sensing data and local monitoring by Block Development Officers (BDOs). Further, a financial reward for panchayats is suggested in order to catalyse the vision of zero-burning in rural areas.
- Regulatory support towards ex-situ treatment this is equally desirable given the limitations to ploughing all the straw back into the soil.
- Awareness tools this includes dedicated awareness campaigns involving State Agriculture Departments and Krishi Vigyan Kendras (KVKs) and recognition to farmers already following such practices

Solutions Proposed

- Ploughing the residue back into the field or in-situ approaches-
 - Residue retention as straw mulch Mulch can increase yield, water use efficiency, and profitability, while decreasing weed pressure.

- o **Residue incorporation** Wet mixing of chopped straw helps conserving nitrogen and other nutrients contained in the straw.
- Extraction and usage for other purposes or ex-situ approaches -
 - Pyrolysis (Biochar) Biomass is converted to biochar by pyrolysis (burning in the complete absence or limited presence of air) which can then be used as a soil conditioner, char briquettes and other valueadded products such as home garden fertilizer.
 - Briquetting and/or Palletization For the purpose of efficiently using straw as fuel and to ease its transportation over larger distances, biomass can be transformed into briquettes and/or pellets of regular shape. These are easier to use, convenient to transport and store, and have higher calorific value (heat value).
 - Briquettes have good potential of being co-fired into industrial boilers along with coal and other high calorific crop residues. Pellets have good potential for being used as fuel in cooking stoves and heating applications in domestic as well as industry.
 - Other steps include conversion to BioCNG, bio-ethanol and other liquid fuels, setting up bio-power plant and dry fermentation biogas plant.

5.13. 2018 STATE OF THE WORLD'S BIRDS REPORT

Why in News?

• According to the 2018 State of the World's Birds report, even some well-known species of birds are now in danger of extinction.

About the Report

- It is published by Birdlife International which contains a five-year compendium of population data of birds.
- Birdlife International is a global partnership of conservation organisations (NGOs) that strives to conserve birds, their habitats and global biodiversity, working with people towards sustainability in the use of natural resources.
- It also assesses avian extinction risk for the IUCN Red List

Major Observations of Report

- 40 percent of the world's 11,000 bird species are in decline and one in eight species of birds faces the threat of extinction.
- Bird population trends often mirror those of other species
- The health of bird species is a key measure for the state of ecosystem in general, so these data are a warning for the whole planet
- Some species which are globally threatened with extinction- Snowy Owl, Bubo scandiacus, Atlantic Puffin, Fratercula arctica, and European Turtle-dove Streptopelia turtur
- Birds that were once Critically Endangered but have now been downlisted to Endangered include Red-billed Curassow Crax blumenbachi (Brazil), Pink Pigeon Nesoenas mayeri (Mauritius), and Black-faced Spoonbill Platalea minor.

Major Threats to Bird Species

- **Expansion of agriculture and resultant habitat destruction:** Neurotoxic insecticides known as neonicotinoids used in farming are having a detrimental impact on farmland birds.
- **Deforestation and Unsustainable logging -** Nearly two-thirds of bird species are found in forests, mainly in the tropics
- Unsustainable hunting for food or sport and trapping for the cage-bird trade
- Climate change- many bird species are already struggling to adapt to the pace of climate change.
- Fisheries bycatch- Seabirds are in serious danger from fisheries bycatch
- Urbanisation & pollution and Invasive alien species

Conservation Strategies

Despite the factors threatening the bird species, conservation efforts have been successful in bringing at least twenty-five bird species back from the brink of extinction so far this century. Some specific **conservation strategies** include:

- Identifying Important Bird and Biodiversity Areas (IBAs) and targeting resources in these areas
- Restoration of degraded habitats like- wetlands, coastal saltpans
- Ending deforestation and restoring forests In partnership with WWF and the Wildlife Conservation Society, Birdlife International has set an ambitious target known as The Trillion Trees Project that will see one trillion trees regrown, saved from loss or receiving better protection by 2050.
- Eradication and control of invasive alien species.
- Captive Breeding and Reintroduciton- For example: vultures in Indian subcontinent.
- Curbing the overexploitation of birds The CITES plays an important role in regulating the wild bird trade
- Educating and raising awareness in people about birds and nature

Important Bird and Biodiversity Areas—IBAs

- IBAs constitute the largest and most comprehensive global network of sites that are significant for the global persistence of biodiversity.
- These are identified by Birdlife International.
- A site may qualify as an IBA if it meets one or more of the following criteria:
 - It holds a significant number of a bird species of global conservation concern.
 - It holds a significant assemblage of restrictedrange bird species.
 - It holds a significant assemblage of biomerestricted bird species.
 - It holds a threshold number of a congregatory bird species or group.
- The **needs of local communities** should be integrated to develop sustainable livelihood.
- Effective laws and policies should be brought in to set the wider framework.
- Conservation efforts must be based on the best available scientific evidence and projects with clear, measurable objectives- recently a tool PRISM has been launched for effective monitoring of conservation efforts.

5.14. WORLD'S SMALLEST LAND FERN

Why in news?

Recently, Indian researchers have discovered a fingernail-sized fern named Malvi's adder's-tongue fern.

Fern - a flowerless plant which has feathery leaf (fronds) and reproduces by spores released from the undersides of its leaf-like parts.

About the discovery

- It is the world's smallest land fern discovered measuring only 1–1.2 cm.
- It was discovered in the Ahwa forests of the Western Ghats in Gujarat's Dang district.
- It belongs to a group known as the adder's-tongue ferns, named after their resemblance to a snake's tongue.
- It has a unique thick outer layer around its spores and dome shaped stomata which similar species lack.
- The ferns are seasonal and grow with the first monsoon rains.

5.15. SWELL WAVES

Why in News?

Recently, Indian National Centre for Ocean Information Services (INCOIS) forecasted about the high energy **swell waves** on coastal states.

About Swell Waves

 They are collection of waves produced by storm winds raging hundreds of miles out to sea, rather than the product of local winds along the beaches.

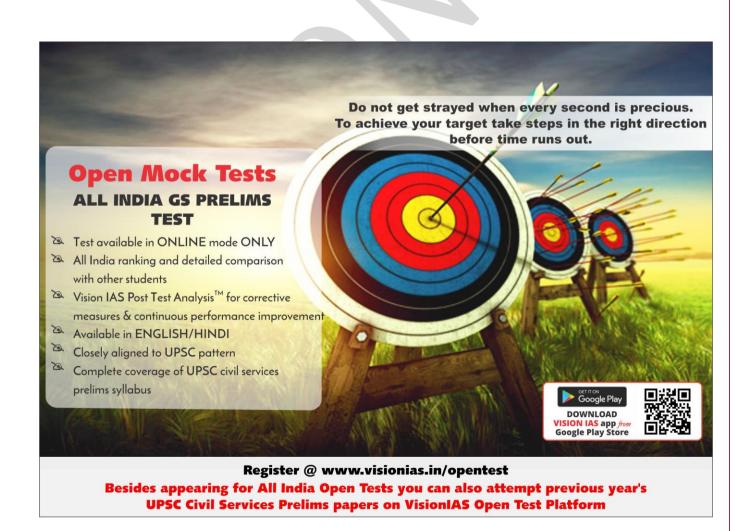
Indian National Centre for Ocean Information Services (INCOIS)

 INCOIS was established as an autonomous body in 1999 under the Ministry of Earth Sciences (MoES) and is a unit of the Earth System Science Organization (ESSO).

• Its functions include:

- It is Regional Tsunami Service Provider (RTSP) to provide tsunami warnings to countries on the Indian Ocean Rim.
- It issues Potential Fishing Zone Advisories, provides training courses in Operational Oceanography.

- It is formed through a combination of wind strength, wind duration and fetch. The present event is associated with massive ripples that form on the sea due to winds coming from as far away as Madagascar.
- The low-pressure system named **'Cut off Lows'** blocked the normal course of westerly winds present in the southern Indian ocean during the period causing propagation of high swell waves towards Indian coasts.
- Low-pressure areas or stronger weather systems here send out high waves, with no signs in the local winds along the south-west coast of India, in a phenomenon locally known as 'Kallakkadal' (the naughty seas).
 - 'Kallakkadal' phenomenon has been formally approved by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2012.



6. SCIENCE AND TECHNOLOGY

6.1. NATIONAL BIOPHARMA MISSION

Why in news?

Recently, a loan agreement of US\$ 125.00 million was signed between India and World Bank for a National Biopharma Mission's project titled "Innovate in India (i3) for inclusiveness".

About National Biopharma mission

- It is an Industry-Academia Collaborative Mission for accelerating discovery research to early development for biopharmaceuticals.
- The World Bank assisted INNOVATE IN INDIA (i3) program under this mission aims to create an enabling ecosystem to promote entrepreneurship and indigenous manufacturing in the sector
- The focus of the mission is to:
 - Develop new vaccines, bio-therapeutics, diagnostics and medical devices to address the rising burden of diseases.
 - o bring isolated centres of excellence (Academia) together, enhance regional capabilities and strengthen the current bio-clusters network in terms of capacities as well as quantity and quality of output.
 - o deliver 6-10 new products in the next five years and create several dedicated facilities for next-generation skills.
 - To develop platform technologies for product validation, link institutions to strengthen clinical trial networks, promote partial derisking for novel products, and build capacities in emerging areas such as bioethics, bioinformatics etc.
- The initial focus will be on Vaccines for HPV, Dengue and biosimilars for cancer, diabetics and rheumatoid arthritis and medical devices and diagnostics.

Key components

- Strengthening the pilot-to-market innovation ecosystem for providing grant funding to support innovation, training, and technology transfer.
- Accelerating the pilot-to-market process for specific products to provide grant funding to consortia of
 private, public, and academic institutions to accelerate the development of low-cost select vaccines,
 biopharmaceuticals, diagnostics, and medical devices.
- Project management and monitoring and evaluation, aims to cover the operating costs incurred
- Biotechnology Industry Research Assistance Council (BIRAC), a public-sector enterprise under Department of Biotechnology (DBT), is the implementing agency of the mission.

6.2. EARTH BIO-GENOME PROJECT (EBP)

Why in news?

Recently, Earth Bio-Genome Project was announced through a paper titled- "Earth Bio-Genome Project: Sequencing life for the future of life".

About Earth Genome Project

• It is an **international consortium of scientists** which will undertake the project that aims to sequence, catalogue, and characterize the genomes of every eukaryotic biodiversity on Earth over a period of 10 years to sequence 1.5 million species in three phases.

Eukaryotic – These organisms whose cells are organized into complex structures by internal membranes and a cytoskeleton. e.g. Humans, animals and plants

Prokaryotic – these are the organisms with single cell nucleus e.g. bacteria and archaea

- There are about 8 million eukaryotic species and only 0.2% of eukaryotic genome have been sequenced so far which are still in the crudest form.
- However the EBP project will help to create a detailed genetic sequence and reveal evolutionary connections among genus, orders and families that will make up the Digital Library of life.
- Significance –

- EBP will address a wide range of issues which humanity faces such as climate change on biodiversity, conservation of endangered species and ecosystems and preservation and enhancement of ecosystem services.
- o It could also lead to discovery of more drugs and let researchers find more sources of food as well.

Challenges –

- o Data sharing policies need to be placed to ensure permanent, freely available resources for future scientific discovery while respecting access and benefit sharing guidelines of **the Nagoya Protocol**.
- The organisational and scientific challenges are also being highlighted for the execution of the project and require a coordinated global effort just like the Large Hadron Collider at CERN.
- o Collection of samples will be difficult due to remoteness of their natural habitat.
- The large database thus created would also require a space as large as 200 petabyte
- Securing a funding of \$4.7 billion is also a challenge.
- World Economic forum is also collaborating with EGP through its **Fourth Industrial Revolution for the Earth Initiative** under which they are developing Earth Bank Codes.
- Thus the Fourth Industrial Revolution in biology could offer innovations to link new models for biodiversity management.
- Other Partners of EBP Africa, Australia, Brazil, Canada, China, the European Union and United States, Global Genome Biodiversity Network, the Global Invertebrate Genomics Alliance, the i5K Initiative to sequence 5000 Arthropod Genome and Genome 10K Project.
- It will also promote citizen-scientist initiative.

6.3. BAN ON OXYTOCIN

Why in News?

• The Union government has banned import of oxytocin and **restricted the manufacture** of its formulations for domestic use to public sector only.

About Oxytocin

- Oxytocin is a hormone produced in humans by the hypothalamus (a part of brain) and secreted by the pituitary gland. It is also produced in animals naturally.
- Usage of Oxytocin-
 - During Childbirth- The hormone stimulates the uterine muscles to contract, so labor begins. It is also used to control post-delivery bleeding
 - o **Breastfeeding-** It promotes lactation by moving the milk into the breast during feeding.
 - Human bonding activities- released naturally during sex, it is also known as 'love hormone'.
- It has been misused for increasing milk production in animals, increasing size of vegetables, accelerate puberty among trafficked girls etc.

6.4. PROJECT DHOOP

Why in news?

Recently the Project Dhoop was launched by Food Safety and Standards Authority (FSSAI).

About the Project Dhoop

- It is a nationwide campaign launched by FSSAI along with NCERT, New Delhi Municipal Council and North MCD Schools to spread awareness about consumption of Vitamin D through natural sun light and consuming fortified food among school going children.
- The project urges the schools to shift their morning assembly timing to noon time so that children are able to absorb optimum levels of Vitamin D through natural sunlight.
- It will ensure that the children are exposed to sun light that will give them the required 90% of Vitamin through sun light.
- The sunshine from 11AM to 1PM is most beneficial for bones of human body because during that time the best UVB radiation is received.

Vitamin D and its importance for the body

- Vitamin D is essential for the development of human bones.
- It facilitates absorption of calcium and phosphorus by intestines and their retention in the body and deposition in bones and teeth.
- When skin is exposed to sun, the cholesterolin in the skin converts the cholesterol to Vitamin D via additional conversions in the liver and kidneys.
- The deficiency of Vitamin D can cause Rickets in children and Osteomalacia in adults, whereas acute deficiency could lead to brain, cardiovascular and kidney damage.
- Source of Vitamin D Fish liver oil, egg yolk, milk, liver etc.
- According to recent study it was found that more than 90% of boys and girls across various cities in Indian cities are deficient in Vitamin D.

6.5. SPACE DEBRIS

Why in News?

 A space mission named RemoveDebris was launched to demonstrate various space debris removal technologies.

About RemoveDebris Mission

- It is co-funded by the European Commission and the project partners led by the Surrey Space Centre (SSC), University of Surrey, UK.
- It is 100kg demonstrator project launched onboard a SpaceX Falcon 9 rocket
- It carries its own "junk" two small cubesats as mock targets to demonstrate some of the Active Debris Removal (ADR) technologies which are following-
 - Net capture- capturing using net.
 - o **Harpoon capture** Using Harpoon to allow the junk to be maneuvered out of orbit for a re-entry.
 - Vision-based navigation (VBN)- for tracking debris using VBN camera and LIDAR (Light Detection and Ranging).
 - **Dragsail de-orbitation** –allows the satellite to de-orbit quicker, and to burn up faster in the Earth's atmosphere.

Issues related to Space Junk

- **Huge space junk:** Only 1,400 of the 19,000 artificial objects presently being tracked in Earth orbit are functional satellites. The remaining objects are collectively known as "space debris".
- **Anti-satellite weapons development**: The intentional destruction of the Fengyun-1C weather satellite by China in 2007 has created huge debris and the race of creating ASWs is likely to aggravate the problem
- Accidents: The accidental collision of American and Russian communications satellites in 2009 greatly increased the number of large debris. However, such collisions are bound to increase with increasing ambitions of countries in space.
- No international treaty on orbital debris at present: However, Inter-Agency Space Debris Coordination Committee (IDAC) has been formed comprising various space agencies as an international governmental forum for the worldwide coordination of activities related to the issues of man-made and natural debris in space.
- **Voluntary guidelines:** United Nations Committee on the Peaceful Uses of Outer Space has given some guidelines regarding this but they are voluntary in nature.

6.6. EINSTEIN RING

Why in news?

Recently, the Hubble Telescope discovered a light bending Einstein Ring in space.

Techniques for Debris Removal Active Debris Removal (ADR)

 An external vehicle supplies the mechanism by which the disposal is performed

Postmission Disposal-

- An object is placed on a trajectory that causes it to reenter Earth's atmosphere and impact in a particular region.
- Putting objects in less used orbits.
- Increasing rate of orbital decay through using a drag enhancement device
- Orbital decay refers to the continuous reduction of the altitude of a satellite.

What is an Einstein Ring?

- According to the General Relativity theory of Albert Einstein, light can get deflected when passing through gravitational field of a massive body. Therefore, a massive object would warp space and time.
- When light from a distant object/source (e.g. a galaxy), pass by an extremely large mass/lens (e.g. another galaxy or galaxy cluster), it gets diverted and distorted around the massive intervening cluster and is forced to travel along many different light paths toward Earth, making it seem as though the galaxy is in several places at once. This is called Gravitational Lens effect.

About Hubble Space Telescope:

- It was launched in 1990 in the Lower Earth
 Orbit and was named after Edwin Hubble
 who determined that the universe extends
 beyond milky way and was the first to prove
 that it is ever expanding as well.
- It was built as a collaboration of both NASA and ESA (European Space Agency)
- This telescope could last till 2030-40 and will be replaced by James Webb Space Telescope which will be launched in 2020.
- Einstein Ring is a kind of gravitational lens which is formed when the galaxy cluster is so closely aligned that the otherwise divergent light is focussed as a visible ring by them.
- The rings and lenses **magnify objects** that otherwise would be too distant and dim to see in today's telescopes.
- When the amount of bending of light is analyzed and the required bending mass is found greater than the visible mass of the cluster, it shows the presence of Dark matter.

6.7. ESA'S GAIA MISSION

Why in news?

Recently, a 3-dimensional map of the milky way was released using data from the Gaia mission of European Space Agency.

More about Gaia mission

- In the latest data, it pins down the positions of nearly 1.7 billion stars and also helps in revealing the composition, formation and evolution of the Galaxy.
- It is a leap forward from ESA's Hipparcos satellite, Gaia's predecessor and the first space mission for astrometry.
- The new data not only includes positions, distance indicators and motions of stars in the milky way, but also of asteroids within our Solar System and stars beyond our Galaxy.
- With these accurate measurements it is possible to separate the parallax of stars from their true movements through the Galaxy.
- Analysing all these could provide clues to the nature of dark matter and could lead to a more precise measurement of Hubble constant, which describes how fast the universe is expanding.

6.8. TRANSITING EXOPLANET SURVEY SATELLITE (TESS) MISSION

Why in news?

TESS has been launched by NASA to find worlds beyond our solar system, including some that could support life.

Details about TESS

- TESS will be the **first space-based**, **all-sky surveyor** to search for exo-planets (the planets outside of our own solar system), specifically those that are Earth-like, and close enough for scientists to study them further.
- SpaceX Falcon9 rocket (reusable launch vehicle) was used to liftoff the satellite and put it in orbit.

6.9. ISRO'S IRNSS-11 SATELLITE

Why in news?

ISRO launched the IRNSS-1I satellite from Satish Dhawan Space Centre, Sriharikota, through its PSLV-C41.

Details about IRNSS-11

- It is the **eighth satellite** to join the IRNSS satellite constellation.
- IRNSS-1I will **replace IRNSS-1A**, the first of the seven navigation satellites, which has become ineffective after its three rubidium atomic clocks failed.
- It will be placed in a **sub-geosynchronous transfer orbit** and at its closest point will be 284 km above the Earth and at its farthest will be 20,650 km above the Earth.
- Like all other IRNSS satellites, IRNSS-1I will also carry two payloads navigation payload (determines position, velocity and time) and ranging payload (determines the frequency range of the satellite).



6.10. SOUNDING ROCKET: RH-300 MKII

Why in News?

Recently, Vikram Sarabhai Space Centre (IRSO) successfully launched **RH-300 MKII Sounding Rocket** from Thumba Equatorial Rocket Launch.

About the sounding rocket

- They take their name from the nautical term **"to sound,"** which means to take measurements.
- They are one or two stage solid propellant rockets with a payload of 60kg, and altitude capacity of 160km, used for **probing the upper atmospheric** regions and for **space research**.

Related Information

- In 1975, all sounding rocket activities were consolidated under the Rohini Sounding Rocket (RSR) Programme.
- RH-75, with a diameter of 75mm was the first Indian sounding rocket, which was followed by RH-100 and RH-125 rockets.
- Currently, operational sounding rockets- include three versions namely RH-200, RH-300-Mk-II and RH-560-Mk-III.

- Objective is to measure neutral wind in the dynamo region (80-120 km) of equatorial ionosphere using the indigenously developed Electron Density and Neutral Wind Probe (ENWi) and perform cross-validation using an independent Tri Methyl Aluminium (TMA) release technique.
- They also serve as easily affordable platforms to test or prove prototypes of new components or subsystems intended for use in launch vehicles and satellites.

The study will enrich available atmospheric data and refine the models used for tropical weather prediction.

6.11. LYRID 2018

Why in News?

The Lyrid 2018 meteor shower was visible across the Northern hemisphere.

About Lyrid 2018

- This meteor shower was caused by remains of the C/1861 Thatcher comet, and is a yearly celestial phenomenon set around April.
- Lyrid meteor shower gets its name from the constellation Lyra, as it appears to originate from Lyra.
- Unlike eclipses, stargazers can enjoy the meteor shower without a visual aid.

Meteor Shower

- A comet passing close to the Sun heats up and spews dust and gases into a giant glowing head larger than most planets.
- The dust and gases form a tail that stretches away from the sun for millions of kilometers and is known as comet's trail.
- When earth, moving in its orbit around the Sun, passes through such a comet's trail, debris left behind by comet enters atmosphere and heats up and burn in a bright burst of light.
- This burning of debris with burst of light is called Meteor Shower.



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7. SOCIAL

7.1. STATE OF SOCIAL SAFETY NETS 2018

Why in news?

Recently, **World Bank** has released State of Social Safety Nets Report, 2018.

Background

- Report is part of efforts to monitor the implementation progress of the World Bank's 2012–2022 Social Protection and Labor Strategy.
- Report uses administrative data for 142 countries and household survey data for 96 countries from the ASPIRE database.

Highlight of the report

The report focuses on two special themes:

- Adaptive Social Protection (ASP): It places an enhanced focus on better enabling social protection to address the impacts of all manner of shocks on households – including natural disasters and climate change, economic and financial crises, conflict and displacement, among others. Focus Area of ASP
 - Building Household Resilience before shocks Occur: This can be done by:
 - Diversifying livelihood strategies and access to markets
 - Increasing access to financial, social, human, physical, and natural capital
 - Access to quality basic social services.
 - Access to social protection programs, including safety nets, particularly in difficult periods.
 - Access to the information and skills needed to adapt to shocks
 - Local and national institutions able to adapt to changing realities.
 - Increasing the Capability Of Safety Nets To Respond To shocks after they occur: By adopting dynamic delivery systems to provide required flexibility and scalability in SSN program to achieve horizontal and/or vertical expansion, depending on post-shock needs.
 - Vertical expansion: It increase benefit amounts at an acute time of need to existing social protection beneficiaries.

SOCIAL SAFETY NETS HELP REDUCE POVERTY & INCOME INEQUALITY

Safety nets build resilience and protect vulnerable households from impacts of economic shocks, natural disasters, and other crises.

Social safety nets help
50 million people
Escape Extreme poverty

Globally **2.5 BILLION PEOPLE** are covered by Safety Net Programs. of These **650 MILLION PEOPLE** Are From The Poorest Quintile.





But in low-income countries

ONLY 1 IN 15

of the poorest are covered by safety net programs

How Much Do Regions & Countries Spend on Safety Nets?

Globally, developing and transition countries spend an average of 1.5 percent of GDP on safety net programs.



Many Countries are Scaling up Their Flagship Safety Net Programs

- Horizontal expansion: It's about increasing the coverage of the program to include those who were not included in regular program but are affected and targeted for assistance.
- Old-Age Pensions: It provides an alternative source of income for elderly adults who are not covered by contributory schemes. (old-age pensions have helped the elderly reduce or altogether escape poverty).

Finding of report

- Increase in SSN Spending: Globally, developing and transition countries spend an average of 1.5 percent of GDP on SSN programs, where India and Bangladesh public works spending budget share is the highest in South Asia (> 25%).
- **Declining** Poverty: Safety nets help people escape extreme poverty (3 6% escaped extreme poverty), close the **poverty** gap by about 45%, and reduce inequality.
- On India: Impact of Inclusion Productive Interventions (graduation models) that support sustainable exits from poverty by extension, resilience-building increasing in India.

Types of Social Safety Net Program

- Unconditional cash transfers (UCTs): It encompass interventions such as poverty alleviation or emergency programs, guaranteed minimum income programs, and universal or poverty targeted child and family allowances.
- Conditional cash transfers (CCTs): It aim to reduce poverty and increase human capital by requiring beneficiaries to comply with conditions such as school attendance and health checkups
- Social pensions: It aim to overcome loss of income because of old age, disability, or death of the bread winner for individuals who do not have access to social insurance benefits.
- Public works programs condition the transfer on participating in a community project/activity
- Fee waivers and targeted subsidies: It subsidize services or provide access to lowpriced food staples for the poor
- School feeding programs provide meals to students generally in poor and foodinsecure areas.
- **In-kind transfers** consist of food rations, clothes, school supplies, shelter, fertilizers, seeds, agricultural tools or animals, and building materials, among others.
- Disaster Safety: Safety nets build household resilience to respond to shocks across the life cycle, key to building human capital.

Factors Affecting the Impact of **SSN Transfer**

- Program's coverage: High coverage along with high benefit levels lead to higher outcomes in poverty and inequality reduction.
- Transfer Level: Sufficient amount is necessary for sustainable and holistic development of household.
- Beneficiary/Benefit Incidence: Coverage of scheme must include all possible vulnerable under its target to obtain desired level of poverty gap reduction.

Related information

World Bank 2012–2022 Social Protection and Labor Strategy

Aim: To help improve resilience, equity, and opportunity for people in both low- and middle-income countries through integrated social protection and labor systems, increasing coverage of social safety nets programs, especially in lower-income countries, and improved evidence.

Aspire: The Atlas of Social Protection - Indicators Of Resilience And Equity - It is the World Bank's premier compilation of Social Protection and Labor (SPL) indicators in order to analyze the distributional and poverty impact of Social Protection and Labor programs.

Social assistance/Social safety net programs

- They are non-contributory transfers in cash or in-kind and are usually targeted at the poor and vulnerable.
- They are focused on improving chronic poverty or providing equality of opportunity

7.2. HUMAN RIGHTS (AMENDMENTS) BILL, 2018

Why in news?

The Union Cabinet has given its approval to the Protection of Human Rights (Amendments) Bill, 2018.

Proposals of the Bill

- Include "National Commission for Protection of Child Rights" as deemed member of the National Human Rights Commission
- Add a woman member in the composition of the NHRC.
- Enlarge the scope of eligibility and scope of selection of Chairperson of NE
- scope of selection of Chairperson of NHRC, as well as of State Human Rights Commission
- Incorporate a mechanism to look after the cases of human rights violation in the **Union Territories**.
 Amend the term of office of Chairperson and Members of NHPC and State Human Rights Commiss
- Amend the term of office of Chairperson and Members of NHRC and State Human Rights Commission to make it in consonance with the terms of Chairperson and Members of other Commissions.

National Human Rights Commission (NHRC)

under the Protection of Human Rights Act, 1993.

of ST and Chairman of National Council of Women.

The commission includes a chairperson and 4 members.

Benefits

- It will strengthen the Human Rights Institutions of India further for effective discharge of their mandates, roles and responsibilities.
- The amended Act will be in sync with the agreed global standards towards ensuring the rights relating to life, liberty, equality and dignity of the individual in the country.
- The amendment to the Protection of Human Rights Act, 1993 will make National Human Rights Commission (NHRC) and State Human Rights Commission (SHRC) more compliant with the Paris Principle concerning its autonomy, independence, pluralism and wide-ranging functions in order to effectively protect and promote human rights.

Paris Principles

It was constituted in 1993 as a **statutory body** (not constitutional)

In addition to these full time members, the commission also has 4

ex-officio members i.e. Chairman of National Council of Minorities,

Chairman of National Council of SCs, Chairman of National Council

- The Paris Principles is a set of international standards which frame and guide the work of National Human Rights Institutions (NHRIs).
- According to the Paris Principles, NHRIs should be established by a statutory or constitutional provision, which sets for the tasks, composition and sphere of competence of the institution.
- These institutions must have an autonomous and independent status not only formally, but also financially and administratively.

7.3. CHILD RAPE

Why in news?

Recently an ordinance was passed by the government to allow courts to pronounce death penalty to those convicted of raping children below the age of 12 years.

Background

- According to the National Crime Records Bureau, in 2016, 93,344 cases of crimes against children were registered across India.
- These many numbers of cases were recorded despite the fact that adequate provisions exist under both Indian Penal Code (IPC) and Protection of Children from Sexual Offences Act, 2012 for crimes against children.

Features of Criminal Law (Amendment) Ordinance, 2018

- The Ordinance will amend Indian Penal Code, Evidence Act, the Code for Criminal Procedures and the Protection of Children from Sexual Offences (POCSO) Act to introduce new provisions.
- It proposes to:
 - o amend Section 376 of Indian Penal Code. The amended provision proposes to increase the minimum sentence of rape from 7 to 10 years.
 - o incorporate Section 376 (3) which provides that punishment for rape of girl below 16 years shall not be less than 20 years but may extend to imprisonment for life.
 - o insert Section 376AB to provide that whoever commits rape of women below 12 years of age shall be punished with rigorous imprisonment for life and with fine or with death.
 - o punish gang rape of woman below 16 years of age with rigorous imprisonment for life and with fine.

- o punish gang rape of woman below 12 years of age with rigorous imprisonment for life and with fine or with death.
- The ordinance also reduces the time limit of three months of investigation under CrPC to two months and also prescribes six months for disposal of appeals.
- The Ordinance also prescribes that there will be **no anticipatory bail** for a person accused of rape or gang rape of a girl under 16 years.

Other measures announced

- Strengthening Courts and prosecution -
 - Fast track courts will be set up for speedy trial in consultation with States/UTs and High Courts.
 - o Special forensic Kits will be provided to all police stations and hospitals.
 - o **Dedicated manpower** for investigation of rape cases in time bound manner
 - o Measures to be implemented in **mission mode** within 3 months
- **National Crime Records Bureau** will maintain a national database and profile of the sexual offenders and will share it with states and UTs for **tracking**, **monitoring and investigation**.
- The present scheme of 'One Stop Centre' for assistance to victim will be extended to every district in the country.

Criticism of the Ordinance

- Presently there are a number of laws and acts in place which provide for stringent punishment in cases mentioned above such as POCSO Act, Criminal Amendment Act of 2013 etc. However, efforts should be made to implement the existing laws properly.
- The delivery of justice for crimes reported against children needs to be expedited by placing more resources (human, budget and through the use of technology) and by making it survivor-centred, by strengthening the existing Integrated Child Protection Scheme and other support services.
- Presently, the massive backlog of redressal of rape cases, lack of rehabilitation support and psycho-social counselling to rape survivors -- and their family members -- is the immediate need.
- POCSO and RTE should also be extended to Jammu, Kashmir and Ladakh.
- The focus instead should be on quicker investigation and conviction which is one of the stated objectives of the new law through fast track courts but this was also there in the Act of 2013.
- New penalty will affect the reporting of cases because family members would not like their own relatives, who are often the culprit, to be hanged, putting them in jail for ten years or 20 years was a different proposition.

7.4. NIRF INDIA RANKINGS 2018

Why in News?

Union HRD Minister released 'NIRF India Rankings 2018' for Higher Education Institutions.

Background

- National Institute Ranking Framework was launched in 2015 to rank institutions across the country and promote quality in education and encourage competition to perform better
- The framework follows **India-centric parameters** like diversity and inclusiveness apart from excellence in teaching, learning and research.

About NIRF India Rankings 2018

- NIRF 2018 gave rankings for 9 different categories of institutions including 3 new categories Medical,
 Architecture and Law. Also dental colleges have been added for the first time.
- It ranked institutions on following five parameters:-
 - Teaching, Learning and Resources- These lay emphasis on measuring numbers and quality of faculty, library and lab resources and general facilities for development of young persons.

- Research and Professional Practices These measure the quantity and quality of research output as seen through international data bases, IPR generation and interface with industry and fellow professionals.
- o **Graduation outcomes** This measures the student graduation rate and their success in finding placement in industry and Government or taking up higher studies.
- Outreach and Inclusivity- It lays emphasis on representation of women and socially challenged persons in student or faculty populations, and also on outreach activities of the institution.
- Perception of the institutes by its stakeholders.
- **NIRF 2018** included **new criteria** such as total budget and its utilisation, combined metric for quality of publications, university examinations and how many graduating students admitted into top institutions.
- The rankings assume significance as performance of institutions has been linked with "Institutions of Eminence" scheme.

Please refer to February, 2018 to read more about Institutions of Eminence scheme.

7.5. UNNAT BHARAT ABHIYAAN 2.0

Why in news?

Recently Human Resource Development Ministry launched Unnat Bharat Abhiyan 2.0 in New Delhi.

Unnat Bharat Abhiyaan 2.0

- It is phase 2 of Unnat Bharat Abhiyaan where students of premier institutions will help in solving the problems faced by rural population across the country.
- Unnat Bharat Abhiyaan was launched by govt. of india with objective of Building institutional capacity in Institutes of higher education in research & training relevant to the needs of rural India and providing rural India with professional resource support from these institutions.

Under the Unnat Bharat Abhiyan 2.0

- The institutions have been selected on a Challenge Mode.
- The scheme has been extended to 750 reputed Higher Educational Institutes (both public and private) of the country.
- IIT Delhi has been designated to function as the National Coordinating Institute for this programme.
- Each selected institute would adopt a cluster of villages / panchayats and gradually expand the outreach over a period of time.
- Institutes through their faculty and students, will carry out studies of living conditions in the adopted villages. The focus will be on:
 - o assess the local problems and needs
 - o workout the possibilities of leveraging the technological interventions in implementation of various government schemes
 - o prepare workable action plans for the selected villages.
- These studies will help in augmenting the implementation of the development programmes in rural areas.
- The Institutes will work in close coordination with the district administration, elected public representatives of panchayat / villages and other stakeholders.
- Also, scope for providing Subject Expert Groups and Regional Coordinating Institutes to handhold and guide the participating institutions has been strengthened.
- In this process, faculty and students of such institutes would be re-oriented and connected to the rural realities so that their learning and research work also becomes more relevant to the society.

7.6. RASHTRIYA AVISHKAR ABHIYAN

Why in News?

Recently, Ministry of Human Resource Development has launched the Rashtriya Avishkar Abhiyan (RAA).

About Rashtriya Avishkar Abhiyan

- It envisages to motivate and engage children of the **age group from 6-18** years in Science, Mathematics and Technology through observation, experimentation, inference drawing, model building, etc.
- Main objectives of RAA-
 - Curb the outward flow of the country's students, who leave their homeland in search of backing for their ideas.
 - o GIAN (Global Initiative for Academic Networks) programme is initiated
 - o Encourage students to come up with new innovations and new designs.
- Under RAA government schools will be mentored by institutes like IITs/ IIMs/ IISERs and other central
 universities and reputed organizations through innovative programmes, student exchanges, demonstrations,
 student visits, etc to develop a sense of passion towards learning of science and mathematics
- **Funding:** under Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and in cases of collaborative initiatives with Ministry of Science and Technology and Department of Higher Education institutions in coordination with their schemes and norms.

7.7. VAN DHAN SCHEME

Why in news?

Ministry of Tribal Affairs has recently launched Van Dhan Scheme.

Background

- Minor Forest Produce (MFP) is a major source of livelihood for tribals living in forest areas.
- Around 100 million forest dwellers depend on MFPs for food, shelter, medicines and cash income.
- Tribals derive 20-40% of their annual income from MFP and activity has strong linkage to women's financial empowerment as most of the MFPs are collected and used/sold by women.
- MFP sector has the potential to create about 10 million workdays annually in the country.
- The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, defines
 a Minor Forest Produce (MFP) as all non-timber forest produce of plant origin and includes bamboo,
 brushwood, stumps, canes, Tusser, cocoon, honey, waxes, Lac, tendu/kendu leaves, medicinal plants and
 herbs, roots, tuber and the like.
- Government had earlier launched a scheme named "Minimum Support Price (MSP) for Minor Forest Produces (MFP) scheme for safeguarding the remuneration of tribal population.
- However, most of the trade related to the MFPs remained unorganized in nature, which has led to low returns to the gatherers and high wastages due to limited value addition. Thus, a more holistic approach with robust institutional mechanisms is required for strengthening the backward and forward linkages of MFP supply chain.

Van Dhan Scheme

- Under the scheme **10 Self Help Groups of 30 Tribal gatherers** (Van Dhan Vikas Samuh) will be constituted. They will then be provided with working capital to add value to the products collected from the jungle.
- A cluster of ten such SHGs within the same village shall form a Van Dhan Vikas Kendra.
- Van Dhan Vikas Kendra are multi-purpose establishments for providing skill upgradation, capacity building training and setting up of primary processing and value addition facility.
- The stock after primary processing shall be supplied by these SHGs to the State Implementing Agencies or direct tie up for supply to corporate secondary processor.
- For creation of secondary level value addition facility at district level and tertiary level value addition facility at State level, Big Corporates shall be involved under PPP model.

- The scheme will be implemented through **Ministry of Tribal Affairs** as Nodal Department at the Central Level and **TRIFED** as Nodal Agency at the National Level.
- At State level, the State Nodal Agency for MFPs and the District collectors are envisaged to play a pivot role in scheme implementation at grassroot level.
- The First model Van Dhan Vikas Kendra is being set up in Bijapur District of Chattisgarh which will train 300 beneficiaries.

7.8. GRAM SWARAJ ABHIYAN

Why in news?

The Prime Minister has announced that "Gram Swaraj Abhiyan" would be organised on the occasion of Ambedkar Jayanti.

About Gram Swaraj Abhiyan

- This Abhiyan (campaign) is being undertaken for reaching out to poor households, spreading awareness about government welfare schemes and other people centric initiatives.
- The campaign is undertaken under the name of "Sabka Sath, Sabka Gaon, Sabka Vikas".
- During the Abhiyan, universal coverage under following seven welfare programmes in 21058 identified villages, with large number of underprivileged households across the country, has been contemplated.
 - Pradhan Mantri Ujjwala Yojana
 - o Saubhagya
 - o Ujala scheme
 - o Pradhan Mantri Jan Dhan Yojana
 - o Pradhan Mantri Jeevan Jyoti Bima Yojana
 - o Pradhan Mantri Suraksha Bima Yojana
 - Mission Indradhanush.

7.9. NATIONAL ANNUAL RURAL SANITATION SURVEY (NARSS)

Why in news?

Recently the results of NARSS were published.

About NARSS

- The Survey was conducted by an Independent Verification Agency – Kantar Public- between mid-November 2017 and mid-March 2018 to establish the baseline with respect to the Disbursemment Linked Indicators for the World bank project support to the Swacch Bharat Mission (Gramin).
- NARSS annually measures the three World Bank
 Disbursement Linked Indicators
 - o Reduction in prevalence of open defecation
 - Sustain ODF status in villages
 - Increase in population with solid and liquid waste management practices.

Findings of NARSS, 2017

- 95.6% of Open Defecation Free (ODF) verified villages have been confirmed ODF.
- Remaining 4.4% villages could not be confirmed due to reasons such as –
 - Lower than 100% access to toilets in villages
 - Presence of an unhygienic/defunct/ unsafe toilets in any household in the village

Swachh Bharat Mission - Gramin

SBM was launched in 2014 with an objective to accelerate the efforts to achieve universal sanitation.

It is being implemented by Ministry of Drinking Water and Sanitation and has two Sub- Missions SBM- Urban and SBM- Gramin.

SBM- Gramin as a sub mission has following objectives –

- Bring improvement in the general quality of life by promoting cleanliness, hygiene and eliminating open defecation.
- Accelerate sanitation coverage in rural areas to achieve Swachh Bharat Vision by 2019.
- Motivate communities and Panchayati Raj Institutions to adopt sustainable sanitation practices and facilities through awareness creation and health education.
- Encourage cost effective technology
- Develop community managed sanitation systems focusing on scientific solid waste management.

An ODF verified village is confirmed to be ODF if:

- No visible faeces was found in the environment or village.
- Every household as well as public/community institutions was found to be using safe technology option for disposal of faeces.

- Non-usage of a toilet
- Absence of toilets in schools or anganwadi
- Presence of visible faecal matter in village.
- 77% of the households found to have access to toilets.
- 93.4% of the people who had access to toilets used them regularly
- 70% of the villages were found to have minimal litter and stagnant water.
- Among the states, Kerala and Mizoram have achieved 100% Open Defecation Free status while Uttar Pradesh and Bihar are the bottom ranking with less than 44% of such households.
- However, the findings have been have been criticised for using a small sample size which is not enough to have a holistic view of sanitation status.



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8. CULTURE

8.1. WORLD HERITAGE SITES

Why in news?

6 monuments/historical sites in the North Eastern states have been **identified tentatively** for listing under World Heritage Site.

Details

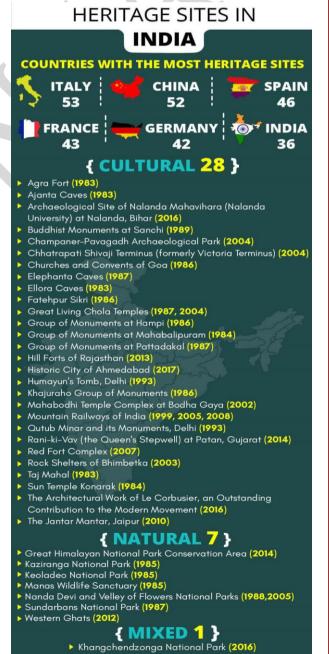
- Apatani Cultural Landscape, Arunachal Pradesh:
 - Apatani civilisation existed in Zero Valley, Arunachal Pradesh.
 - The hallmark of the valley is judicious utilization of limited land area. The relatively flat land in the valley is used for wet-rice cultivation where fish is also reared.
 - The Apatanis are also known for their effective traditional village council called **bulyañ**, which supervises, guides and have legal oversight over the activities of individuals that affect the community as a whole.
- Iconic Saree Weaving Clusters of India: This pan-India cluster comprises of sites from five Indian states: Madhya Pradesh (Chanderi, the 13th cent. Moroccan traveler Ibn Batuta also visited here), Uttar Pradesh (Banaras and Mubarakpur), Maharashtra (Paithan and Yeola), Andhra Pradesh (Koyyalagudem and Pochampalli, the silk city of India famous for Ikat sarees) and Assam (Sualkuchi for muga and mulberry silk).
- Moidams the Mound Burial System of the Ahom Dynasty, Assam
 - Moidams are vaulted chamber (chow-chali), often double storied entered through an arched passage, used for burying the royals in Choraideo landscape of the foothill of Patkai hills. The Changrung Phukan (canonical text developed by the Ahoms) discusses that Moidams were made of woods, and later of burnt bricks.

Namdapha National Park, Arunachal Pradesh

- It is only park in the World to have the four Feline species of big cat namely the Tiger, Leopard, Snow Leopard and Clouded Leopard. The area lies close to the Indo-Myanmar-China tri-junction.
- River Island of Majuli in midstream of Brahmaputra River in Assam
 - The Majuli Island is a fluvial landform (a riverine delta). The formation of islets locally called as Chaporis around the majuli island is its another significant feature. It is the largest mid river delta system in the world.

What is world heritage site?

- Under Convention concerning the protection of the world culture and natural heritage, 1972, UNESCO encourages identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity.
- Such heritages are listed under world heritage site list.
- The WHS helps in raising awareness, getting expert advices and financial assistance as well.
- WHS are categorised into Cultural sites, Natural sites and Mixed sites.
- The World Heritage Day is observed on 18th of April every year.



• Thembang Fortified Village, Arunachal Pradesh

Thembang bears an exceptional testimony to the living cultural traditions of the Monpa tribe, which depicts influences of diverse cultures - the Bhutanese, the Tibetans and the indigenous North East Indian. This includes their social structure and practices, rites, rituals and their vernacular building knowledge systems such as Dzongs or the fortress which are also found in Bhutan and Tibet.

8.2. KONARK TEMPLE

Why in News?

• A state-of-the-art interpretation and tourist facilitation centre was recently inaugurated at the Sun temple at Konark, Odisha.

About Sun Temple, Konark

- The Temple was built in the 13th century by King Narasimhadeva I of the Ganga dynasty.
- It has a gigantic chariot of the Sun god, with 12 pairs of exquisitely ornamented wheels pulled by seven horses.
- It is a UNESCO World Heritage site under Cultural category.
- is the third link of Odisha's Golden Triangle. The first link is Jagannath Puri and the second link is Bhubaneswar (Capital city of Odisha).
- It is also known as 'Black Pagoda' due to its dark color.

Other Famous Sun Temples in India				
Name of Temple	Other Details			
Sun Temple, Modhera	Gujarat			
	Situated on the bank of the Pushpavati river			
Surya Narayan Temple, Arasavalli	Andhra Pradesh			
	 Constructed during 7th Century by Kalinga king Devendra Varma 			
Sun Temple, Martand	Jammu and Kashmir			
	Listed as national importance in Jammu and Kashmir and protected monuments of India			
Sun Temple, Gwalior	Madhya Pradesh			
	Architecture is inspired by the Sun temple in Konark			
Brahmanya DevTemple, Unao	Madhya Pradesh			
	known for unique architecture and design			
Sun Temple, Ranchi	Jharkhand			
Sun Temple, Khatarmal	Uttrakhand			
	Noted for its magnificent carved pillars and wooden doors			
Surya Pahar Temple, Assam	Assam			
	Has rock-cut Shivalingas, sculpture of twelve-armed Vishnu and remains of the			
	Ganesha and Hari Hara			
Surya Narayan Temple, Domlu	Karnataka			
Dakshinaarka Temple, Gaya	Bihar			
	Images of Sun God Aditya are found here			
Suryanar Temple, Kumbakonam	Tamil Nadu			
	One of the nine Navagraha temples in Tamil Nadu			

8.3. MADHUBANI PAINTING

Why in News?

 Recently, Madhubani/Mithila Painting was used to decorate Madhubani railway station in Bihar which also became one of the cleanest railway stations in India.

About Madhubani Paintings

- It derives its name from the **Madhubani town** in Bihar where this art form was done traditionally.
- Its origin is believed to be during the period of Ramayana.

- Characteristic features
 - o **line drawings** filled in by **bright colours** and contrasts or patterns.
 - o **Major theme**: geometric patterns; religious motifs of Hindu such as Krishna, Rama, Tulasi plant, Durga, Sun and Moon etc.; auspicious occasions like marriages, birth etc.
 - o **Floral, animal and bird motifs** are also drawn and **symbolic** in nature, for example- fish depicts good luck and fertility.
 - o commonly includes double line border, bold use of colours, ornate floral patterns and exaggerated facial features.
 - o Two-dimesional with no shading.
- It is done on **freshly plastered walls using rice paste and vegetable colours on a base of cow dung and mud**. For **commercial purposes**, the work is now being done on **paper**, **cloth**, **canvas** etc. and men have also got involved along with women.
- It has been given Geographical Indication (GI) tag.

[Please refer to November 2017 issue to read more about Geographical Indication tag]

8.4. NATIONAL CULTURE FUND

Why in News?

• A total of 34 projects have been successfully completed under National Culture Fund (NCF) scheme since its inception.

About National Culture Fund

- It was established as a **funding mechanism distinct from the existing sources and patterns** of funding for the arts and culture in India.
- It was created as a **Trust** under the Charitable Endowment Act, 1890.
- It aims at inviting individuals as well as private institutions in the task of promoting, protecting and preserving India's cultural heritage.
- A **council** headed by **Union Culture Minister** manages and administers the Fund and decides the policies while an **Executive Committee headed by Secretary**, Ministry of Culture actualizes those policies.
- The Government granted a one-time corpus fund to NCF. Apart from this, there is no fund allocated by the Government to National Culture Fund. It receives contributions and voluntary donations as endowments from many other sources.
- All the projects undertaken by the NCF are completed within a specified period, in accordance with an MoU signed by NCF with the concerned donor organization.

8.5. UNESCO ATLAS OF THE WORLD'S LANGUAGES IN DANGER

Why in News?

 Recently, first ever dictionary of Gondi language was launched.

More on news

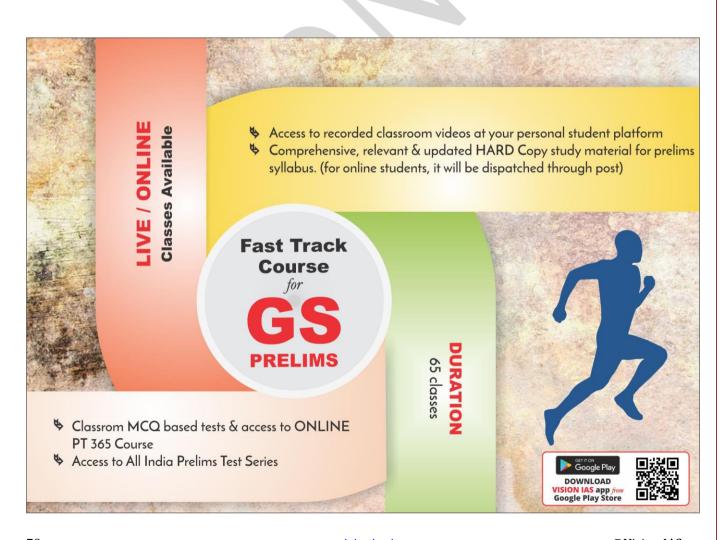
- The project aims to create a standardized and unified language and was supported by Indira Gandhi National Centre for the Arts, an autonomous body under ministry of culture.
- At present, Gondi is spoken by two million people in 6 states (Madhya Pradesh, Gujarat, Telangana, Maharashtra, Chhattisgarh and Andhra Pradesh). It has six different dialects but can be written by only 100 people.
- UNESCO has put it in the 'vulnerable' category in its Atlas of the World's Languages in Danger.

LANGUAGE VITALITY

- Absolute number of speakers
- intergenerational language transmission
- Community member's attitude towards their own language
- Shifts in domains of language use
- Governmental and institutional language attitudes and policies, including official status and use
- Type and quality of documentation
- Response to new domains and media
- Availability of materials of language education and literacy
- Proportion of speakers within the total population

UNESCO's Atlas of the World's Languages in Danger

- The Atlas aims to **raise awareness** about language endangerment and the need to safeguard the world's linguistic diversity.
- It also serves as a **tool to monitor the status** of endangered languages and the **trends in linguistic diversity** at the global level.
- It uses nine factors to determine the vitality of a language.
- It segregates language based on Degree of Endangerment as Safe, Vulnerable, Definitely endangered, Severely endangered, Critically endangered and Extinct.



9. ETHICS

9.1. INEQUALITY AND ETHICS

Inequality is a situation where certain people have access to things - places, goods, services - which others do not. Historically, inequalities have often been enforced by fiat, such as aristocracies and guilds, or perhaps based on group characteristics, such as apartheid or slavery or casteism. In today's societies, property rights are used to restrict peoples' access to resources. Justifying inequality therefore entails arguing why some deserve more wealth and hence greater access to places, to goods and services, to social opportunities, than others.

Defenders of inequality typically rely on one of 3 ethical arguments:

- Desert Ethics: According to the Desert ethics, it is only fair to treat a person, as the person DESERVES. So, if
 somebody has created something, say wealth, he is entitled to it, and he must have all the rights to exclude
 others from using it.
- Voluntarist Ethics: According to it, the exchanges which led to an unequal distribution were voluntary people CONSENTED to the transactions, therefore they consented to the resultant outcome. So, inequality is
 just an outcome of what people have already consented.
- The Ethics of 'Growing the Pie': According to this theory, granting superior legal status to few, will result in more wealth and opportunities for everyone.

But most of the wealth acquired by a person is through luck. Even those who develop strong work ethics is mostly due to their genetic makeup, environment and upbringing. Also, natural resources which are free gift of nature are exploited more by rich to become richer. Public services such as rule of law, infrastructure, and health and education also play major role in acquisition of wealth. Also, higher inequality results in lower growth of incomes of poor. So, inequality indeed has moral bearings.

High degree of Inequality presents following ethical issues:

- Inequality creates a less virtuous society because,
 - the virtue of **Trust** among members of society is lost e.g. acute deprivation may force a person to steal or lie.
 - o the virtue of **Individual Self-determination** is lost as Inequality removes the level playing field to achieve success in life e.g. a rich child has better access to education and nutrition than a poor child.
 - the virtue of **respect and tolerance** in the society is lost e.g. the wasteful expenditure of rich undermines their rationality and intellect in the eyes of poor.
 - o the virtue of **obedience** is also lost e.g. people start protesting, breaking rules, creating riots etc.
- Inequality violates **distributive justice** e.g. wages are not distributed according to the labour or efforts one puts in the work.
- The right to have a dignified Life, the right to equality, the right to have an equal opportunity gets
 jeopardised in case of extreme Inequality leading to lack of food, education, healthcare, etc. Inequality
 creates compulsion and takes away the right to choose.
- Inequality **creates sufferings** at many points, which may lead to a society where rich force the poor into positions of servitude. Morality lies in reducing such sufferings.
- Inequality also **undermines democracy** as it creates unequal access to the political system and to the positions of power. (John Rawls).

Rawls says that **inequality can be justified only when it benefits everyone in society,** particularly those who are most poor and vulnerable.

Economic prosperity, if it does not ensure justice to all, will not lead to long-lasting peace, well-being, and development in the world. Those who are denied justice and even a minimum means of life will rise against the powerful who deny them justice and oppress them in different ways. A number of revolutions and people's movements in the history of the human society clearly show this. Hence, development in solidarity is necessary for peace and harmony in this world. Ensuring justice is not merely to satisfy some legal requirements, or to avoid wars and conflicts. It comes out of the conviction that all people on earth basically form one single human community, that everyone is related to everyone else and everyone is responsible for the well-being of all. This concept of justice is fundamentally rooted in love and solidarity with all people on earth.

10. MISCELLANEOUS

10.1. ADILABAD DOKRA AND WARANGAL DURRIES

Why in news?

Recently, Adilabad Dokra and Warangal Durries have been issued GI tag.

About Adilabad Dokra

- It is an ancient bell metal craft popular in the tribal regions of Adilabad district in Telangana.
- The Dokra craftsmen belong to the Woj community, called Wojaris/Otaris/Ohjas.
- It is unique because **no two pieces are alike** in shape as well as in size and hence replica of the bell is nearly impossible.
- The craftsmen make brass objects by an ancient casting technique called cire perdue (french term for lost wax technique)
- The product mainly includes idols of local deities, bells, dancing figures, jewellery, statues and many other decorative items.

About Warangal Durries

- In this style of durries, weavers create beautiful patterns and dye them using vegetable colours, which are washed in flowing water after the printing process.
- The Nizam of Warangal had established Azam Jahi Mills in 1934, which created an ecosystem for cotton based weaving industry, especially of durries in the area.

City Data for India Initiative

planning,

It has been established by the Tata Trusts and the

Its goal is to contribute to improved infrastructure

services, inclusive prosperity and quality of life for

The initiative empowers city leaders, decision-

makers and citizens from major cities in India to

make data-informed decisions to improve city

investment

infrastructure

World Council on City Data (WCCD).

millions of Indian urban citizens.

operational performance.

For details on GI tag, refer November 2017 current affairs of Vision IAS

10.2. WORLD COUNCIL ON CITY DATA CERTIFICATION

Why in news?

Chennai is set to join the list of 50 cities notified by World Council on City Data Certification (WCCD).

More on new

- Ahmedabad, Pune, Surat and Jamshedpur have already received the certification from the WCCD under the City Data for Indian Initiative.
- WCCD is a global hub for creative learning partnerships across cities, international organizations, corporate partners, and academia to
 - further innovation, envision alternative futures, and build better and more liveable cities.
- The WCCD ISO 37120 certification published for globally-comparable city data, provides a comprehensive set of indicators to measure the city's social, economic and environmental performance in relation to other cities.
- Once ISO 37120-certified, Chennai will be included in the WCCD's Global Cities Registry.
- The data pertaining to the city is then available on the WCCD's Open City Data Portal and can be accessed by civic bodies, state and Central authorities, international bodies etc.
- Significance of the Certification
 - The Certification will guide the city towards a smart, sustainable and resilient future with **independently** verified and globally comparable city data.

Lost wax technique

In this technique a clay model of the sculpture to be created is designed. This clay model is wrapped with wax threads and kept in the mould, which is baked to allow the wax to flow out and then molten metal is poured into the mould to get the desired sculpture.

10.3. UN ROAD SAFETY TRUST FUND

Why in News?

Recently, United Nations has launched UN Road Safety Trust Fund in order to enhance road safety worldwide.

About UN Road Safety Trust Fund

- It is a trust fund managed by United Nations Economic Commission for Europe
- It aims to accelerate progress in improving global road safety by bridging the gaps in the mobilization of resources for effective action at all levels.
- The Fund will mobilize resources from governments, intergovernmental or non-governmental organizations, the private sector, philanthropic organizations and individuals.
- It will focus on strengthening the capacity of government agencies, local governments and city authorities to develop and implement road safety programmes, prioritizing projects in low and middleincome countries.
- It will support mainly two initiatives;
 - Five pillars of Global Plan for Decade of Action for Road Safety (2011-20)- developed by UN Road Safety Collaboration. It advocates that the efforts should be made around five pillars.
 - Sustainable Development Goal-
 - 3.6 which aims to halve the number of global deaths and injuries from road traffic accidents
 - 11.2 which provides access to safe, affordable, accession, sustainable transport systems for all, improving road safety.

United Nations Economic Commission for Europe

- It was set up in 1947 by ECOSOC (United Nation Economic and Social Council) a regional commission for Europe.
- UNECE includes 56-member States in Europe, North America and Asia.
- India is not a member country to it.
- Its major aim is to promote pan-European economic integration.

Other International efforts for Road Safety

- United Nations road safety conventions
- Road Safety Action Plan mooted by Asian Development Bank stressed the need of optimal mobility of traffic, promotion of traffic circulation, building the rush-hour lanes and selfexplained roads.



10.4. WORLD PRESS FREEDOM INDEX

Why in news?

Recently India ranked 136 among 180 countries in World Press Freedom Index (PFI) 2018.

About the index

- The index is determined by pooling the responses of experts to a questionnaire devised by **Reporters** without borders (Reporters Sans Frontières, RSF). This qualitative analysis is then combined with quantitative data on abuses and acts of violence against journalists.
- The questionnaire focuses on following criteria categories for the country's performance
 - Pluralism: Measures the degree to which opinions are represented in the media.
 - Media independence: The degree to which the media are able to function independently of sources of political, governmental, business and religious power and influence.
 - o **Environment and self-censorship:** The environment in which news and information providers operate.
 - Legislative framework: governing news and information activities.
 - Transparency: of the institutions and procedures that affect the production of news and information.

- o **Infrastructure**: The quality of the infrastructure that supports the production of news and information.
- o **Abuses**: Measures the level of abuses and violence against journalists.
- Norway is at the top and North Korea at the bottom of the 180-strong list of nations.

10.5. FIEO GLOBALLINKER

Why in News?

Recently, government has launched FIEO GlobalLinker, a digital platform for MSME Exporters.

About News

- It is a digital platform for micro, small and medium scale exporters (MSME) to digitise their businesses and join a global community of growing businesses
- It will help in expanding India's multi-focused export strategy and also aid in connecting art and artisans to the market.

About Federation of Indian Export Organisations (FIEO)

- It was set up jointly by the Ministry of Commerce and private trade and industry in 1965 for promoting India's exports.
- FIEO is a partner of the Government of India in promoting India's exports.
- Digital Platform is available free of cost and it offers exporters a range of features and benefits like easy to find clients, suppliers and advisors using the search and review facilities, up-to-date business knowledge through business articles, etc
- FIEO GlobalLinker is a growing global network currently comprising over 140,000 SME firms, who are seeking business collaboration and growth opportunities through the use of their electronic business card and digital profiles created on the platform.

For more about MSME, refer to February 2018 CA, page 34.

10.6. EXERCISE 'CHAKRAVATH'

Why in news?

Recently, a Joint Humanitarian Assistance and disaster relief (HADR) exercise 'Chakravath' was held in Cochin.

More from the news

- Chakravath is an exercise which has been organised by Indian Navy- Southern Command in Coordination with Kerala Government.
- During the exercise the capabilities of the armed forces and the State Agencies to tackle emergency situations were demonstrated which was mostly centred on the theme of tackling the situation arising out of Cyclone.

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