

VISION IAS

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1. POLITY AND CONSTITUTION

1.1. REGULATION OF NGOS

Why in news?

 More than 10,000 NGOs may lose license to receive any foreign grant as they failed to furnish details of their income and expenditure for 5 years—2010-11 to 2014-15 by the deadline given by Ministry of Home Affairs.

1.1.1. REGULATING FLOW OF PUBLIC MONEY TO NGOS

Recently, one SC judgment suggested centre to frame a statutory law regarding the same. It also directed the government to audit nearly 30 lakh NGOs which receive public funds but do not explain their expenditure.

Thus, Centre framed new accreditation guidelines for NGOs and voluntary organisations in the country which are as follows:

- Evaluating past track record of applicant and internal governance and ethical standard of the NGOs.
- Their outcome evaluation through independent third parties and performance audit by the CAG
- Prescribed the manner of maintenance of their accounts
- Prescribed procedure for recovery in case they fail to submit their balance sheets as according to CBI, only about 3 lakh of about 32 lakh NGOs file their balance sheets with the government.
- The government and CAPART will not only blacklist such NGOs as earlier but also move to file civil suit for recovery of money siphoned off.
- There is also planning for roping in Income Tax authorities for criminal conviction.

All these restrictions are reasonable as under Article 19 (1) (c) citizens have the right 'to form associations and unions' subject to reasonable restrictions such as sovereignty and integrity of India, the security of the state, friendly relations with foreign states, public order etc.

1.1.2. ISSUES IN FCRA

Foreign Contribution (Regulation) Act (FCRA) is a tool used to regulate foreign financial aid received by the NGOs. As per FCRA, if an NGO is put under prior permission category, it is barred to receive foreign funding from abroad without taking permission from the Home ministry. However, there are some issues with the Act

- Abuse of legal procedures Government seems to be rejecting licenses non-objectively. This has been
 observed by NHRC as well.
- **Arbitrarily curbing dissent** could be used to silence any opposition to government and target rights-based advocacy groups
- Human rights issue may affects human right of people as they have served basic facilities to citizens of India since decades
- **Non-conformity to international standards** India is a party to the International Covenant on Civil and Political Rights under which, right to freedom of association is incorporated.
- **FEMA and FCRA** presently, Home Ministry monitors foreign funds donated to NGOs and organisations through the FCRA. But for effective monitoring it also wants to monitor NGOs under FEMA (under finance ministry) as many International donors such as the Ford Foundation, Canada's International Development Research Centre etc. are registered under it.

Justification by government for such regulation

 Public servants - any organisation, trust or NGO that gets Rs 10 lakh as foreign aid or Rs 1 crore as government aid comes under the definition of "public servants" under Lokpal and Lokayuktas (Amendment) Bill, 2016

Council for Advancement of People's Action and Rural Technology (CAPART)

- CAPART chaired by the Union Minister for Rural Development, was launched for sustainable development of rural areas.
- It is an autonomous body registered under the Societies Registration Act 1860.
- It works as a nodal agency for catalyzing and coordinating the emerging partnership between voluntary organizations and the Government.

- **Protecting sovereignty** to curb foreign interference in domestic politics.
- Regulating misuse of funds As per the Report of the Intelligence Bureau, some of the terror funding was also being done through this route.

Thus, following steps should be taken to resolve the issue

- Legitimate restrictions Although freedom of association is not an absolute right, restrictions should be precisely articulated as criteria of "public interest" and "economic interest" give state discretion
- National Accreditation council of India An autonomous and self-regulating body should be established to regulate corrupt and unscrupulous NGOs that may be laundering money.
- FCRA-PFMS system envisioned as far back as 2015 need to be operated smoothly. Thus, NGOs that have received foreign funding should have their bank accounts with institutions that have core-banking facilities so that RBI, and therefore the MHA, have real-time updates on transactions.

FCRA

The Foreign Contribution (Regulation) Act was enacted in 1976. It regulates all grants, gifts and donations from NRIs. Also, all eligible NGOs should receive donations from abroad in a single designated bank account.

This act was amended in 2010 and brought out following three main changes:

- FCRA registration would expire after 5 years, and had to be renewed afresh, unlike earlier where it was permanent.
- Restriction (50%) on the proportion of foreign funds that could be used for administrative expenses, thereby controlling how a civil society spends its money.
- The new law shifts focus from only political parties to "organisations of a political nature". There are concerns that this enables government to target inconvenient NGOs, especially those working on governance accountability.

1.2. PUDUCHERRY GOVERNMENT DEMANDS MORE POWER

Why in news?

- There is an ongoing tussle between Puducherry LG and CM over powers designated to the two authorities.
 - CM has insisted that Lt. governor should work according to the advice of council of ministers and she should inform prior to visiting any constituency
 - ✓ Lt. Governor said that she was the "real administrator" and all files had to be sent for her approval as she had the powers over administrative matters.

Ambiguities in Government of Union Territories Act, 1963

- This act provides for a Legislative Assembly in Puducherry, with a Council of Ministers to govern the "Union Territory of Pondicherry". On the "Extent of legislative power" of the Assembly, the act provides that MLAs "may make laws for the whole or any part of the Union Territory with respect to any of the matters enumerated in the State List or the Concurrent List".
- However, the same Act says that the UT will be administered by the President of India through an Administrator (LG). And Section 44 of the Act, says the

Puducherry is one of the smallest and administratively challenging Union Territories of India as it has administrative fragments across three States of southern India

- Puducherry and Karaikal districts in Tamil
 Nadu
- Mahe district in Kerela
- Yanam district in AP

UTs and its Administration

- Every UT is administered by the President through an "Administrator" appointed by him.
- The "Administrator" of the UT has powers similar to that of the Governor but he is just a representative of the President and not the constitutional head of the state.
- The administrator may be designated as Lieutenant Governor, Chief Commissioner or Administrator.
- The powers and functions of Administrator are defined under Article 239 and 239AA of the Constitution.

Council of Ministers headed by a Chief Minister will "aid and advise the Administrator in the exercise of his functions in relation to matters with respect to which the Legislative Assembly of the Union Territory has power to make laws". The same clause also allows the LG to "act in his discretion" in the matter of lawmaking if there is any difference in opinion.

Arguments in favour of CM's stand

- Undermining of rights of elected government The
 UTs of Delhi and Puducherry have been provided
 with a legislative assembly and Council of Ministers.
 Therefore, their Administrators are meant to act
 upon the aid and advice of the CM and his Council of
 Ministers.
- Accountability to people Being people's representative in the legislative assembly, they are accountable to people for their welfare. LG may not approve certain policy decisions taken by the government for the same.
- Parallel power centres LG should not conduct inspections, meet people directly and give directions bypassing the elected government. She has to coordinate with the government.
- Upset balance of power between LG and CM Constitution would not have envisaged a legislature
 and a council of ministers feeding on public funds, if
 these are to be overruled by LG frequently.
- Article 240 (1) states that the President's administrative control ceased to exist after the legislative body was created, thus, an appointee (LG) of the President had no powers over and above the council of minister and elected representatives.

Arguments in favour of LG's stand

- Rule 21(5) of Business of the Government of Puducherry – According to it, LG can call for files relating to any case and request the CM for update on any doubt or query which may arise.
- Article 239AA
 It states that in case of a difference of opinion and referring a matter to the central government/president in an urgent situation, the LG can take action as he deems necessary and can give such directions as he considers necessary.
- Delhi high court judgement In a similar feud witnessed between Delhi Chief Minister and former LG, Delhi High Court had in August 2016 upheld the supremacy of the LG.
- Rule 47 According to it, the Administrator exercises powers regulating the conditions of service of persons serving in UT government in consultation with the Chief Minister.

Way forward

 $\ensuremath{\mathsf{LG}}$ has more powers in UT than a governor in the state.

However, LG should use its capabilities to guide, direct and advice the government and allow primacy in administration to the elected government.

Now, Legislative Assembly of Puducherry has passed a resolution urging the Union Government to make necessary amendments in the Union Territories Act 1963, to bestow full administrative powers on the elected government and curtail the role of the Lt. Governor.

Difference between powers in state and UT

- The Union Government can exercise executive and legislative power on all State subjects with reference to a Union Territory, which is not possible in a full-fledged State Government.
- According to Article 244, the President has powers to make regulations for a UT unless there is a legislature for that State. Even if there is a legislature, the Administrator can reserve it for the assent of President, who might reject it, except a money bill.
- The Governor appoints the CM in States but the President appoints the CM and Ministers for UTs, who will hold office during the President's pleasure.
- Prior sanction of the Administrator is required for certain legislative proposals involving "Judicial Commissioner"
- 'Recommendation' of the LG is obligatory for UT government before moving a Bill or an amendment to provide for
 - the imposition, abolition, remission, alteration or regulation of any tax
 - the amendment of the law with respect to any financial obligations undertaken or to be undertaken
 - anything that has to do with the Consolidated Fund of the UT

Difference between LG power in Puducherry and Delhi

- The LG of Delhi enjoys greater powers than the LG of Puducherry. The LG of Delhi has "Executive Functions" that allow him to exercise his powers in matters connected to public order, police and land "in consultation with the Chief Minister, if it is so provided under any order issued by the President under Article 239 of the Constitution".
- While the LG of Delhi is also guided by the Government of National Capital Territory of Delhi Act, 1991, and the Transaction of Business of the Government of National Capital Territory of Delhi Rules, 1993, the LG of Puducherry is guided mostly by the Government of Union Territories Act, 1963.
- Articles 239 and 239AA of the Constitution, as well as the Government of National Capital Territory of Delhi Act, 1991, clearly underline that Delhi is a UT, where the Centre has a much more prominent role than in Puducherry.

1.3. UN-PUNJAB COLLABORATION ON DRUG MENACE

Why in news?

 MoU will be signed between the Punjab's Health Department, a Special Task Force (STF) and the UNODC (United Nations office on Drugs and Crime) to root out drug menace.

Strategy to combat drug abuse

- Improving law enforcement to control supply of drugs.
- Preventive action at the district level by involving students in the anti-drug awareness drive and by involving mothers as it has proved successful in other countries.
- Rehabilitation which is being overseen by the Health Department.

1.4. CONTEMPT POWERS TO EC

Why in news?

• Election commission (EC) has urged Law ministry to amend election laws to enable EC to use contempt of court Act against parties making unfounded allegations.

Arguments in favour of such powers

- International examples Election management bodies (eg: Kenya, Pakistan) have direct power to initiate contempt proceedings.
- **Effect on Credibility** Such allegations affect the credibility of the commission as one of the important guardian of the democratic process.

Arguments against giving such power

- **Need of transparency** The body, custodian of secret ballot, should choose transparency rather than contempt powers to maintain its track record of honesty and fairness.
- **Undemocratic** Contestation is part and parcel of elections. Thus, powers to silence criticism will undermine this democratic process.
- **Against freedom of expression** Because of this reason even big democracies such as USA and Canada have not given contempt powers to election panel.
- **Rejected earlier** Dinesh Goswami committee on electoral reforms, three decades earlier, had rejected this proposal of EC then.
- Satisfaction of people is supreme EC does not have to satisfy every politician. It enjoys public confidence and reputation of impartiality. Thus, it just needs to reach out to people and explain process transparently.
- **Prone to abuse** Fair criticism in future may be silenced. Even powers with judiciary has come under question in recent times.

1.5. BRINGING BCCI UNDER RTI

Why in news?

 CIC in its latest order has urged CoA (Committee of administrators) running BCCI to bring BCCI under RTI.

Arguments in favour

- Public authority Supreme court has declared BCCI as a public body as it discharges pubic functions monopolistically with tacit approvals of central and state governments
- Transparency and accountability to public If audit is already being done, then BCCI should not hesitate to come under RTI

 It fights against illicit drugs and international crime by enhancing capacity of member states, undertaking research to increase knowledge and assisting states in implementing relevant treaties.

About UNODC

 Almost 90% of its budget comes from voluntary contributions, mainly from Governments.

Information related to following is exempted under RTI

- National security or sovereignty
- National economic interests
- Relations with foreign states
- Law enforcement and the judicial process
- Cabinet and other decision making documents
- Trade secrets & commercial confidentiality
- Individual safety
- Personal privacy

- Punishment to guilty Cricket is the most popular game in the country despite controversies and thus demands accountability not just players but officials who should get penalized too
- Reducing role of black money Transparency will enable meaningful government-control of enormous amount of public-money earned regularly by BCCI.
- Government order which declared all the National Sports Federations (NSF) receiving a grant of Rs. 10 lakh or more as a Public Authority under Section 2(h) of the RTI, 2005. And BCCI has received concessions above this amount.
- **Lodha committee** also favored it in its recommendations.

Arguments against it

- Auditing done Auditing of their accounts is already being done by BCCI.
- Affect working efficiency due to interference and fear
 of officials of being scrutinized for every decision. This
 argument is however not valid as RTI is not absolute there are sufficient exemptions under RTI. (see box)
- Registered under societies act The national governing body for cricket was registered as a society under the Tamil Nadu societies registration act and thus, termed by BCCI as a private body.

Way Forward

Parliament should bring a law to bring BCCI and other sports

federations under RTI. It will help promote good sportspersons and sports culture, and professionalism in games. It will also put a check on extravagant expenditure of these federations and will help players to access complete funds transferred for their training as they will come under public scrutiny.

1.6. PRIVILEGE OF LEGISLATORS

Why in news?

Recently the Karnataka assembly Speaker ordered the imprisonment of two journalists for a year based on recommendations of its privilege committees. Earlier in 2003, the Tamil Nadu assembly Speaker directed the arrest of five journalists for publishing articles that were critical of the AIADMK government.

What are Privileges?

They are special rights, immunities and exemptions enjoyed by the two houses of the Parliament/ state legislatures, their committees and their members.

Two broad categories:

- 1. Collective privileges are enjoyed by each house collectively. E.g. right to publish reports etc, exclude strangers from house proceedings, punish members/ outsiders for breach of privileges etc.
- 2. Individual privileges are enjoyed by the members individually. E.g. freedom of speech in the house, exemption from jury service when house is in session, exemption from arrest during the session and 40 days before and after the session.

Why BCCI is a public authority?

- It conducts cricket-matches with its teams named as 'Indian team' which gets all types of recognition and facilities from Union and stategovernments.
- Support from the government includes:
 - Thousands of crores received towards tax concessions by BCCI
 - Making available land by state and UT governments for stadiums
 - Making available security during matches
 - o Facilities for visa etc.
- It has complete monopoly and all-pervasive control over the sport of cricket in India.

"Public authority" according to Section 2(h) of Right to Information Act, 2005 includes:

- Any authority or body or institution of selfgovernment established or constituted
 - By or under the Constitution (or)
 - By any other law made by the Parliament or a State Legislature (or)
 - By notification issued or order made by the Central Government or a State Government
- Bodies owned, controlled or substantially financed by the Central Government or a State Government.
- Non-Government organisations substantially financed directly or indirectly by the Central Government or a State Government.

Committee on Privileges: This is a standing committee constituted in each house of the Parliament/state legislature. This Committee consists of 15 members in Lok Sabha (LS) and 10 members in Rajya Sabha (RS) to be nominated by the Speaker in LS and Chairman in RS.

Its <u>function</u> is to examine every question involving breach of privilege of the House or of the members of any Committee thereof referred to it by the House or by the Speaker. It determines with reference to the facts of each case whether a breach of privilege is involved and makes suitable recommendations in its report.

Source of the privileges: Originally these are derived from the British House of Commons. There is no law to codify all the privileges. They are based on five sources namely: Constitutional provisions, various laws of parliament, Rules of both the houses, Parliamentary conventions and Judicial interpretations.

Breach of privilege: There are no clearly laid out rules on what constitutes breach of privilege and what punishment it entails. As per Karnataka privileges panels, breach of privilege include to make speeches or to print or publish any libel reflecting on the character or proceedings of the house, its committees or any member of the house relating to his character or conduct as a member of Parliament.

Constitutional position: Special privileges are enshrined under Art 105 (in case of Parliament) and 194 (in case of state legislature) of the Constitution.

Importance

- They protect the freedom of speech of parliamentarians and legislators and insulates them against litigation over matters that occur in these houses.
- Without these privileges the house can neither maintain their authority, dignity and honour nor can protect their members from any obstruction in discharge of their duties.

Criticism

- It is sometimes used to counter media criticism of legislators and as a substitute for legal proceedings.
- Breach of privilege laws allow politicians to become judges in their own cause, raising concerns of conflict of interest and violating basic fair trial guarantees.

Way forward

There is need for a law codifying the legislative privileges, define the limits of penal action for breach of privilege and procedures to be followed. The legislature must use the power to punish for contempt or breach of privilege sparingly, invoking it mainly to protect the independence of the House and not to take away the liberty of critics.

1.7. PAID NEWS AND ELECTORAL REFORMS

Why in news?

The Election Commission (EC) has disqualified Madhya Pradesh Minister Narottam Mishra for three years for filing wrong accounts of election expenditure. The membership has been revoked under section 10A of the Representation of the People Act, 1951.

The petition seeking Mishra's disqualification was filed in 2009, alleging that the he had not included expenses incurred by him on 'paid news' while filing his expenditure statement before EC after the 2008 poll.

What is paid news: As per Press Council of India, paid news refers to propaganda in favour of a candidate masquerading as news reports or articles for a price in cash or kind as consideration. It is considered a "grave electoral malpractice" on the part of candidates to circumvent expenditure limits. Paid news is not an electoral offence yet.

Impact

- It misleads the public and hampers the ability of people to form correct opinions.
- It causes undue influence on voters and also affects their Right to Information.
- It seeks to circumvent election expenditure laws/ ceiling
- It adversely affects level playing field

Steps taken by ECI

- Starting in 2010, ECI has issued instructions to state and district officers to scrutinize, identify and report cases of Paid News.
- The Commission has appointed a Media Certification & Monitoring Committee (MCMC) at District and State level for checking Paid News.
- The Committee will scrutinise all media within its jurisdiction to identify political advertisement in the garb of news. MCMC shall also actively consider paid news cases referred to it by the Expenditure Observers.

Law commission recommendations: Report No. 255 on "Electoral Reforms" 2015

- The definitions of "paying for news", "receiving payment for news" and "political advertisement" should be inserted in the Representation of the People Act, 1951.
- Making paid news an electoral offence will lead to disqualification
- Disclosure provisions for all forms of media: The purpose of disclosure is two fold; first, to help the public identify the nature of the content (paid content or editorial content); and second, to keep the track of transactions between the candidates and the media. A new section should be inserted in the RPA to deal with the non-disclosure of interests in political advertising.

Challenges in dealing with paid news

- There is circumstantial evidence, but little proof. Establishing transaction of cash or kind is indeed not very easy, as it is usually done without any record and promptly denied by both sides, when enquired.
- Media violations, surrogate advertisement and unreported advertisements are often mistaken as Paid News by MCMC.
- Timelines are quite tight. However if these are not maintained, it is not possible to account expenditure on Paid News in a particular election process.

Way forward

- Make 'paid News' an electoral offence through amendment of Representation of the People Act, 1951.
- Use existing mechanisms of expenditure ceiling to curb the menace.
- Partner with stakeholders, including political parties and media to fight the menace.
- Sensitize people on the subject.

1.8. GORKHALAND ISSUE

Why in News?

There has been total shutdown in Darjeeling and instances of violence over demand for creation of Gorkhaland.

Why the agitation?

- Immediate cause: Bengali language being made mandatory upto class 9th by the state government. The Gorkhas, whose native language is Nepali, has taken it as a threat to their identity.
- Long-term cause: problems in functioning of GTA (Gorkhaland Territorial Administration). The leaders have accused state govt. of interference and not devolving enough financial resources to GTA.

Who are Gorkha?

Indian Gorkhas are indigenous people living all along the Himalayan belt and the North-East states of India. The Gorkhas inhabit areas in J&K, Himachal, Uttarakhand, Sikkim, Darjeeling, Assam, and other states in the North-East.

Gorkhaland

Gorkhaland consists of Nepali-speaking people of Darjeeling, Kalimpong, Kurseong and other hilly districts. The people belonging to these areas hardly have any connection with the Bengali community and are different in ethnicity, culture and language.

History of Demand for Gorkhaland

• In 1780, the Gorkhas captured Sikkim and other areas includes Darjeeling,
Siliguri, Simla, Nainital, Garhwal hills, and Kumaon, that is, the entire region from Teesta to Sutlej. After 35 years of rule, the Gorkhas surrendered the territory to British in the Treaty of Segoulee in 1816, after they lost the Anglo-Nepal war.

BIHAR

JHARKHAND

BANGLADESH

• In 1907, the first demand for Gorkhaland was submitted to Morley-Minto Reforms panel. Later, on several occasions demands were made to the British government and then government of Independent India. There have been two mass-movements - first in the 1980s and then in 2007.

Why demand for Gorkhaland?

- Differences in language and culture.
- Aspiration of Indian Gorkha identity: Since creation of Darjeeling Gorkha Hill Council in 1988 and GTA in 2012 did not fulfill this aspiration, they failed.
- Relative Economic deprivation
- Alleged maltreatment by Bengalis and lack of voice in Kolkata.

Responses to Gorkhaland

Darjeeling Gorkha Hill Council (DGHC): Following the agitation that began in 1986, a tripartite agreement
was reached between Government of India, Government of West Bengal, and Gorkha National Liberation
Front in July 1988. Under this, an autonomous Hill Council (DGHC) under a State Act was set up for "the
social, economic, educational, and cultural advancement of the people residing in the Hill areas of Darjeeling
District". The Council covered the three hill sub-divisions of Darjeeling district and a few Mouzas within the
Siliguri sub-division.

Problems:

- ✓ The Council was given limited executive powers but in the absence of legislative powers the aspirations of the people of the region could not be addressed.
- ✓ The non-inclusion of the Dooars region in the Council became a major reason of discontent.
- Gorkhaland Territorial Administration (GTA): GTA created in 2012 through a tripartite agreement signed by
 Gol, Govt. of West Bengal and Gorkha Janmukti Morcha (GJM), replaced the Darjeeling Gorkha Hill Council. It
 is a semi-autonomous administrative body. It has administrative, executive and financial powers but no
 legislative powers. GTA presently has three hill subdivisions Darjeeling, Kurseong and Mirik and some areas
 of Siliguri subdivision of Darjeeling district and the whole of Kalimpong district under its authority.

Problems:

- ✓ Lack of legislative powers means that the people of the region have no control over laws to govern themselves by
- ✓ Dooars again has been left out and instead a verification team has been set to identify "Gorkha majority" areas in the Dooars.

Way forward

The agitation for a separate Gorkhaland state must be brought to a swift end through a solution which meets the aspirations of the Nepali-speaking people without hurting the sentiments of the Bengali-speaking majority, which is largely against the division of the state. The possible steps include:

- Good power sharing agreement: Gorkhaland on its own is not financially viable. Except tourism it doesn't
 have much of its own resources. Tea industry is also facing crisis. The functioning of GTA needs to be
 improved and made accountable.
- Government of centre as well as state needs to be more sensitive towards needs and aspirations of Gorkhas. Eg instead of imposing Bengali, it could have been made optional.
- Economic development of the region. Hospitals, schools, public services must be set up and existing ones need to be improved.
- Creation of an Autonomous State of Gorkhaland within an undivided West Bengal can be considered. Article 244 A provides for an autonomous state for certain tribal areas in Assam with its own legislature and council of ministers. By a constitutional amendment, the applicability of this article can be extended to West Bengal. Alternatively, through a constitutional amendment, an Article similar to Article 244 A, can be inserted as a new chapter in Part VI of the Constitution. This will enable the establishment of an Autonomous State of Gorkhaland, with a legislature and council of ministers within the existing state of West Bengal without bifurcating it.

1.9. COMMIT

Why in news?

A new training programme Comprehensive Online Modified Modules on Induction Training (COMMIT) for State Government officials has been launched.

Objective: To improve the public service delivery mechanism and provide citizen centric administration through capacity building of officials who interact with the citizens on day-to-day basis.

Details

The COMMIT programme has been developed by DoPT in collaboration with United Nations Development Programme (UNDP). It will supplement the existing ITP (Induction Training Program) launched in 2014-15 for newly recruited state Government officials to develop in them Generic & Domain specific competencies.

• COMMIT will be launched in 6 States of Assam, Haryana, Maharashtra, Tamil Nadu, Telangana and West Bengal initially on pilot basis during the current financial year 2017-18 and within next year it is expected to cover all India.

Importance

- It is cost effective and has the potential to cover about 3.3 lakh officials annually.
- It allows to translate the content in local/regional languages, thus making the training more useful.
- It will equip the officials with the soft skills and best possible tools to perform best to their ability.

1.10. REFORMS IN PARLIAMENT: INCREASING EFFICIENCY

Background: Reform is urgently needed to make Parliament more productive and responsive.

Issues concerning Indian Parliament:

- **Reduction in the number of sittings:** The number of sitting days has come down from about 140 days a year in the 1950s to an average of sixty-five days over the past five years.
- **Discipline and decorum:** instances of interruptions and disruptions leading sometimes even to adjournment of the proceedings of the House have increased. This, not only, results in the wastage of time of the House but also affects adversely the very purpose of Parliament.
- **Declining quality of parliamentary debates:** Parliamentary debates, which once focussed on national and critical issues, are now more about local problems, viewed from a parochial angle.
- Low representation of women: The Lok Sabha and the Rajya Sabha have not seen women MPs cross the 12% mark.
- Bills being passed with no/minimum discussion and by voice vote amidst pandemonium in the House. In 2008, for instance, 16 Bills were passed with less than 20 minutes of debate. The non-passage of private member Bills doesn't help either. To date, only 14 private member bills have been passed.

Factors that have affected the role of Parliament:

- Passing of Anti-defection law in 1985 has made it less necessary for MPs to prepare for their work in Parliament, because they will need to heed the party whip or risk losing their seat in Parliament.
- MPs have no research staff, nor does the Parliament library provide research support beyond newspaper clippings.
- Growth of coalition politics has made managing inter-party mechanisms more difficult.
- The opening up of Parliament to live telecasts has increased the incentives for groups of MPs to grandstand on issues, knowing well that it will be widely covered in the media, beyond the live telecast.

On positive side, the introduction of Standing Committees in 1993 has enhanced the ability of Parliament to scrutinize legislation, and to oversee the work of the executive.

Implications of poor functioning of Parliament

- Lack of accountability of the government: If the parliament doesn't function properly, it can not hold the government accountable for its actions.
- Low productivity: Productivity of Lok Sabha in the 2016 winter session was 14%, while that of the Rajya Sabha was 20%.
- High cost to public exchequer in the form of wasting of taxpayer money. But the real cost to society is huge. Eg. GST could have been passed four years ago. If we assume that the passage of GST will have added 1% to India's GDP then in the last four years we have lost 4% of GDP.

- Delay in policy making leading to rise of unconstitutional bodies to fill the legislative gap
- Declining faith in democratic process. Parliament as an institution becomes less relevant for national policy making.

Suggestions

- Minimum working days: National Commission to Review the working of the Constitution recommended the
 minimum number of days for sittings of Rajya Sabha and Lok Sabha should be fixed at 100 and 120 days
 respectively. Odisha has already shown the way, mandating minimum 60 days for the State Assembly.
- If time is lost due to disruptions it should be compensated for, the same day, by sitting beyond normal hours.
- Passage of the Women's Reservation Bill (108th amendment) reserving 33% of all seats in Parliament and State legislatures for women.
- Systematic approach to legislative process. Parliamentary committees can assume institutional importance in this process. They offer a place to raise issues in the general public interest and conduct advocacy amidst legislative engineering.
- Constitution committee to conduct priori scrutiny before the actual drafting of the proposal for constitutional reform.
- The Anti-Defection Act needs to be recast, and used only in exceptional circumstances, allowing MPs free rein on their self-expression. The UK, for example, has the concept of a free vote allowing MPs to vote as they wish on particular legislative items.
- Investing in Parliament's intellectual capital is necessary and additional budgetary support should be provided to LARRDIS (Parliament's Library and Reference, Research, Documentation and Information Service) while assisting MPs in employing research staff.
- Improving the budget scrutiny process: India needs a parliamentary budget office, akin to the US Congressional Budget Office. This can be an independent institution devoted to conducting a technical and objective analysis of any Bill with spending or revenue raising requirements.
- Political parties must create a common national interest agenda that covers poverty, economy, national security, etc. on which there is clear consensus from day one.

Conclusion

Parliament should be a space for policy and not for politics. The Indian Parliament has not gone through the changes that recognize the new circumstances. Hence there is need to make our parliament representative and efficient.

1.11. TELE-LAW INITIATIVE

Why in news?

In order to make legal aid easily accessible to the marginalized communities and citizens living in rural areas, Government of India has launched the 'Tele-Law' pilot project on June 11, 2017.

Details

Union Ministry of Law and Justice has partnered with the Ministry of Electronics and Information Technology, to provide legal aid services through its Common Service Centres (CSC) at the Panchayat level across India.

- In the first phase, 'Tele-Law' scheme will be tested as a pilot across 500 CSCs in UP and Bihar to understand the challenges and make necessary corrections before it is scaled up and rolled out across the country.
- A portal called 'Tele-Law' will be launched, which will be available across the CSC network. It will enable people to seek legal advice from lawyers through video conferencing.
- Law school clinics, District Legal Service Authorities, voluntary service providers and NGOs working on legal aid can also be connected through the CSCs in order to strengthen access to justice for the marginalized. The National Legal Services Authority (NALSA) will also provide a panel of lawyers from State capitals.

Para Legal Volunteers

- They will be the first point of contact for the rural citizens and will help them in understanding the legal issues, explain the advice given by lawyers and assist in further action required.
- Women PLVs will be encouraged and trained under the Scheme. The aim is to promote women entrepreneurship and empowerment and ensure women participation.

- A fully functional monitoring and evaluation system is also being designed that will help to assess the quality of legal advice.
- Every CSC will engage a Para Legal Volunteer (PLV), who will be the first point of contact for the rural citizens.

Other recent initiatives of government

'Tele-Law' is one the three key legal aid and empowerment initiatives of the Department of Justice along with 'Pro bono legal services' and 'Nyaya Mitra scheme' that were announced in April 2017.

Pro bono legal services: It is a web-based initiative which can be accessed through the website www.doj.gov.in.

- Litigants who cannot afford legal services can apply for legal aid and advice from pro bono lawyers.
- The idea behind this online initiative is to promote the concept of legal aid in an institutionalized manner and ensure that those lawyers who volunteer for such services are duly recognized.

'Nyaya Mitra' scheme: It aims to reduce pendency of cases across selected districts, with a special focus on those pending for more than 10 years.

- This scheme would play a pivotal role in assisting litigants who are suffering due to delay in investigation or trial, by actively identifying such cases through the National Judicial Data Grid, providing legal advice and connecting litigants to government agencies and civil society organizations.
- This initiative would be launched in 227 districts—27 districts in the North-east and J&K and 200 in Uttar Pradesh, Bihar, Maharashtra, Rajasthan, Odisha, Gujarat, West Bengal.

Access to Justice Project for Marginalized Persons: The schemes are continuation to the "Access to Justice Project for Marginalized Persons" which is being implemented by Department of Justice and United Nation Development Programme (UNDP). The Access to Justice Project has already partnered with CSC-E-governance Services India Limited to mainstream legal literacy through CSCs in Jharkhand and Rajasthan.

Importance: Using technology for providing access to justice is in tandem with the Digital India initiative, the primary focus being transparency, good governance and digital delivery of services.

These initiatives will serve as a tool to give the poor, rural, marginalised communities a voice and ensure that everybody has equal access to justice.



2. INTERNATIONAL/INDIA AND WORLD

2.1. QATAR DIPLOMATIC CRISIS

Why in news?

Saudi Arabia, Egypt, the United Arab Emirates, Yemen, Libya, Bahrain and Maldives severed their ties with Qatar, accusing it of supporting terrorism.

Reason of present crisis

Issue of Terrorism:

Saudi Arabia has accused the Qataris of supporting terrorist groups like al-Qaeda and the Islamic State and of meddling in the **internal affairs of neighbouring Gulf States**.

- The fault-lines came out in the open when Qatar welcomed the rise of the **Muslim Brotherhood** in Egypt after the fall of the Hosni Mubarak regime in 2011.
- Saudi Arabia accused Qatar of supporting what it described as Iranian-backed militants in its restive and largely Shi'ite Muslim-populated Eastern region of Qatif and in Bahrain.

Ties with Tehran:

The other key issue is Qatar's relations with Iran, with which it shares the world's largest gas field.

• The Saudis are upset with **Qatar's Tehran ties**, at a time when they are trying to rally Sunni countries behind themselves to counter Tehran's influence.

What is Qatar's response?

Qatar rejected a list of "non-negotiable" demands, saying it would not agree to any measures that threatened its sovereignty or violated international law and has sought to internationalise the issue.

Impact of present crisis

The Saudi-led bid to isolate Qatar could have far-reaching economic-political consequences.

• Fight against Islamic State:

- ✓ Qatar is an economic powerhouse in the Gulf and hosts the headquarters of the US military's Central Command. The air war command for the US-led fight against the Islamic State in Iraq and Syria is also in Qatar.
- ✓ So any prolonged attempt to isolate the country would not only have economic consequences but also complicate the fight against the IS yet more.
- Oil prices rose after the moves against Qatar, which is the biggest supplier of liquefied natural gas (LNG) and a major seller of condensate a low-density liquid fuel and refining product derived from natural gas.

What do Qatar's neighbours want?

In return for ending the restrictions, Qatar's neighbours had presented the 13-point list of demands to Qatar on 22 June. They had told the emirate to:

- Curb **diplomatic ties with Iran** and close its diplomatic missions.
- Stop all funding for individuals or organisations designated as terrorists by Saudi Arabia, the UAE, Egypt, Bahrain, the United States and other countries.
- Shut down Al Jazeera and other Qatarfunded news outlets.
- Close a Turkish military base and halt joint military co-operation inside Qatar.
- End interference in other sovereign countries' internal affairs.
- Pay reparations and compensation for loss of life caused by Qatar's policies.
- Align with other Arab countries militarily, politically, socially and economically.
- Qatar is dependent on imports by land and sea for the basic needs of its population of 2.7 million, and about 40% of its food came in through the land border with Saudi Arabia. Hence, **Qatar may face food shortage.**
- Qatar's stock market has lost about 10%, or about \$15bn (£12bn), in market value since the start of the crisis, and the credit rating agency **Moody's has downgraded Qatar's rating from stable to negative.**
- There are also signs that this may be the precursor **to a larger conflict with Iran**. This is a troubling scenario for the world and for India in particular with its commitment to build connectivity and shore up oil reserves.

Impact on India

India has "vital stakes" in peace and stability in the Gulf. It asked countries in the region to resolve the Qatar crisis through constructive dialogue and well-established international principles of mutual respect.

• Expatriate community

- ✓ The region is home to about 8 million Indians. Indians are the largest expatriate community in Qatar, the same way they are in Saudi Arabia and the UAE the two key countries who are in the opposite camp.
- ✓ An economic blockade could also affect Indian community in Qatar as much as its other residents.

Remittance

- ✓ The Indian diaspora in the region remits around USD 40 billion a year. These funds are immensely valuable as they help India manage its current account deficit.
- West Asia is among the key destinations for Indian engineering exports, accounting for 13% of India's total engineering exports.

Energy security

✓ New Delhi is the second largest buyer of Qatari liquefied natural gas (LNG), after Japan. India's Petronet LNG, as part of a long-term deal, imports 8.5 million tons of LNG from Doha every year.

2.2. SHANGHAI COOPERATION ORGANISATION (SCO)

Why in news?

The Shanghai Cooperation Organisation (SCO) Summit took place in Kazakhstan's Astana on June 8-9, 2017.

- India and Pakistan inducted as full members of the SCO at the summit.
- Its 2015 summit in Ufa, Russia, the SCO formally adopted a resolution which started the procedures to admit India and Pakistan into the grouping.

Importance of India's membership for SCO

India's entry into the China-dominated SCO is seen as a major milestone as it is expected to increase the **group's heft in regional geopolitics and trade negotiations** besides giving it a pan-Asian hue.

- With the expansion of the grouping, the SCO will now represent over 40% of humanity and nearly 20% of the global GDP.
- India, as the largest economy in southern Asia, has much more to offer for the economic development of Central Asian countries.
- India's inclusion offers a huge potential for development and expands the influence of the organisation in international and regional affairs in various fields, especially in **security**, **geopolitics** and the economy.
- Experts say India's inclusion may even bring down Beijing's overarching influence over the SCO.

Importance of SCO's membership for India

Becoming a full member of the body will strengthen India's position in Central Asia. It will also help the country's aim to regional integration; promote connectivity and stability across borders.

- **Defence cooperation:** As an SCO member, India is expected to have a bigger say in pressing for concerted action in dealing with terrorism as well as on issues relating to security and defence in the region.
- **Energy security:** India is also likely to get greater access to major gas and oil exploration projects in Central Asia as many of the SCO countries have huge reserves of oil and natural gas.
- Counter-terror: India is also keen on deepening its security-related cooperation with the SCO and its Regional Anti-Terrorism Structure (RATS) which specifically deals with issues relating to security and defence.

• India- Pakistan relation

- ✓ The SCO membership offers a platform for India to engage Pakistan in a wider regional setting.
- ✓ The entry of India and Pakistan into SCO may help boost anti-terrorism cooperation between the two countries and provide a platform to resolve their differences.

2.3. 20 YEARS OF BIMSTEC

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) celebrates its 20th anniversary on June 06, 2017.

About BIMSTEC

BIMSTEC or Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation was formed nearly two decades ago, in June 06, 1997.

- The BIMSTEC comprises India, Bangladesh, Bhutan, Myanmar, Nepal, Sri Lanka, and Thailand.
- The permanent secretariat of BIMSTEC was established in Dhaka in 2014.
- It was originally called BIST-EC (Bangladesh, India, Sri Lanka, and Thailand Economic Cooperation) and was formed at a meeting in June 1997 in Bangkok.
- Myanmar was admitted in December 1997 and the organisation was renamed as BIMST-EC.
- The grouping expanded when Nepal and Bhutan were admitted in February 2004.
- The grouping's name was changed to BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) at Bangkok in July 2004".
- The BIMSTEC region is home to around 1.5 billion people which constitute around 22% of the global population.
- BIMSTEC is a **sector-driven cooperative organization**, **starting with six sectors**—including trade, technology, energy, transport, tourism and fisheries.
- It expanded to embrace **eight more sectors**—including agriculture, public health, poverty alleviation, counter-terrorism, environment, culture, people to people contact and climate change—in 2008.

Importance of BIMSTEC for India

India is a founder-member of BIMSTEC. India has been clearly signaling its renewed interest in BIMSTEC. With the South Asian Association for Regional Cooperation (SAARC) faltering badly due to Pakistan's support to cross-border terrorism, India seems to be giving prominence to BIMSTEC.

- BIMSTEC, in fact, is a **bridge between South Asia and Southeast Asia**, and India is the prime mover behind the recent moves on this regional grouping.
- Energising it would also accelerate India's Act East policy.
- The other advantage is that it would give impetus to India's domestic goal of **developing the northeastern region**, which is the country's geographical **gateway to the East and South-East Asia**.
- The ongoing India-Myanmar-Thailand Trilateral Highway and the India-Myanmar Kaladan Multimodal Transit Transport Project are expected to further augment connectivity and economic cooperation in the sub-region and beyond.
- India is keen for a Motor Vehicle Agreement between India, Myanmar and Thailand, as has been forged by Bangladesh, Bhutan, India and Nepal (BBIN) and signed in June 2015. Such an agreement will facilitate the movement of goods, services and people between these countries and boost productivity and trade.
- India is already the lead country for four priority sectors, namely, transportation and communication, environment and disaster management, tourism, and counter-terrorism and trans-national crime.

Potential of BIMSTEC

BIMSTEC indeed has huge potential to emerge as a grouping that can accelerate the process of regional integration, security cooperation, and inclusive growth in this region.

- In the last five years, BIMSTEC member states have been able to sustain an average 6.5% economic growth trajectory despite global financial meltdown.
- The free trade agreement being negotiated by the seven-nation will help in elimination of non-tariff measures and give a big push to trade in the region.
- The BIMSTEC region has a huge amount of **untapped natural**, **water**, **and human resources**, from hydropower potential in the Himalayan basin to hydrocarbons in the Bay of Bengal.
- BIMSTEC, unlike SAARC, is **an "issue-free relationship"** where all countries are looking for cooperation in development processes. Also unlike SAARC, BIMSTEC has **no written charter and thus more flexible.**

• With five countries that also belong to SAARC and two that belong to ASEAN, BIMSTEC can serve as **the bridge between South Asia and Southeast Asia**.

Challenges for BIMSTEC

In 1998, the regional group proposed entering a **free trade agreement (FTA)** with India and Thailand, two main partners, pushing for **'Look East' and 'Look West' programmes**, respectively. But, the BIMSTEC free trade agreement remained a pipe dream.

- Issues of **refugee issues and ethnic tension** among BIMSTEC member countries would pose a challenge to the grouping.
- Despite its huge potential in terms of enhancing regional cooperation between parts of South and Southeast Asia, **BIMSTEC** has long suffered from lack of resources and proper coordination among member states.
- So far, BIMSTEC has held only four summit meetings in last two decades.

Conclusion

The idea of BIMSTEC as a bridge between South and Southeast Asia is a compelling one, owing largely to the failed narrative of SAARC. To achieve true potential of BIMSTEC requires early conclusion of FTA and regular high-level summits.

2.4. INDIA-USA

PM Modi paid official visit to US. This was the fourth visit of PM to US and first direct official meet with President Donald Trump.

Highlights of the visit

The joint statement released by India and US can be seen as a renewed interest of Trump administration to actively engage with India not only in bilateral but also in global issues.

• Defence cooperation

✓ US has cleared the sale of **22 unmanned Guardian drones** to India, with the deal being termed as a "game changer". The deal, estimated to be worth \$2-3 billion, has been approved by the State Department.

Maritime security and data sharing

- ✓ Both leaders announced their intention to 'build on the implementation of the "White Shipping" data sharing arrangement. The agreement allows countries to share data on maritime traffic and domain awareness.
- ✓ Noting the importance of the upcoming MALABAR naval exercise, the leaders determined to expand their engagements on shared maritime objectives and to explore new exercises.

• Terror and Pakistan

- ✓ In a joint statement, the leaders called on **Pakistan to ensure its territory** is not used to launch terrorist attacks on other countries.
- ✓ They further called on Pakistan to "expeditiously bring to justice perpetrators" of the 26/11 Mumbai, Pathankot, and other cross-border terrorist attacks by Pakistan-based groups.
- ✓ The US State Department moved to make **Hizb-ul-Mujahideen leader Syed Salahuddin a Designated Global Terrorist**, a move that was welcomed by India.
- ✓ US also committed to **UN Comprehensive Convention on International Terrorism**, an Indian initiative.

Climate change

- ✓ Climate change, which was a major component of Mr. Modi's engagement with Mr. Obama, **did not come up in the joint statement with Mr. Trump.**
- ✓ Mr. Trump had announced that the US would be **pulling out of the landmark Paris accord, pointing** fingers at India and China.
- US support for India's permanent membership of the UN Security Council, membership of the Nuclear Suppliers Group, the Wassenaar Arrangement, and the Australia Group has been reiterated.
- North Korea

- ✓ Dealing with North Korea is **now a component of India-US cooperation**, and the statement obliquely blamed China and Pakistan in this context.
- ✓ The two leaders condemned the country's "continued provocations".

U.S. LNG for India

✓ Foreign Secretary told that from next year liquefied natural gas (LNG) from US will start flowing to India.

On Afghanistan

- ✓ Mr. Trump welcomed "further Indian contributions to promote Afghanistan's democracy, stability, prosperity, and security".
- ✓ Recognizing the importance of their respective strategic partnerships with Afghanistan, the leaders committed to continue close consultations and cooperation in support of Afghanistan's future.

On China

- ✓ The statement recognized India and US as two "democratic stalwarts in the Indo-Pacific region"—a clear hint towards building a coalition of democratic countries against non-democratic forces (read China) in the region.
- ✓ **South China Sea:** Joint statement "reiterates the importance of respecting freedom of **navigation**, **overflight**, **and commerce throughout the region**," a significant toning down of the language that possibly reflects Mr. Trump's current ties with Beijing.

On economic front

- ✓ The insertion of an entire section titled "Increasing Free and Fair Trade" is a veiled attempt at putting the Trump administration's concerns on bilateral trade on the front burner for example, with references to "balancing the trade deficit", "protecting innovation", and "increasing market access" in areas where American industry has been most critical of Indian policy.
- ✓ The President's daughter will lead the U.S delegation to **Global Entrepreneurship Summit (GES)** later this year. GES is a key foreign policy initiative of former President Barack Obama to bring together global entrepreneurs and innovators, **and India will be hosting its next edition**.

Conclusion

PM Modi and President Trump exceed the muted expectations for their first meeting.

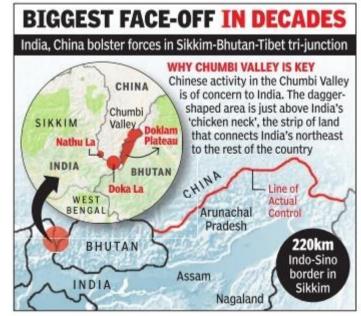
- Mentioning North Korea, West Asia and Afghanistan, the statement talks of a "growing strategic convergence" between the two countries and a shared vision on world affairs.
- An emphasis on the need for Pakistan to stop attacks on India launched from its soil, and for China to forge its Belt and Road Initiative taking into account India's concerns on territorial and sovereignty issues.
- However, while the two leaders were able to establish a **common understanding of global issues**, the joint statement indicates that **many bilateral issues are yet to be resolved**.

2.5. INDIA-CHINA

Why in news?

Indian troops intervened to block the path of Chinese People's Liberation Army soldiers engaged in **building road-works on the Doklam plateau**, a strategically vital 269 square kilometre patch of Bhutan's territory that Beijing laid claim to in the 1980s.

- This is the first time that India used troops to protect Bhutan's territorial interests.
- The tri-junction stretch of the boundary at Sikkim, though contested, has witnessed far fewer tensions than the western sector of the India-China boundary even as India and Bhutan have carried on separate negotiations with China.



India's concern about road building

Analysts say that the construction of a new road through the Chumbi valley would further endanger the "Chicken's Neck" — the narrow Siliguri corridor links the north-east with the rest of India.

- India is vulnerable in this corridor as it is the only access point to the northeast. The Corridor is about 500 km from the **Chumbi Valley.**
- India has conveyed to the Chinese government that the latter's construction of road in the disputed **Doklam** area 'would represent a significant change of status quo with serious security implications for India.'
- India has also rejected Chinese interpretation of the **1890 Sino-British Treaty**, pointing out that the road construction by China would undermine India's security.
- For Chinese troops to transgress over non-finalised borders in Sikkim and into Bhutanese territory is unprecedented, and is a violation of agreements with Bhutan from 1998 and 1999 as well as with India in 2012 to maintain the status quo, and causes special worries for the future.
- India's military presence in **Doklam gives it the ability to snap vital road** and in the near future, rail links between Lhasa and the Nathu-La region in the event of war.
- In recent time, China appears to have escalated its pressure on Bhutan. The aim of the pressure is well known: To persuade Bhutan to cede Doklam, through which China has built a road linking Lhasa to the Nathu-La pass and is in the process of driving a railway line, for two other disputed enclaves.

Chinese reaction to latest Face-off

China has said that Indian forces **had intruded into the Donglang or Doklam** — an area, which according to Chinese interpretation lies undisputedly on its side of the boundary in the Sikkim border area.

- Following the tensions, Chinese authorities have closed the Nathu La pass to Kailash Mansarovar pilgrims.
- China served notice on India to withdraw its forces, which had allegedly "trespassed" into its territory, as a precondition for a "meaningful dialogue" with New Delhi.
- China has justified the construction of a road in the Sikkim sector, saying the area undoubtedly" is located on its side of the border as per the 1890 Sino-British Treaty.

Deterioration of India-China relation

India-China relation has deteriorated continuously since the Mr. Xi's 2014 visit to India. The stand-off comes after a series of setbacks to bilateral ties.

- Delhi has expressed disappointment over **China's rejection of its concerns on sovereignty** issues, and refusal to corner **Pakistan on cross-border terrorism** or help India's bid for **Nuclear Suppliers Group membership**.
- In turn, India's spurning of the **Belt and Road Initiative** and cooperation with the U.S. on maritime issues has not played well in China
- Dalai Lama visit to Tawang was strongly protested by the China and it accused India for fuelling secessionist
 in Tibet
- India is also working with Japan, South Korea and the US to contain China's power in the Indian Ocean, provoking warnings from China's Foreign Ministry.

Way forward

These issues have to be **addressed through sustained dialogue**. In the immediate term, however, talks must focus on defusing the tensions at the tri-junction.

- China has made the withdrawal of Indian troops a precondition for dialogue. This would be unacceptable to India, unless the PLA also withdraws its troops and road-building teams.
- Apart from its own commitments to the status quo, Beijing must recognise the special relationship India and Bhutan have shared since 1947, the friendship treaty of 2007 that commits India to protecting Bhutan's interests, and the close coordination between the two militaries.

2.6. INDIA-RUSSIA

Why in news?

Prime Minister Narendra Modi was in St Petersburg for the **18th India-Russia annual summit** as well as the St Petersburg International Economic Forum.

St Petersburg Declaration

- Marking 70 years of diplomatic ties, India and Russia signed the St Petersburg Declaration.
- The Declaration was signed following the annual bilateral summit between Prime Minister Narendra Modi and Russian President Vladimir Putin.

Important points of St Petersburg Declaration

- Stating that the economies of India and Russia complement each other in the energy sector, it said that they
 would "strive to build an 'Energy Bridge' between our states and expand bilateral relations in all areas of
 energy cooperation, including nuclear, hydrocarbon, hydel and renewable energy sources and in improving
 energy efficiency".
- It also stated that both countries were interested in launching joint projects on exploration and exploitation of hydrocarbons in the Arctic shelf of Russia.
- Regarding the new world order, the Declaration said both India and Russia "regard the establishment of the multi-polar global order in international relations as a reflection of natural and inevitable process of evolution of interstate relations in the 21st century".
- Russia reaffirmed its support for India's bid for permanent membership in the UN Security Council and the Nuclear Suppliers Group.
- Both countries strongly condemned terrorism in all its forms and manifestations.
- They urged all countries and entities to "work sincerely to disrupt terrorist networks and their

MoUs/agreements signed during the PM visit to Russia India and Russia reaffirmed their "special and privileged strategic partnership" and signed following pacts:

- The **program of cultural exchanges between** the Ministry of Culture of the Russia and the Ministry of Culture of the Republic of India for 2017-2019.
- The General Framework Agreement for the construction of the third stage of the Kudankulam NPP (KK5 & KK6) along with the Credit Protocol.
- Agreement between the Federal Service for Intellectual Property (Rospatent) and the Council of India on Scientific and Industrial Research on granting access to Rospatent experts to the Indian Digital Library of Traditional Knowledge (TKDL).
- The contract between JSC (Russian Railways) and Indian Railways on the preparation of the justification for the implementation of the high-speed service at the Nagpur-Secunderabad section.
- **financing, and stop cross-border movement of terrorists"** and called for "early conclusion of negotiations on the **Comprehensive Convention on International Terrorism** to strengthen the global counter-terrorism normative and legal framework to combat this scourge".
- On defence cooperation, it said both countries upgrade and intensify this cooperation through joint
 manufacture, co-production and co-development of military hardware and military spares, with increasing
 reliance on the adoption and sharing of future technologies.
- They also would work on development of **high speed railways, dedicated freight corridors**, and application of newer technologies for efficient rail transport.
- On connectivity, it said this must be strengthened based on dialogue and consent of all parties concerned
 with due respect to sovereignty, while reiterating their commitment to build effective infrastructure for the
 International North South Transport Corridor and implementation of the Green Corridor.

India's concerns with Russia

Russia-china relation

✓ India's concerns vis-à-vis its once "trusted strategic partner" include its present tilt towards China with which India has a difficult relationship mainly due to an unsettled border dispute and Beijing's close ties with Pakistan.

• Russia -Pakistan relation

✓ Last year, Russia held its first ever military exercises with Pakistan, raising concerns in India.

✓ Russia did not back India's demand to name two Pakistan-based terror groups as perpetrators of terrorism against India last year at the Goa BRICS summit did not go down well with India.

• Issue of Terrorism

✓ There are divergences between New Delhi and Moscow on terrorism emanating from Pakistan and Afghanistan as well with Russia favouring a role for the **rebel Taliban in a future Afghanistan** against the rise of the Islamic State in the war-torn country.

Russia's concerns with India

• On its part, Russia has been concerned at the rapidly warming ties between India and the US including the recent signing of a military logistics agreement.

2.7. INDIA-FRANCE

Why in news?

Prime Minister Narendra Modi paid official visit to France. It was the first direct meeting between PM and newly elected French President Emmanuel Macron.

Highlights of the visit

Both leaders discussed ways to enhance the strategic ties, countering terrorism and climate change.

- India and France agreed to further deepen cooperation to tackle the challenge of terrorism and extremism.
- India and France agreed to work for the implementation of the landmark Paris climate agreement.
- PM Modi also appreciated the positivity of President Macron towards the International Solar Alliance.

India -France relation

Trade and investment

- ✓ France is India's 9th largest investment partner.
- ✓ France is also a key partner in India's development initiatives in areas like defence, space, nuclear and renewable energy, urban development and railways.

• Strategic partnership

- ✓ In 1998, France was also the **first country** with which India established a **strategic partnership**, which has since been accorded to more than 30 countries.
- ✓ This special relationship has always centered around three crucial areas: Nuclear, space and defence.

Nuclear cooperation

- ✓ Following India's peaceful nuclear explosion in 1974, the United States and Canada terminated their nuclear engagements with India, but France supplied us with fuel for the Tarapur nuclear plant.
- ✓ Similarly, when the United States and others imposed sanctions on India after the **nuclear tests in May 1998, France proved the exception.** In fact, the then French president Jacques Chirac publicly supported New Delhi and opposed US sanctions.
- ✓ Soon after the India-specific waiver was granted by the Nuclear Suppliers Group (NSG) in 2008 to engage in civil nuclear trade, France was the first country to sign a civil nuclear agreement with India.
- ✓ France has decided to construct six EPR (nuclear reactors) of 1,600 MW each in India.

Defence cooperation

- ✓ France was the **first country** with which India conducted a **joint naval exercise called 'Varun'** after the 1998 nuclear tests.
- ✓ Similarly, the IAF's first bilateral exercise in 2003 with a foreign counterpart, 'Garuda I', was once again with the French Air Force.

• Cooperation in space technology

- ✓ India-French cooperation in space technology began nearly 60 years ago, when France provided India the technology to start producing the **Centaure sounding rockets domestically**.
- ✓ The first Indian Satellite Telecommunication Experimental Project (STEP) was undertaken during the 1970s by using **French satellite Symphonie**, followed by "Ariane Passenger Payload Experiment" (APPLE).

- ✓ In fact, Arianespace was the preferred agency for launching large Indian satellites, particularly the INSAT and GSAT series.
- ✓ French organizations like **EADS Astrium and Indian commercial arm Antrix** have found it mutually beneficial to work to market Polar Satellite Launch Vehicle capabilities together in the West.

2.8. INDIA-AFGHANISTAN

Why in news?

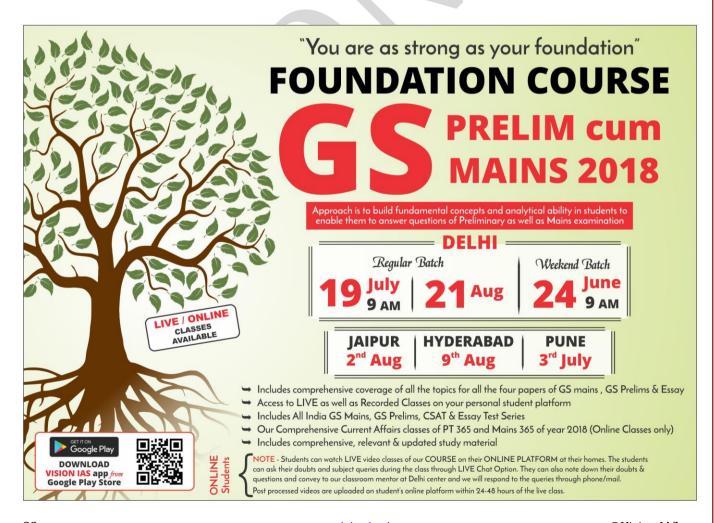
India and Afghanistan inaugurated a dedicated air freight corridor service.

- The corridor which passes through the **airspace of Pakistan** was launched with a cargo aircraft flight flagged off by Afghanistan President Dr. Ashraf Ghani.
- The connectivity established through the Air Freight Corridor will provide Afghanistan, a landlocked country, greater access to markets in India, and will allow Afghan businessmen to leverage India's economic growth and trade networks for its benefit.
- It would enable Afghan farmers quick and direct access to the Indian markets for their perishable produce.

Access to Afghanistan

India has been closely working with Afghanistan to create alternate and reliable access routes for the landlocked country.

- In this context, in January 2015, India had announced its decision to allow Afghan Trucks to enter the Indian territory through **Attari land Checkpost** for offloading and loading goods from and to Afghanistan.
- India is also cooperating with Afghanistan and Iran for development of the Chahbahar Port. In this context, a trilateral transport and transit agreement based on sea access through Chabahar was signed in the presence of the leaders of the three countries in Tehran in May 2016.



3. ECONOMY

3.1. IMPACT OF GST ON AGRICULTURE

Why in News?

 GST will rollout by 1 July of the current financial year and is perceived to have a mixed impact on agriculture, be it farm machinery, farm inputs etc. Recently, it was decided by the government that pesticides would be put in the 18% slab of the GST.

Impact

- Impact on the input side of the agriculture
 - ✓ Fertilizers will now attract 5% tax under the GST (currently VAT of 0-8%) as opposed to 12% proposed earlier under GST which is **likely to reduce the tax burden on farmers**
 - ✓ Pesticides are put in a slab of 18 % (currently 12% excise and a VAT of 4-5% in some states).
 - ✓ With relation to farm machinery, several components are put in a slab of 28 %, while tractors are under the 12 % slab (currently zero excise and a VAT of 4-5%). But it is still not sure whether input tax credit would be larger than tax rate. Therefore, there could be a scope for reduction in tractor prices
- Impact on the output side of the agriculture
 - ✓ Most raw agri-commodities ranging from rice, wheat, milk, fresh fruits and vegetables, are in the zero tax slab. This would help avoid tax, cess and arhatiya commission levied by some States.
 - ✓ For processed foods, fruit and vegetable juices will be taxed at 12% (from 5%) and fruit jams, jellies etc. are taxed even higher at 18% (from 5%). This would negatively impact food processing industry.

Significance

- Mandi taxes and associated cess and levies were distorting agricultural markets, thus driving out the private sector. GST could help in reinvigorating the interest of private sector in agriculture.
- Rationalization of the tax structure on agriculture would help in reducing the food subsidy bill borne by
 organizations like Food Corporation of India. But this may also affect the tax revenue of the states
 negatively.
- A smooth GST regime can break inter-state barriers on movement and facilitate direct linkages between processors and farmers.

Challenges

• The **food processing industry would be negatively impacted** given the fact that some processed foods have been put in the higher tax slab category. This may also **affect the employment** in this industry.

3.2. TAXING AGRICULTURAL INCOME

Why in News?

 NITI Aayog in its three-year action agenda has proposed the idea of taxation of agricultural income above a certain threshold.

Need

- NITI Aayog says that a blanket relief of taxation on agricultural income was aimed to protect farmers but this
 provision has been seen to be misused by many non-farmers who declare agriculture as their source of
 income to evade tax.
- The tax base in India is around 1.5% of the population only. This makes it a necessity to tax agricultural income so that the population involved in agriculture can also be brought under the tax net.
- Green revolution has improved the status of some farmers. Therefore agricultural taxation is needed to reduce the inequality between the rich and the marginal farmers.

Background

- In 1925 British India, a Indian taxation enquiry committee was formed to assess the feasibility of taxing agricultural income.
- The idea was also recommended in postindependence India by KN Raj committee in 1972 with examination of feasibility and implementation issues too.

Present scenario of agriculture tax

As per Section 10(1) of the Income Tax Act, agricultural income earned by the taxpayer in India is exempt from tax and it includes –

- Any rent or revenue derived from land which is situated in India and is used for agricultural purposes.
- Any income derived from such land by agriculture operations including processing of agricultural produce to make it fit for the market.
- Any income attributable to a farm house subject to satisfaction of certain conditions specified in this regard in section 2(1A).
- The Kelkar task force report of 2002 estimated that 95% of the farmers were below the tax threshold.

Significance

- It would expand the tax base and improve revenues of the government, leading to an increase in the expenditures on social sector schemes.
- It would curb the evasion of taxes by falsely showing income as agricultural income.
- Rich farmers above an income threshold can be taxed which will be a step towards economic equity.
- Taxation requires regular and systematic maintenance of accounts which would further help the farmers to secure need based loans on documented records.
- Adequate formal documentation would help the Government to identify the difference between small and big farmers and rollout targeted subsidy schemes in future.

Challenges

- According to NSS data, the average annual income of the median farmer net of production costs from cultivation is less than rupees 20,000 in 17 states. Therefore taxation of such a small agriculture income may impose negative externality on farmers.
- With different subsidies still existing at different agricultural stages, the taxation of agricultural income would further distort agricultural revenue structure.
- Agricultural income is highly monsoon dependent and therefore taxing agricultural income may become a negative externality.
- Farmers may become victim to the exploitation of the tax officials.

Way Forward

There is a need of prioritizing the data collection on farmers' incomes. The data needs to be collected at the village level and then a threshold can be set to tax the agricultural income. Also, the state governments need to be taken into confidence for because Agriculture is mentioned in the State List of the Constitution.

3.3. CAPITAL GAINS TAX RULES

Why in News?

 The Central Board of Direct Taxes (CBDT) has come out with a final notification specifying that the securities transactions where the securities transaction tax (STT) hasn't been paid would attract capital gains tax.

Need

 In order to curb the practice of declaring unaccounted income as exempt from long-term capital gain by entering into sham transactions there was a need to amend the Income Tax Act.

Capital Gains tax

- A capital gains tax is a tax levied on capital gains, profits an investor realizes when he sells a capital asset for a price that is higher than the purchase price. Capital gains taxes are only triggered when an asset is realized, not while it is held by an investor.
- India classifies this tax into short term (capital gains made within 36 months) and long term capital gains (made beyond 36 months). (subject to certain exceptions. for example, the holding period of 24 months has been specified for unlisted shares and immovable property).

Background

- Finance Act 2017 was amended recently to curb the declaration of unaccounted income as exempt of long-term capital gains tax under the previous provisions of the Income Tax Act by entering into fake transactions.
- The amendment notification specifies the transactions on which the tax would apply and those on which tax would be exempt.

Provisions

- The chargeability to STT will not apply to all transactions of acquisitions of equity shares entered into after October 1, 2004, except
 - Listed shares in a preferential issue of a company whose shares are not frequently traded in a recognized stock exchange.
 - Acquisition of existing listed equity shares in a company not through a recognized stock exchange of India.
 - Acquisition of shares of a company while it is de-listed.

Significance

• It will benefit foreign investors, venture capital houses and shareholders who have acquired shares upon corporate restructuring vide court-approved schemes on which no STT was paid.

Challenges

• CBDT notification appears to be significantly unfair for shareholders of companies whose shares are not frequently traded on stock exchanges.

3.4. FARMER PROTESTS

Why in News?

- In recent times, there has been a fall of prices of various crops like soybean, onion, vegetables etc. Along with this various states have also experienced a rise in input costs like seeds, labour, fertilizers and transport.
- The stretch from Ahmednagar to Nashik to Sangli, home to relatively more prosperous farmers, has seen a rise in farmer movements.

Reasons

- Fall in the procurement prices because of a glut of produce in the market.
- Cash crunch due to the recent demonetization policy. This has led to deflation in the farm sector. RBI's
 monetary policy review statement in June 2017 asserted the remarkable fall in prices across agricultural
 commodities resulting in "fire (distress) sales" on account of demonetization.
- Predominance of small landholdings which are expensive to maintain.
- Lack of basic infrastructure like decentralized warehouses in majority of locations is also a barrier to creation of buffer stock.
- Farm incomes have also reduced due to dwindling government support and increasing market instability.
- Farmers have also been demanding the implementation of structural reforms as recommended by Swaminathan committee.

Government Steps

- Maharashtra government has addressed demands like ensuring crop procurement prices of at least 50% above production costs, a complete waiver of farm loans, 100% subsidy on drip/sprinkler irrigation systems, and a minimum milk purchase price of Rs 50.
- Governments have also disbursed loans immediately for the next cropping cycle.

National Commission of Farmers (2004-06)

• This commission was headed by MS Swaminathan with the terms of reference for preparing for food security strategy.

• Some of its findings on major causes of the agrarian crisis are: unfinished agenda in land reform, quantity and quality of water, technology fatigue, access, adequacy and timeliness of institutional credit, opportunities for assured and remunerative marketing and adverse meteorological factors.

Recommendations

- Land Reforms
 - ✓ Distribute ceiling-surplus and waste lands.
 - ✓ **Establish a National Land Use Advisory Service** to link land use decisions with ecological, meteorological and marketing factors on a location and season specific basis.
- Irrigation Reforms Increase water supply through rainwater harvesting and aquifer recharge should become mandatory. "Million Wells Recharge" programme, specifically targeted at private wells should be launched.

Agricultural Productivity

- ✓ Increase public investment in agriculture related infrastructure.
- ✓ A national network of advanced soil testing laboratories with detection of micronutrient deficiencies.

Credit and Insurance

- ✓ Establish an Agriculture Risk fund to provide relief in natural calamities.
- ✓ Issue Kisan Credit Cards and joint pattas as collateral.
- ✓ Develop an integrated credit-cum-crop-livestock-human health insurance package.

Food Security and Farmer Welfare

- ✓ Implement a universal public distribution system. Also, have an integrated food cum fortification approach to eliminate micronutrient deficiency.
- ✓ Promote the establishment of Community Food and Water Banks operated by Women Self-help Groups (SHG), based on the **principle of 'Store Grain and Water everywhere'**.
- ✓ Set up State level Farmers' Commission with representation of farmers for dynamic government response to farmers' problems.
- ✓ Cover all crops by crop insurance with the village and not block as the unit for assessment.
- ✓ Set up Village Knowledge Centres (VKCs) or Gyan Chaupals in the farmers' distress hotspots.
- ✓ Promotion of commodity-based farmers' organizations to combine decentralized production with centralized services
- ✓ MSP should be at least 50% more than the weighted average cost of production.
- ✓ The "net take home income" of farmers should be comparable to those of civil servants.

• Bioresources improvement

- ✓ Preserving traditional rights of access to biodiversity
- ✓ Allowing export of indigenous breeds and import of suitable breeds to increase productivity of nondescript animals.

3.5. MCKINSEY EMPLOYMENT REPORT

Why in News?

 McKinsey Global Institute has recently released its report titled "India's Labour Market: A new emphasis on gainful employment".

Background

 The employment estimates in the report are based on employment and unemployment surveys carried out by the National Sample Survey Office as well as the annual surveys of the labour bureau.

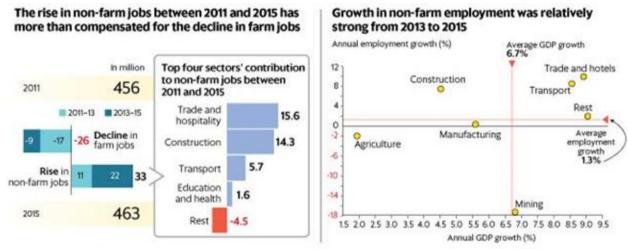
Findings of the report

• The report focuses on "gainful employment" i.e. better work that promises more money.

Non-farm employment in India

- Non-Farm Sector includes all economic activities like manufacturing, handicrafts, construction, mining, trade, communication etc. in rural areas.
- These activities in rural areas are important in providing additional income to households.
- In 1980's rural nonfarm employment was one of the reason and main driver for the reduction of poverty.
- MNREGA has been one of the main drivers to promote non-farm sector.
- According to NSS, recent focus on education, skilling etc. has led to construction, services and labour intensive manufacturing sectors absorbing the farm jobs.

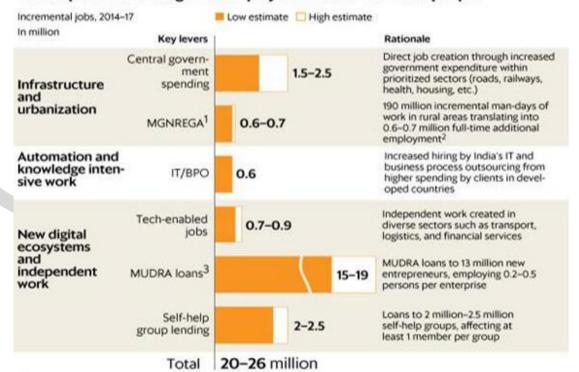
- It highlights the structural shift i.e. shifting from agriculture to non-farm sectors. **Between 2011 and 2015,** the number of agricultural jobs reduced by 26 million while the number of non-farm jobs rose by 33 million. This was especially driven by creation of jobs between 2013 and 2015.
- Despite the growth of non-farm jobs, **overall labour force participation rate fell** from 55.5% in 2011 to 52.4% in 2015
- Gig economy (or increase in independent work opportunities available), government spending and increased entrepreneurial activity have created gainful employment of 20-26 million people between 2014 and 2017



Years are financial years from April to March; thus 2011 is FY2011, from April 2010 to March 2011. Numbers may not add up due to rounding

- Bulk of these jobs was created in sectors such as trade and hospitality, construction and transportation, while sectors such as mining and manufacturing saw declines.
- Automation is unlikely to immediately affect jobs in India because automation would be lagging in India due to low wages and high costs of automation.

Increased government spending, rise of independent work, and entrepreneurship have boosted gainful employment for 20–26 million people



¹Mahatma Gandhi National Rural Employment Guarantee Act, ²Assuming 300 working days in an year, ³Micro Units Development and Refinance Agency Bank. Data from MUDRA pertains only to loans disbursed during the year, and does not reflect the longerterm viability of businesses to which these loans were made.

Incremental job totals do not account for offsetting job reductions. Some overlap in each category is possible. Incremental jobs could amount to additional work for current labour force rather than new workforce participants. Income generated by each of the categories cannot be concluded. Numbers may not add up due to rounding.

Recommendations of report

- It suggests three ways to create opportunities for more gainful employment. These are -
 - More appropriate statistical measurement of employment
 - Targeted government programmes
 - o Removing hurdles that stand in the way of investment and innovation.
- It adds that building industrial townships, focusing on manufacturing, and the development of tourist circuits, all through government programmes, could create more opportunities for gainful employment.

Significance

- The report if implemented can be a valuable resource for improving the "gainful employment" with better match of the skills demand and supply.
- It can also become a focal point for recent data and statistics related to the jobs in agriculture and non-farm

3.6. INTERNATIONAL INVESTMENT AGREEMENTS

Why in News?

- Recently the idea of reviewing the International Investment Agreements (IIA) including the Investment-State Dispute Settlement (ISDS) mechanism has been mooted.
- India has also prevented any such agreement on global scale like a goods or services agreement.

Background

- An IIA (also commonly called bilateral investment treaty (BIT) when used in a bilateral context or "investment guarantee agreement (IGA)) promotes greater investment flows between two signatory countries and sets out standards of protection for investments made in one country by investors from the other country.
- As per UN Conference on Trade and Development Report, by end of 2016, about 770 cases have been filed against the host country under the IIAs.

Reasons of protest

- International The present Investment Agreements have a pro-investor bias with an aim to protect only capital and not labour, indigenous people, migrants or consumers.
- The current ISDS mechanism is ad hoc, unpredictable and often arbitrary.

Way forward

There should be a greater focus on other alternative modes of dispute settlement,

Investment-State Dispute Settlement

- It is a neutral international arbitration procedure.
- In this mechanism, the investor in another signatory state can seek compensation in a binding arbitration tribunal in case of violation of principles of investor support.
- The ISDS mechanism is contentious as it enables companies to drag governments to international arbitration without exhausting the local remedies and seek massive amounts as compensation citing losses due to reasons, including policy changes.

Bilateral Investment Treaty

- A BIT is an agreement between two countries that help formulation of rules for foreign investment in each BIT offers protection to foreign other's countries. investor by holding the host state accountable for exercise of their regulatory power through an independent international arbitration mechanism.
- India changed its model BIT treaty in 2015. Indian signed some 70-odd BITs from 1994-2011 which were investor friendly. Post 2011, the trend has been its opposite.

India's model draft on BIT

- After losing in the 2011 White Industries case, India prepared a model BIT. Some of its provisions are -
 - Deleting the MFN clause.
 - Enterprises based definition of investment -Investors who do not set up an enterprise in India to carry business cannot seek protection under BIT.
 - Compulsorily exhausting the local courts first before approaching international tribunal for dispute resolution.
 - List of subject exceptions where provisions of BIT would be invalid are health, environment etc.

including domestic remedies or compulsory negotiation and mediation, wherever possible. Direct access to international mechanisms should be allowed only after exhaustion of local remedies.

Also, there needs to be a regulatory freedom of governments to pursue legitimate public policy.

3.7. FUEL ADMINISTERED PRICE MECHANISM

Why in News?

Recently, Administered Price Mechanism (APM) for petrol and diesel were dismantled by the government.

Background

- The idea of dismantling the APM was mooted for the first time two decades ago.
- The Narasimha Rao government had set up a "R Committee" (R for Reforms) under Vijay Kelkar to plot a

blueprint for dismantling Administered Price Mechanism.

 But such mechanisms could not fructify because in the 2000s, the price of crude oil became highly volatile and political consensus on reforms withered.

Provisions

 India lifted price control on diesel in 2014 and on petrol in 2010 allowing state

Fuel Administered Price Mechanism

- The APM was created after the Government **nationalized the international oil majors** Caltex, Esso and Burmah Shell in the early 1970s.
- With the APM, the Government also established a system of Oil Pool accounts, which was administered by the Oil Coordination Committee (OCC).
- The OCC has been reduced to Petroleum Planning and Analysis Cell under the Petroleum Ministry to oversee the functioning of the downstream oil companies.
- In Administered Pricing, under the cost plus formula, prices of all petroleum products are fixed on the basis cost of procuring and refining crude oil.
- Cross subsidization among petroleum products was in existence under the administered pricing mechanism. The prices of petrol and diesel subsidized the prices of liquefied petroleum gas (LPG) and kerosene.

companies to charge market prices. At present, **state companies review prices at the end of every fortnight** depending on the prevailing international prices.

• From now on, the daily sales at all the petrol pumps would be linked to the international prices of crude oil.

Significance

- Now, oil companies are free to take independent decisions based on import parity and market forces in pricing of petroleum products.
- It shifts India a step closer to becoming a competitive market economy with the entry of more private players. This would improve the inefficient allocation of scarce resource like fuel.
- It would also help move the oil public sector units into profits. It would also reduce the burden on exchequer.

Dynamic Fuel Pricing The automation at most filling stations, which allows IndianOil, BPCL and HPCL are companies to centrally change prices, has made it considering ways to much easier for companies to roll out the plan to convey price changes to their 53,000 filling station across review petrol and diesel prices daily the country Dally changes mean prices **Executives of** wouldn't rise or drop sharply Prices would change just by a few paise every day, bringing no shock to customers This means companies can easily take price hikes without worrying about political backlash

Challenge

- The sustainability of this mechanism would face challenges when the crude oil prices rise.
- It would create an inequality of prices of fuel in different states. For Eg. The coastal state fuel prices would reduce whereas the fuel prices of hinterland would rise after the market linked pricing steps in.
- Retail presence, logistics arrangement and risk management would be the three critical factors for oil
 companies to succeed in the new competitive free market. Extensive retail presence would be the most
 critical success factor for companies.

3.8. SATH PROGRAMME

Why in news?

NITI Aayog has launched SATH, a program providing 'Sustainable Action for Transforming Human capital' with the State Governments.

About the programme

- The vision of the program is to initiate transformation in the education and health sectors.
- The program addresses the need expressed by many states for technical support from NITI aayog.
- SATH aims to identify and build three future 'role model' states for health systems.
- NITI Aayog will work in close collaboration with their state machinery to design a robust roadmap of
 intervention, develop a program governance structure, set up monitoring and tracking mechanisms, handhold state institutions through the execution stage and provide support on a range of institutional measures
 to achieve the end objectives.
- The program will be implemented by NITI along with McKinsey & Company and IPE Global consortium, who were selected through a competitive bidding process.

3.9. PROPOSAL FOR SALE OF AIR INDIA

Why in news?

The Union Cabinet will soon decide the disinvestment process for the state-owned carrier Air India.

Background

- The three options for disinvestment as suggested by Department for Investment and Public Asset Management (DIPAM) are a full 100% sell-off, a 74% stake sale or retaining a 49% share in the airline.
- There might be a creation of a special purpose vehicle (SPV) to get rid of a major portion of its debt.

Maharaja's mounting woes Air India's mammoth debt is behind the clamour for its sale As per Civil Aviation Ministry Total debt Al's net loss in 2014-15: ₹5,859.91 cr. ₹52,000 Al's net loss in 2015-16: ₹2,636 cr. crore If 86% of flying can be B handled by private sector, it Aircraft Working can handle 100% also capital ARUN JAITLEY Loan Finance Minister

About disinvestment

- Disinvestment can be defined as the action of an organisation (or government) selling or liquidating an asset or subsidiary.
- It is also referred to as 'divestment' or 'divestiture.'
- In most contexts, disinvestment typically refers to sale from the government, partly or fully, of a government-owned enterprise.

Disinvestment in India

The new economic policy initiated in July 1991 clearly indicated that PSUs had shown a very negative rate of return on capital employed.

Of the various factors responsible for low profits in the PSUs, the following were identified as particularly important:

- Price policy of public sector undertakings
- Under-utilisation of capacity
- Problems related to planning and construction of projects
- Problems of labour, personnel and management
- Lack of autonomy

In this direction, the Government adopted the 'Disinvestment Policy'. This was identified as an active tool to reduce the burden of financing the PSUs. The following main objectives of disinvestment were outlined:

- To reduce the financial burden on the Government
- To improve public finances
- To introduce, competition and market discipline
- To fund growth
- To encourage wider share of ownership
- To depoliticise non-essential services

The Department for investment and public asset management takes note of all such policies.

The bugdet 2017-18 has set a goal of Rs 72,500 crore from disinvestment in various PSUs.

3.10. GST SUVIDHA PROVIDERS

Why in news?

Goods and services tax network (GSTN) has allowed GST suvidha providers (GSP) for providing innovative and convenient methods to taxpayers and other stakeholders seeking to interact with the system.

What are these providers?

- These are **third-party application providers** which are allowed by GSTN to smoothen the process of tax administration under GST.
- The GSTN has selected 34 GSPs to provide an additional channel for filing returns and other compliances relating to GST.
- The GSTN portal will be able to handle the load of smaller taxpayers who will enter up to 100-200 invoices, but for those whose invoices run into thousands, GSPs are the recommended route since the GSTN portal can cater only to around 80 lakh taxpayers.
- GSPs are **expected to help large businesses** with complex internal processes in complying with the GST regime
- Further, while the GSTN has laid down broad guidelines for GSPs to adhere to, it has left the pricing for the market to decide.

Goods and services tax network

- The GSTN is a unique and complex IT initiative.
- It is unique as it seeks, for the first time to establish a uniform interface for the tax payer and a common and shared IT infrastructure between the Centre and States.
- The portal envisions becoming a trusted National Information Utility (NIU) which provides reliable, efficient and robust IT Backbone for the smooth functioning of the Goods & Services Tax regime.

3.11. REVERSE CHARGE MECHANISM

Why in news?

Recently the government gave a description about the reverse charge mechanism under the GST.

What is reverse charge mechanism?

- Under the reverse charge mechanism in the GST regime, the liability to pay tax is of the recipient of goods & services rather than the supplier when the goods or services have been received from an unregistered person.
- Usually, the supplier is liable to pay tax and avail input tax credit, if applicable, but in this case the mechanism is reversed.
- Also, the GST Council has specified **12 categories of services for reverse charge** that include radio taxi, services provided by an individual advocate or firm of advocates etc.
- If these services are provided through an e-commerce operator, it will be liable to pay the tax. No separate list for reverse charge for goods has been issued by the CBEC.
- If the supply of goods or services or both is exempt under GST, then the recipient is not liable to pay tax under the reverse charge mechanism.
- However, the CGST law mandates registration for those who are required to pay tax under reverse charge, even if their turnover is less than the threshold limit of Rs 20 lakh.

3.12. NATIONAL BIOPHARMA MISSION

Why in news?

The program named Innovate in India (i3) i.e. the National Biopharma Mission was recently launched by the government.

Need for the mission

Indian biopharmaceutical industry is still 10-15 years behind their counterparts in the developed countries and faces stiff competition from China, Korea and others.

The lacuna primarily exists due to:

- disconnected centers of excellence
- less focus on translational research
- staggered funding.

Thus there was an immediate need felt to focus on consolidated efforts to promote product discovery, translational research and early stage manufacturing in the country to ensure inclusive innovation.

About the mission

- It is anticipated to be a game changer for the Indian Biopharmaceutical industry.
- It aspires to create an **enabling ecosystem to promote entrepreneurship and indigenous manufacturing in the sector.**
- The Mission aims to make India a hub for design and development of novel, affordable and effective biopharmaceutical products and solutions.
- Currently India has only 2.8% share in the global biopharmaceutical market, the program would elevate this to 5% resulting in an additional business opportunity of 16 Billion USD.

A biopharmaceutical, also known as a biological medical product, is any pharmaceutical drug product manufactured in, extracted from, or semisynthesized from biological sources.

- The Mission will provide a **holistic and integrated approach** to strengthen and support the entire product development value chain for accelerating the research leads to product development.
- The Mission to be **implemented by Biotechnology Industry Research Assistance Council (BIRAC)**, a Public Sector Undertaking of Department of Biotechnology, will bring together expertise from national and international corridors to provide strategic guidance and direction to move promising solutions through the product development value chain.
- The program thereby stands unique in its approach as it becomes a cradle to innovate, co-create and co-facilitate scientific discoveries and offers young entrepreneurs an avenue to engage with the best in the industry.

3.13. IMPACT ASSESSMENT OF DAY-NRLM

Why in news?

Recently an assessment study of Deen Dayal Antyodaya Yojana – National Rural Livelihood Mission (DAY-NRLM) was conducted by Institute of Rural Management, Anand (IRMA).

Institute of Rural Management Anand is an autonomous institution located in Anand in Gujarat, India with the mandate of contributing to the professional management of rural organisations.

Findings of the study

The study indicates that the households covered under NRLM:

- Have a higher number of livestock assets as compared to uncovered areas;
- Show a higher proclivity to save in formal institutions
- Have a higher loan size (about 67% more than the loan size in the uncovered areas) and are more likely to borrow from formal financial sources;
- Spend less on food consumption but more on education. However, the total household consumption expenditure is similar in covered and uncovered areas.
- Have 22% higher (net) income than the households in the uncovered areas, largely due to income from enterprises.

Overall, the report states that the Mission has largely been successful in creating sensitive support structures right up to the block level.

About DAY-NRLM

- The objective to organize all rural poor households in the country and continuously nurture and support them till they come out of abject poverty.
- This was sought to be achieved through universal **social mobilization** by organizing at least one-woman member from each rural poor household into **Self Help Groups (SHGs).**
- All 29 states and 5 UTs [except New Delhi and Chandigarh] are currently implementing the Mission in 3,814 blocks across 556 districts.
- The Mission is expected to mobilize all rural poor households (about 9 crore) by 2024-25.

3.14. INAUGURATION OF AII DAM

Why in news?

Recently the Prime Minister inaugurated the filling of Aji Dam near Rajkot under Sauni Yojana.

About SAUNI yojana

- SAUNI stands for Saurashtra Narmada Avtaran Irrigation.
- SAUNI envisages filling 115 major dams of the arid Saurashtra region by diverting floodwaters overflowing from the Sardar Sarovar Dam across the Narmada in south Gujarat.
- It involves laying a 1,125-km network of pipelines at a cost of Rs 12,166 crore to carry Narmada water to these dams, and irrigate 4.13 lakh hectares (ha) land.
- Parts of Saurashtra are prone to drought, and irrigation water is also a politically sensitive issue in this region.

3.15. STARTUP INDIA HUB

Why in news?

• Ministry of Commerce & Industry recently launched the Startup India Virtual Hub.

What is Startup India Hub?

• A common online platform for all stakeholders of the entrepreneurial ecosystem like startups, investors, mentors, academia, incubators, accelerators, corporates, Government bodies in India, etc. to discover, connect and engage with each other.

Benefits

- It will solve the problem of information asymmetry and lack of access to knowledge, tools, experts, and funding especially in the nascent ecosystems across Tier II and III towns.
- It will enable users to connect with ecosystem stakeholders, access free learning resources, tools & templates on legal, HR, accounting & regulatory issues and discussion forums.

Features

- Startup India Hub comes under Invest India, the official Investment Promotion and Facilitation Agency of the Government of India, mandated to facilitate investments into India.
- The Hub has aggregated over 50 relevant Govt schemes/programs. In the next phase, the platform will also aggregate schemes available across various state governments.

3.16. FINANCIAL RESOLUTION AND DEPOSIT INSURANCE BILL 2017

Why in news?

- The Union Cabinet has approved the proposal to introduce a Financial Resolution and Deposit Insurance Bill, 2017.
- The broad aim of the bill is to ensure early recognition of a financial firm, regulated by RBI, SEBI, IRDA or PFRDA, which could potentially be in trouble so as to lower the impact on the economy.

Background

- After Global Financial Crisis of 2008, it was important for the government to come up with a framework to deal with bankruptcy and insolvency cases. The Government has recently enacted the Insolvency and Bankruptcy Code, 2016 for the insolvency resolution of non-financial entities.
- The proposed Bill complements the Code by providing a resolution framework for the financial sector. Once implemented, this Bill together with the Code will provide a comprehensive resolution framework for the economy.
- Both of these are about issues that can arise when companies go bankrupt or insolvent, except that this Bill deals only with the companies that are in the financial sector such as banks and insurance companies. Insolvency Code Act deals with companies in all other sectors.

Features

- The Bill would provide for a comprehensive resolution framework to deal with bankruptcy situation for specified financial sector entities like banks, insurance companies and financial sector entities.
- When enacted, it will pave the way for setting up of the Resolution Corporation.
- The bill will result in the repealing of the Deposit Insurance and Credit Guarantee Corporation Act, 1961 to transfer the deposit insurance powers responsibilities to the Resolution Corporation.

Benefits

- It will give comfort to the consumers of financial service providers in financial distress.
- It aims to inculcate discipline among financial service providers in the event of financial crises by limiting the use of public money to bail out distressed entities.
- The Bill aims to strengthen and streamline the current framework of deposit insurance for the benefit of a large number of retail depositors.
- This Bill seeks to decrease the time and costs involved in resolving distressed financial entities.

Resolution Corporation

- This Corporation will take swift action for winding up or dissolving a firm. Once that happens, the Corporation will act like a receiver - ensure quick payments to depositors up to a certain limit to which their deposits have been insured and settle the claims of debtors and equity holders.
- It will have a corpus or fund built on premiums by firms which are covered under the new law, besides contributions from the government.
- It would protect the stability and resilience of the financial system; protecting the consumers of covered obligations up to a reasonable limit; and protecting public funds, to the extent possible.
- It is expected to cover all firms regulated by the RBI, SEBI, IRDA and PFRDA.

3.17. INDIA SIGNS OECD MULTILATERAL CONVENTION TO PREVENT **BEPS**

Why in news?

India recently signed the Multilateral Convention to implement Tax Treaty Related Measures to prevent Base Erosion and Profit Shifting (BEPS).

Multilateral Convention to implement Tax Treaty Related Measures to Prevent BEPS

- The Multilateral Convention aims at the swift and consistent implementation of the treaty related BEPS measures.
- The Convention is an outcome of the OECD / G20 BEPS Project. The convention was conceived as a multilateral instrument which would swiftly modify all covered bilateral tax treaties to implement BEPS measures.

Base Erosion and Profit Shifting (BEPS)

- It refers to tax planning strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations where there is little or no economic activity, resulting in little or no overall corporate tax being paid.
- BEPS is of major significance for developing countries due to their heavy reliance on corporate income tax, multinational particularly from enterprises.

Importance of the convention

The Convention will have the effect of amending most of the bilateral tax treaties of the signatory jurisdictions in respect of treaty related measures under the BEPS package for preventing artificial tax avoidance, prevention of treaty abuse, and improve dispute resolution.

 The Convention will ensure that the minimum standards regarding prevention of treaty abuse and amelioration of the international tax dispute resolution process are implemented in all covered tax agreements quickly.

3.18. DONER LAUNCHES HILL AREA DEVELOPMENT PROGRAMME

Why in news?

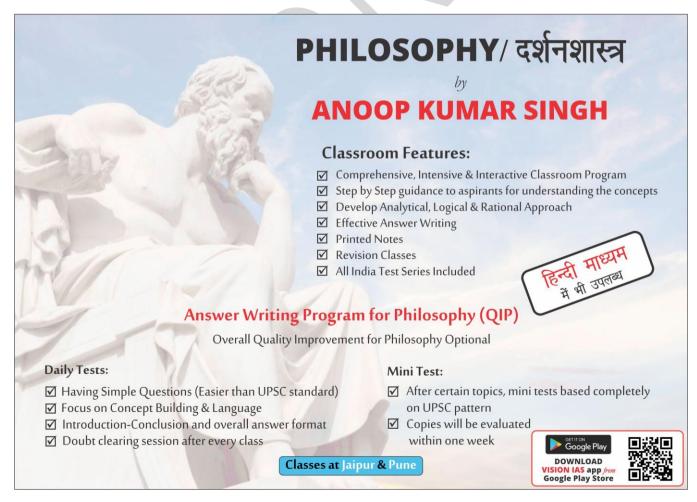
- The Ministry for Development of North Eastern Region (DoNER) launched the "Hill Area Development Programme" (HADP) for Northeast that aims at giving a focused attention to the lesser developed hilly areas.
- It will be initiated on a pilot basis in the hilly districts of Manipur. Out of 80 districts of Northeast, 3 districts of hilly areas, which ranked lowest in the Composite District Infrastructure Index, belonged to Manipur.

Reasons for launching the programme

- As a result of peculiar topography, there is a wide gap between the hill and valley districts in Manipur, Tripura and Assam in terms of infrastructure, quality of roads, health and education etc.
- The approach of the Government is twofold: one is to ensure equitable development of every area, every section of society and every tribe living in the North Eastern Region and; second is to bring the eight North Eastern Region States at par with the more developed states in the rest of India.

Composite District Infrastructure Index

- It has been prepared by Ministry for DoNER to help the in better targeting of schemes and projects within the North Eastern Region (NER) in order to reduce intra-regional disparity.
- It Is based on 7 broad indicators -
 - Transport facilities
 - Energy
 - o Water supply
 - o Education
 - Health facilities
 - o Communication infrastructure
 - o Banking facilities
- The index is also expected to serve as a useful guide in formulation and implementation of various development policies by the Government of India.



4. SECURITY

4.1. HAWALA TRANSACTIONS AND MILITANCY IN INDIA

Why in news?

The counter insurgency cell of the Jammu and Kashmir police has stated that money transactions through hawala to fuel militancy in Kashmir goes back to the early days of insurgency in the 1990s.

Background

The sources of funding for militants acts are as follows:

- Small hawala transactions through small and big businessmen.
- Thirty-five percent of hawala money, according to sources, is channelled directly through militant outfits such as the Lashkar-e-Taiba and the Hizbul Mujahideen and another 40% through overseas religious and charity organisations.
- The cross-Line of Control (LoC) trade, which started in 2008, is believed to have fallen into the hands of money launderers.
- Circulation of Fake currency

What is Hawala system?

- The word "Hawala" means trust.
- It is an **alternative or parallel remittance system**, which works outside the circle of banks and formal financial systems. It is also sometimes referred to as "**Underground Banking**"
- Hawala is an ancient system of money transfer originated in India and is now being used across the globe.
- In a hawala transaction, no physical movement of cash is there. Hawala system works with a network of operators called Hawaldars or Hawala Dealers.
- A person willing to transfer money, contacts a Hawala operator at the source location. The hawala operator at that end collects the money from that person who wishes to make a transfer. He then calls upon his counterpart or the other Hawala operator at the destination place/country was the transfer has to be made.
- This network is being used extensively across the globe to circulate black money and to provide funds for terrorism, drug trafficking and other illegal activities.

Status of Hawala in India

- Hawala has been made illegal in India, as it is seen to be a form of money laundering and can be used to
 move wealth anonymously.
- As hawala transactions are not routed through banks, the government agencies and the RBI cannot regulate them.
- In India, FEMA (Foreign Exchange Management Act) 2000 and PMLA (Prevention of Money Laundering Act) 2002 are the two major legislations which make such transactions illegal.

4.2. WOMEN TO GET COMBAT ROLE IN ARMY

Why in news?

Recently, Indian Army announced that women will be allowed to occupy combat roles in all sections of its army.

Significance of the move

- It would be a radical move to **gender parity** in one of the world's most-male dominated professions.
- This is in line with the gradual induction of women in combat roles in armed forces across the globe- be it United States or Israel.

Concerns

• Concerns relating to **safety** and ensuring dignity of women in the forces.

- **Male domination** in the forces including the composition of armed forces Tribunals raise apprehensions over proper treatment of cases relating to sexual harassment.
- Concerns over women's vulnerability on capture and over their physical and mental ability to cope with the stress of frontline deployments.

Rationale for the decision

- The policy of composition of army should be driven by single factor of 'ensuring security of the country'. They need the best and fittest people regardless of gender. So the resource pool should not be limited to half of the population.
- Landscape of modern warfare has changed with more sophisticated weapons, greater focus on intelligence
 gathering and emergence of cyberspace as arena of combat. Brute force, often a reason for non-inclusion of
 women, is less necessary today.
- **Modular training** for specific assignments can be imparted to women to overcome perceived disadvantages due to availability of sophisticated tools such as simulation arenas.
- Finally, gender cannot be a barrier in front of someone having the desire to render service to the nation. Women who are aware of the concerns and still are willing to join services should not be held back.

Way forward

- All matters concerning the security of the country have to be considered in a dispassionate manner.
- The whole concept of women's induction in the services, therefore, has to be viewed in a holistic and objective manner and not only from gender equality perspective.
- Therefore, there should be a gradual integration of women in the services along with continuous and periodical performance auditing of both male and female soldiers.

4.3. PANEL TO STUDY FREE MOVEMENT ALONG MYANMAR BORDER

Why in news?

The Union Home Ministry has constituted a committee to examine methods to curb the misuse of free movement along the Myanmar border.

Background

- The India-Myanmar border has a unique arrangement in place called the Free Movement Regime (FMR).
- FMR permits the tribes residing along the border to travel 16-km across the boundary without visa restrictions.
- While this has helped the tribes maintain their age old ties, it has also become a cause of security concern.
- The insurgents have been taking advantage of the FMR and have been crossing over to Myanmar to receive training in arms, establish safe havens and re-enter India to carry out subversive attacks.
- Over the years, this border has become the main conduit for the trafficking of arms and high quality heroin.
- Smuggling of ephedrine and pseudo-ephedrine and trafficking of women and children from the Northeast to Myanmar and further to Southeast Asia are also rampant along the border.

Indo-Myanmar Border

- India and Myanmar share an unfenced border of 1,643 km.
- Arunachal Pradesh, Nagaland, Manipur and Mizoram are the 4 states, which have border with Myanmar.
- Even though the international boundary between the two countries had been formally delimited and demarcated following the 1967 Boundary agreement, it has not crystallized on the ground.
- The border traverses a region infested with **numerous insurgencies**.
- The policymakers have not given adequate attention to the border. Hence it remains poorly managed.
- Infrastructural facilities at Moreh and Zokhawatar the two designated points for normal trade and border trade respectively is poor.
- The land customs station lack screening and detection machines, communication devices, banking facilities, warehouses, parking and quarantine facilities.

Recommendations

- Govt. should first strengthen the security of the border by either giving the Assam Rifles the **single mandate** of guarding the border or deploying another border guarding force such as the Border Security Force (BSF).
- Govt. should initiate a revision of the FMR and reduce the permitted distance of unrestricted travel.
- The **construction of the Integrated Check Posts** along with other infrastructure should be expedited.
- Finally, India should endeavour to meaningfully engage with Myanmar and solicit its cooperation in resolving all outstanding issues and better manage their mutual border.

4.4. PRITHVI-2 MISSILE

Why in news?

India has successfully test-fired its indigenously developed Prithvi-II missile from a test range in Odisha as part of a user trial by the Army.

About the missile

- The Prithvi-II missile is capable of carrying 500 kg to 1,000 kg of warheads.
- It is thrusted by liquid propulsion twin engines.
- It uses advanced inertial guidance system with manoeuvring trajectory to hit its target with precision.
- Single-stage liquid-fuelled Prithvi II is the first missile to have been developed by the DRDO under the Integrated Guided Missile Development Programme.
- It is a nuclear capable missile.

Integrated Guided Missile Development Program

- The Integrated Guided Missile Development Program (IGMDP) was launched in 1983 to develop five missile systems in the country viz. Trishul, Akash, Nag, Prithvi and Agni-I (intermediate-range surface-to-surface missile).
- In 1990s, the program was expanded to develop the long range Agni Missile, Sagarika (ballistic missile), Surya (medium-range version of the Agni ballistic missile) and Dhanush (naval version of the Prithvi).

4.5. MYANMAR NSCN-K CEASEFIRE PACT

Why in News?

 Home Secretary indicated the India may ask the Myanmar to revoke ceasefire pact with the National Socialist Council of Nagaland-Khaplang (NSCN-K).

More on News

- Myanmar is the safe sanctuary for various insurgent groups
- Gol will use the diplomatic platform to supress the insurgent activity.
- The NSCN-K has a ceasefire agreement with Myanmar thereby aggravates the ground based insurgent activity in the region.
- The insurgent groups have formed a network on both sides of the border, to smuggle arms and other anti-India activities.

Naga Movement

- Started way back in 1918 by the Naga Club.
- In 1973 Sixteen Point Agreement and creation of Nagaland was not accepted by the Naga people this is because Naga inhabited areas was left outside the new state.

National Socialist Council of Nagaland-Khaplang (NSCN-K)

- It is a banned insurgent organisation of North-East area
- Carrying on an armed struggle to secession from Indian sovereignty and establish a People's Republic of Nagaland
- Opposed the Shillong Accord of 1975 signed by the then NNC (Naga National Council) with the Indian government.
- Split into two factions namely the NSCN (K) led by SS Khaplang, NSCN (IM) led by Isak and Muivah in 1988.
- Primary objective is the establishment of a Great Nagaland comprising of the Naga dominated areas.
- Active in eastern parts of Nagaland, Changlang districts of neighbouring Arunachal Pradesh and Mvanmar.
- It has been asserting a distinct ethnic identity and demanding an independent homeland of Greater Nagalim (integration of Naga inhabited areas in Assam, Arunachal and Manipur).

Naga Peace Accord of 2015

- A framework agreement was signed between the National Socialist Council of Nagalim-Isak-Muivah [NSCN (IM)] and the Government of India on August 3, 2015.
- The leadership of NSCN (IM) has accepted to alter goals from complete sovereignty.
- Framework for grant of greater autonomy to the Naga inhabited areas outside of Nagaland through the establishment of autonomous district councils.
- Likely adoption of **Non-territorial framework** would safeguards the culture, history and autonomy of Naga inhabited territories outside of Nagaland.

Way ahead

- The non-territorial resolution framework agreement would allay the apprehensions of Arunachal Pradesh, Assam and Manipur.
- It would enable these states to maintain their territorial status quo while only giving up developmental privileges in their Naga-inhabited areas to a new Naga non-territorial body.
- The Naga Peace Accord has implications for Manipur and it is important that these are understood and necessary policy interventions are considered.

4.6. PETYA RANSOMWARE CYBERATTACK

Why in News?

 The Indian Computer Emergency Response Team (CERT-In) recently issued an advisory about Petya or Petrwrap the latest in the series of ransomware attacks affecting computer systems across the world.

More on news

- The agency has asked users and organizations to apply patches to Windows systems as mentioned in Microsoft Security Bulletin MS17-010.
- Petya ransomware with worm-like capabilities is spreading.
- Spreading mechanism are similar to WannaCry attack such as EternalBlue, Psexec, Windows Management Instrumentation

CERT-In or ICERT (Indian Computer Emergency Response Team)

- Under Ministry of Information and communication technology.
- Collection, analysis and dissemination of information on cyber incidents
- Forecast and alerts of cyber security incidents
- Emergency measures for handling cyber security incidents
- Coordination of cyber incident response activities
- Issue guidelines, advisories, whitepapers, etc. relating to information security practices, procedures, prevention, response and reporting of cyber incidents.

NOTE: For more information refer MAY 16-31, 2017 Current Affairs Security Section.

4.7. AADHAAR AND NATIONAL SECURITY

Positive relationship between Aadhaar and national security

- Its inception in the wake of national security: Kargil Review committee to review the state of national security recommended issuing of "Multi-purpose National Identity" cards to villagers living in conflict zones and it was subsequently decided to extend this to all citizens.
- **Easy tracking** A person misusing biometrics or other data to undertake illegal transactions for activities such as terrorism, smuggling etc. will now be easier to track than earlier.
- Eliminate duplication of resources Thus freeing financial resources for developmental activities.
- **Robust social security** It enables a robust, efficient and fast system to provide social security to vulnerable sections and enables covering more people under its ambit.

However, government should ensure that national security risks do not get enhanced by databasing the whole population. Thus, it should strive to put an end to following issues

- Fear of mass surveillance Although targeted surveillance is essential for national security, mass surveillance undermines it. It may also lead to illegal tracking of individuals or identification without consent
- Issues of cyber security There is need of security from threat of cyber-attacks or identity/data theft such as on Bangladeshi bank account at Federal Reserve Bank of New York or wannacry ransomware which affected almost 150 countries.

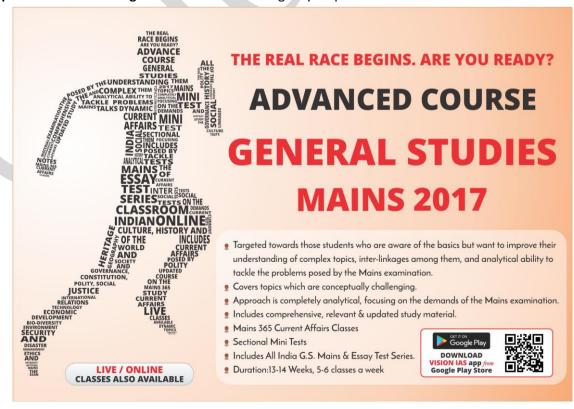
- **Issues in Financial security** Now that bank account, PAN card etc. are being linked with Aadhaar, sensitive financial information of individuals and companies may be exposed through breaches of UID database such as case of illegal storing of Aadhaar biometrics to conduct payment transactions by Axis bank, eMudra etc.
- Internal collusion An investigative website reported cards made without any proof of identification or address for petty bribes. This lets an illegal immigrant also get an Aadhar, defeating its purpose.
- Security features in physical Aadhaar card There is no hologram or digital signature but rather a QR code, which is just an image representation of a text. Thus, in its physical form, its coloured photocopy may look as good as the original.
- **Definition of national security** "National security" should be defined so that the blanket 'national security' clause in Section 32 of the Aadhaar Act is not misused.

Government has also undertaken various security measures in Aadhaar system such as:

- Purpose of context of any transaction is not known to Aadhaar system while undertaking any transaction.
- Every data packet is stored in encrypted form non-modifiable during transit thus making it completely inaccessible to any other system/persons.
- Encryption happens at the chip level of any digital device thus, making it impossible for anyone to breach.
- Disclosure of information cannot be done for any reason other than national security and a joint secretary-level officer shall record reasons in writing. A high-level committee is also established for oversight.
- Imprisonment up to three years for publishing UID data on portals.

Recommendations

- Concrete privacy laws It will increase trust of citizens in the system that they will not be subjected to any mass surveillance in name of national security. Also IT laws should be modernised to put liability on the company handling the data
- **Biometric to smart cards** It would eliminate the need for centralized biometric database, hence lowering the risk of being identified remotely or by foreigners or criminals etc.
- Include Aadhaar database in the definition of critical infrastructure (CI) it is important because it is internationally accepted that CIs are not to be attacked during peace time or armed conflict.
- App-security Security testing of all Aadhaar based applications as targeting applications such as BHIM etc.
- **Mobile-laptop security** Encouraging device level encryption for mobiles and laptops as well to ensure that personal information or transactions linked to Aadhaar is not targeted through hacking these
- Response team for emergencies Create an emergency response team to monitor attacks on Aadhaar.



5. ENVIRONMENT

5.1. UN OCEAN CONFERENCE

Why in News?

Recently, first United Nations Ocean Conference was held in New York.

Need

- With decades of unsustainable exploitation patterns, overcapacity,
 - unsuccessful governance interventions, climate change and rising ocean temperatures, ocean and its resources are facing various problems like acidification, coral bleaching and changing wildlife patterns.

Global Ocean Commission

- drives the climate and weather systems. Oceans have absorbed about half of the carbon emissions released due to human activities till now.
- SDG 14 specifies targets to manage and protect marine and coastal ecosystems
- Temperature pattern of oceans
- India has a coastline of more than 7,500 kilometres. Marine fisheries wealth in India is estimated at an annual potential of 4.412 million metric tonnes and annual wealth of Rs 65.000 crores.
- About 4 million people depend on fisheries for their livelihoods in India.
- India contributes about 6.3 per cent to the global fish production (both marine and riverine), the sector contributes to 1.1 per cent of the GDP and 5.15 per cent of the agricultural GDP.

It is an international initiative that was launched in 2013. It raises awareness and promotes action to address the degradation of the ocean and help restore it to full health and productivity. Its focus is on the high seas, the vast ocean areas that lie beyond the Exclusive Economic Zones (EEZs) of individual states. Therefore there is a need to focus on conservation of underwater resources. **SDG 14 TARGETS:**

14.1 By 2025, prevent and significantly reduce marine pollution of all BELOW WATER **14.2** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts 14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels **14.4:** By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing **14.5:** By 2020, conserve at least 10 per cent of coastal and marine areas 14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing 14.7 By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources

Outcomes

- It adopted a consensus of a 14-point Call for Action where the participating Heads of State affirmed their strong commitment to conserve and sustainably use our oceans.
- Topics that were discussed ranged from plastic pollution in the oceans and seas to ocean acidification and illegal fishing - which tie in with topics of alleviating poverty, ending hunger, promoting health, ensuring access to water and sanitation etc.
- International Solid Waste Association also announced a task force on marine litter in concert with the conference.

Recommendation

- Some of the recommendations to improve the oceanic ecosystem as decided by the Global Ocean Commission are:
 - o Ending harmful subsidies in seas.
 - o Checking illegal, unreported and unregulated fishing.
 - Establishing binding international safety standards and liability.

Way forward

- There is a need to address the existing gaps in regulation, policy areas, or implementation where governments so far have shown a deficit to deliver on sustainable fish stocks and healthy oceans.
- Some of the recommendations to improve the oceanic ecosystem as decided by the Global Ocean Commission are:
 - Ending harmful subsidies in seas.
 - o Checking illegal, unreported and unregulated fishing.
 - o Establishing binding international safety standards and liability.
- Meanwhile **The UN High Level Political Forum on Sustainable Development**, scheduled to meet in July 2017, will discuss the implementation of SDG 14 and evaluate outcomes of Ocean Conference.

5.2. NCR BECOMING A DEATH TRAP FOR BIRDS: REPORT

Why in News?

- Recently Amity University released a report for declining the population of Birds in migratory and endemic birds in south Haryana's Aravalli range.
- Report cited the survival rate as low as 5%. It is speculated that more than 70% of birds around this area have vanished.

Various reasons for Declining Birds Population

- Degraded level of air quality and water sources such as wetlands and ponds.
- Noise levels near urban areas of Manesar and other industrial locations.
- Non- ionized microwave radiations from mobile towers. Long-term exposure to low level Radio frequency radiation (RFR) has damaging effects on the nervous system, immune system and navigation capacity of birds.
- Combustion of unleaded petrol which produces compounds such as methyl nitrite which is highly toxic for insects that form a major part of young sparrow's diet.

Initiatives for Birds Protection

- World Sparrow day (20th march)
 - ✓ To generate awareness for protection.
- Indian Wildlife Act 1972
 - ✓ Provide legal protection against poaching to various birds such as Peacock, great Indian buster, sparrow etc.
- Environment ministry guidelines for Mobile towers radiation.
 - ✓ New towers must not obstruct the path of migratory birds.
 - ✓ Consultation of Forest department is mandatory for tower near the forest and zoo areas.
- Bonn convention
 - ✓ Intergovernmental treaty
 - ✓ India is signatory to convention
 - ✓ Under the aegis of **United Nation Environment Programme.**
- IUCN red data list
 - ✓ Shows the list of conservation status of Birds
 - ✓ BirdLife International maintain assessor of inventory.
- Widespread use of garden pesticides, vanishing open grasslands, rising air temperature.
- **Bird-unfriendly architecture** such as excess use of glass, paints and declining trend of making birds nesting place in houses.
- There is a **declining tradition of offering water and grains** to animals and birds. Hospitals dedicated to birds and wild animals are a unique feature in the NCR and its surrounding areas.
- **Crop residue burning** around Delhi in the summer and beginning of winter is a potential threat to avian livelihood.
- Lack of surveys to understand the lives of birds better and the link between natural resources, human beings and birds.

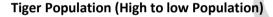
5.3. ORANG TIGER RESERVE

Why in News?

- Orang tiger reserve has seen an increase in tiger density from 17 in 2013 to 28 tigers in
- The count was revealed during phase IV of the all-India tiger estimation programme of the National Tiger Conservation Authority (NTCA).

More on the News

- All India tiger estimation is carried out once in every four years based on the Tiger Task Force approval.
- The tigers are monitored in tiger reserves through a special field protocol (Phase-IV monitoring) which involves recording day to day field evidence collating camera trap pictures of tigers Using information technology for improved surveillance (e-Eye system) using thermal cameras
- Collection of scat samples in difficult areas, besides using smart patrolling protocols like M-STrIPES in some reserves.
- THE NTCA REPORT ON STATUS OF TIGERS, CO-PREDATORS AND PREY IN INDIA, said the density in Kaziranga National Park was 12.72 per 100 sq. km., followed by Jim Corbett National Park (11) in Uttarakhand and Bandipur National Park (10.28) in Karnataka.
- Moreover, apart from North-East region tri-arc landscape sustain good grassland and good number of prey such as hog deer, wild boar and wild buffalo.
- In the fourth phase of monitoring Karnataka has witness the highest number of tiger population.



- 1. Karnataka: Bandipur, Nagarhole,
- 2. Uttrakhand: Jim Corbett
- 3. Madhya Pradesh: Kahna, Bandhavgarh, Pench
- 4. Tamil Nadu: Mudumallai, Annamalai 5. Assam: Kaziranga, Manas, Nameri 6. Kerala: Parambikulum, Periyar

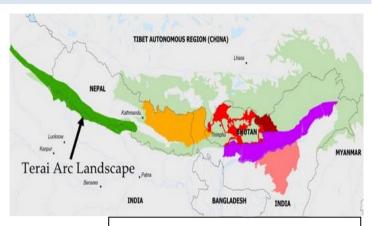
5.4. RISING POLLUTION IN VISAKHAPATNAM

Why in News?

• On world Environment day 5th June 2017, various NGOs and environment activist raised the concern about the rising pollution in Visakhapatnam.

More on Issue

- Visakhapatnam was given critically polluted cluster tag by the Central Pollution Control Board in the Comprehensive **Environment Pollution Index** notified in 2009.
- The city is facing all sorts of environmental issues. The possible challenge will be the quality and quantity of water and loss of green cover.



- Orang tiger reserve in Assam with the smallest core of 78.28 sg. km among 50 nationally protected areas.
- It Spread over Darrang and Sonitpur districts and notified in February 2016.
- Orang has the highest tiger density nationally,
- Kamlang Tiger Reserve in Arunachal is the 50th and latest to be notified.

Comprehensive Environmental Pollution Index (CEPI)

- Measured by Central Pollution Control Board
- Four Indices for CEPI
 - 1. Scale of Industrial activity Observed Value of Pollution in air
 - 2. Scale of exceedance of Environment quality.
 - 3. Health related statistics.
 - 4. Compliance status of Industry
- It is a rational number between 0 and 100

CEPI based on three methodology

A : Source	B: Pathway	C: Receptor
1.Presence of toxin	1.Level of	1.Impact on Human
	Exposure	Health
2.Scale of Industrial Activity		

• Located with industries spread over on three sides and the sea at one side, the city has spoon-shaped topography leaving no scope for people escape in the event of a major catastrophe.

Critically Polluted Cluster tag

- CEPI score of 70 or above is considered as critically polluted cluster tag.
- CEPI score between 60 and 70 is categorised as severely polluted industry.
- Ministry of Environment, Forest and Climate Change imposed a temporary moratorium on development of certain industrial project on the industrial region.

5.5. NILGIRI TAHR

Why in News?

 The first ever State-wide population estimation of Nilgiri tahrs, has put the total population of the endangered species at 1,420,

More on the News

- In 2013, Standing Committee of the National Board for Wildlife planned to reintroduce Nilgiri thar into Mudanthurai tiger reserve.
- Majority of number is 664 at the Eravikulam National Park in Munnar.
- Found in Eravikulam National Park, Adimali forest (Idukki), Silant Valley National Park, Mundanthurai Tiger Reserve.

Threat to Nilgiri Thar

- Temple tourism.
- The meat is highly priced. There is no protection for the animals in several habitats.



- State animal of Tamil Nadu.
- **Endemic**: Western Ghats from the Nilgiris to Kanyakumari.
- IUCN status: **Endangered status** (because number fewer than 2,500 mature individuals).
- Protected (Schedule I) by the Indian Wildlife (Protection) Act of 1972.
- Confined to a narrow belt of higher elevation of Shola Forest.
- Grasslands have been planted with eucalyptus, wattle and pine cultivation and plantations, including tea, which are not a natural habitat of Nilgiri thar.

5.6. INCREASE IN INDIA'S BIODIVERSITY

Why in News?

 Animal Discoveries 2016, New Species and Records, brought out by the Zoological Survey of India, and Plant Discoveries 2016, by the Botanical Survey of India reported that 313 species of animal and 186 of plants have been discovered from various areas of the country last year.

More on News

 Most discoveries were made in the Western Ghats (17%), followed by the Eastern Himalayas (15%), the Western Himalayas (13%), the Eastern Ghats (12%) and the west coast (8%)

Biodiversity Hotspot

- Term coined by Norman Myers
- **Conservational International** (American NGO) designates biodiversity hotspot.
- Criteria
 - ✓ Least 1,500 species of vascular plants (> 0.5% of the world's total) as endemics.
 - ✓ It has to have lost at least 70% of its original habitat.
- Total 36 biodiversity hotspots on Earth (4 in India)
- Critical Ecosystem Partnership Fund (CEPF) provides fund for management of hotspot.
- **CEPF** is joint initiative of l'Agence Française de Development, Conservation International, European Union, Global Environment Facility, Government of Japan, MacArthur Foundation and World Bank.
- Apart from this Manoharan's Burrowing Frog (FEJERVARYA MANOHARANI) was discovered from the Agasthyamala hills and Kadar Burrowing Frog (FEJERVARYA KADAR) was collected from the Vazhachal forests.

- New biodiversity species were from the four **biological hotspots** of the country
 - o **Himalaya:** Includes the entire Indian Himalayan region.
 - o Indo-Burma: Includes entire North-eastern India, except Assam and Andaman group of Islands
 - o **Sundalands:** Includes Nicobar group of Islands
 - Western Ghats and Sri Lanka: Includes entire Western Ghats.

Sundaland: The Sundaland hotspot covers the western half of the Indo-Malayan archipelago, an arc of some 17,000 equatorial islands, and is dominated by two of the largest islands in the world: Borneo (725,000 km²) and Sumatra (427,300 km²). It covers

- A small portion of southern Thailand (provinces of Pattani, Yala, and Narathiwat)
- Nearly all of Malaysia
- Singapore
- Brunei Darussalam
- Western half of the megadiversity country of Indonesia, including Kalimantan (Borneo, Sumatra, Java, and Bali)
- Nicobar Islands, India.

Botanical survey of India

- Established: 1890, HQ: Calcutta
- Evolved from Royal Botanic Garden: Sir George King
- Under Ministry of Environment Forest and Climate Change (MoEFCC).
- Undertaking intensive Plants surveys
- Collecting, identifying and distributing materials for scientific research.
- Custodian of authentic collections from Local, District, state and national Flora.

Zoological survey of India

- Established: 1916, HQ: Calcutta
- Evolved from Asiatic Society of Bengal and Zoological Section of the Indian Museum: Sir William Jones.
- Under Ministry of Environment Forest and Climate Change.
- Exploration, Survey, Inventorying and Monitoring of faunal diversity in various States, Ecosystems and Protected areas of India.
- Periodic review of the Status of Threatened and Endemic species.
- Preparation of Red Data Book, Fauna of India and Fauna of States.

5.7. GREEN BUILDING RATING SYSTEM

Why in news?

To promote construction of environment-friendly buildings, Rajasthan government has adopted the green building rating system developed by the Indian Green Building Council (IGBC), which is part of the Confederation of Indian Industry (CII).

Significance

- Lays emphasis on checking exploitation of natural resources in the construction of buildings.
- Ensure environment-friendly construction
- It comprises a predefined set of criteria relating to the design, construction, and operations of green buildings.

Three primary Green building rating agencies in India

Green Rating for Integrated Habitat Assessment (GRIHA)

Confederation of Indian Industry (CII)

- Non-government, not-for-profit, industryled and industry-managed organization.
- Working closely with Government on policy issues.
- The CII theme for 2017-18, India Together: Inclusive. Ahead. Responsible
- Membership: Any Firm in India engaged in manufacturing activity or providing consultancy services.

Conventional Methods of Green building

- Homes with baked red colour roof tiles and clay.
- Rural India use of naturally available materials like clay, wood, jute ropes, etc.
- Developed by TERI (The Energy and Resources Institute) and the Ministry of New and Renewable Energy.
- Rating criteria (1) Site selection and site planning, (2) Conservation and efficient utilization of resources, (3) Building operation and maintenance, and (4) Innovation.

Indian Green Building Council (IGBC)

- The vision of the council is, "To enable a sustainable built environment for all and facilitate India to be one of the global leaders in the sustainable built environment by 2025".
- The council offers a wide array of services which include developing new green building rating programmes, certification services and green building training programmes. It also organises Green Building Congress, its annual flagship event on green buildings.

• All the stakeholders of construction industry comprising of architects, developers, product manufacturers, corporate, Government, academia and nodal agencies participate in the council activities through local chapters.

Bureau of Energy Efficiency (BEE)

- Statutory body under Ministry of Power.
- Mandate under Energy conservation act 2001; regulatory and promotional functions.
- Developed the Energy Performance Index (EPI).
- Buildings rating based on a 1 to 5 star scale.

5.8. NEW BIODIVERSITY AREAS IN GOA

Why in News?

 Recently, BirdLife International has recognised three new sites in Goa as hotspots for protection, taking the total to 7. The sites have been added to their list of "Important Bird and Biodiversity Areas".

More on news

- New sites: Bondla Wildlife Sanctuary, Navelim Wetlands and Netravali Wildlife Sanctuary.
- Goa earlier had 4 recognised biodiversity areas: Bhagwan Mahavir Wildlife Sanctuary and Mollem National Park, Carambolim Wetlands, Cotigao Wildlife Sanctuary and Mhadei Wildlife Sanctuary.
- The updated list has been published by the Bombay Natural History Society
- Goa harbours a good population of the lesser adjutant and the Nilgiri wood pigeon.
- Bird's biodiversity is directly correlated with healthy wetland.
- Site under **Important Bird and Biodiversity Area** does not ensure that the site gets legal protection or becomes inaccessible to people.

Bird Life International

- UK based Global partnership of Conservation organisations.
- Identify: Important Bird and Biodiversity Areas
- Each BirdLife Partner is an independent environmental not-for-profit, or NGO.
- Publishes a quarterly magazine, World Birdwatch.
- Manage Red List of Birds for IUCN.

Bombay Natural History Society (BNHS)

- Non-governmental organization in India engaged in conservation research
- Collaborated with technology company Accenture to create Internet of Birds.
- Internet of Birds: online tool for birdwatchers that identifies birds based on their photos

5.9. AMEENPUR LAKE: THE FIRST BIODIVERSITY HERITAGE SITE IN THE COUNTRY

Why in news?

Ameenpur Lake was declared a 'Biodiversity Heritage Site' by Telangana government in Nov 2016, under the Biological Diversity Act 2002 and the Telangana State Biological Diversity Rules 2015. It has become the <u>first</u> water body in the country to be declared a Biodiversity Heritage Site.

Lesser Adjutant

- IUCN status: Vulnerable
- Found in freshwater wetlands in agricultural areas, and coastal wetlands including mudflats and mangroves (Western Ghats and Himalaya)
- Threat: felling of colony nest-trees, killed for meat and eggs, spread of water hyacinth.

Nilgiri Wood Pigeon

- IUCN status: Vulnerable
- Found in moist evergreen, semi-evergreen forest, and moist deciduous forest (Western Ghat and Nandi Hill)
- Threat: hunted for food and sport, shifting cultivation, collection of timber
- Projects such as hydropower plants and wind energy farms.

Biodiversity Heritage Site (BHS)

- These are areas of biodiversity importance, which harbour rich biodiversity, wild relatives of crops, or areas, which lie outside the protected area network. The purpose is not to cover the already designated protected areas such as national parks and wildlife sanctuaries.
- Section 37 of the Biological Diversity Act for notification of BHS by State governments in consultation with local bodies.

Features

- It is located on the western fringes of Hyderabad in Telangana state.
- It is a man-made lake and was constructed during the reign of Ibrahim Qutb Shah, who ruled the kingdom of Golconda between 1550 and 1580.

Benefits

The lake attracts a large number of migratory and resident birds. However it has been facing problems of encroachment, discharge of industrial pollutants, garbage dumping etc. The 'Biodiversity Heritage tag will enable better conservation of the lake. The lake will now be managed by a locally constituted Biodiversity Management Committee and is eligible for funding for upkeep as well as its protection.

5.10. HARNESSING THE SOLAR SPECTRUM

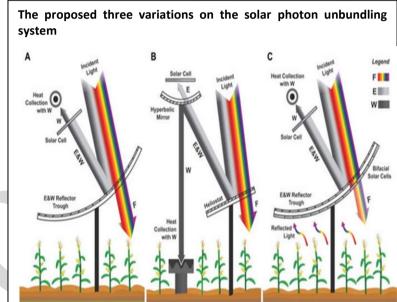
Why in News?

• In July 2017, Natural resource researchers of Washington University and Scientific Reports advocated the

use of solar energy in integrated way to solve the triple problem of food, energy and water.

Need

- Increase in population, coupled with rising per capita income and associated change in consumption habits, will put unprecedented stress on food, energy and water resources.
- In current practices, much of this spectrum is wasted because all of the sunlight falling on a given spot is used for one purpose: agriculture, energy production or water purification.
- Conventional photovoltaic panel casts a shadow and dramatically reduces plant growth and crop yield.



- The new approach would instead use the same land mass for all three purposes
 - Through innovative technologies.
 - Split the spectrum into three segments.
- The proposed photovoltaic designs
 - o Transmit photons responsible for plant growth.
 - Some photons can help generate electricity
 - Remaining photon collect heat for energy recovery and water purification.

5.11. RESCUE WARD FOR INJURED WILDLIFE

Why in news?

 Recently, Rajasthan government has set up rescue wards in rural areas of Jodhpur for wildlife of Thar Desert.

Rescue wards

 These will provide quick treatment to animals injured in

Bishnoi Community

- Followers of Bishnoism Started in 1485 AD by Saint Guru Jambheshwar
- Live in western Rajasthan and environment conservation is their cultural part.
- Amrita Devi bishnoi: Early Chipko Movement of 1730 AD. (Died of protecting Khejri tree)
- Amrita Devi Bishnoi Wildlife Protection Award by Environment Ministry
- They do not fell trees. They only collect dead wood.
- Oppose to their religious tradition of cremating the dead to save firewood.
- Do not believe in unnecessary rituals, idol-worship, and caste system.

road accidents, dog bites and fights.

- Thar Desert has witnessed 60% mortality because of lack of transport.
- This has led to the depletion of wildlife, mainly chinkaras (Indian gazelles)
- The Forest Department's move to set up 17 rescue wards has come as a much-needed support to the **Bishnoi community** of western Rajasthan.
- Bishnois risk their lives to save gazelles from poachers and transport injured animals to Jodhpur.

5.12. 30 NEW SMART CITY ANNOUNCED

Why in News?

• The Ministry of Urban Development (MoUD) announced the new batch of 30 smart cities at a National Workshop on Urban Transformation.

- It also launched a liveability index which will rank the country's 116 major cities on the basis of the quality of life they offer.
- Rs 500 crore were disbursed as incentive to 16 states that performed well in implementing urban reforms during 2016-17.
- Andhra Pradesh topped the list with the highest score in implementing urban schemes, followed by Odisha, Jharkhand, Chattisgarh and Madhya Pradesh.
- The reform incentive fund will be increased to Rs 10,000 crore for the next three years to promote next generation urban reforms.



What is Smart City?

• There is no universal definition and conceptualisation depends upon the level of development, willingness to change, reform and aspiration of city

development.

 It contain a wish list of some aspiration such as highly advanced in terms of overall infrastructure, sustainable real estate, and communications and market viability.

 Smart City would revolve around "Smart Solution".

More on News

- Special focus on sectors like e-governance, energy management, waste management, water management, infrastructure development (roads, rails) and other projects such as establishment of skill development centres, tele-education services and trade centres.
- Cities are free to formulate their own concept, vision, mission and plan (proposal) for a Smart City that is appropriate to its local context, resources and levels of ambition.
- SCM also converges with other government flagship programmes such as the Swachh Bharat Mission (SBM) and AMRUT.

What is City Liveability Index?

- A set of indicators to assess the liveability standards in cities.
- It will measure the quality of life in 116 major cities including capital cities and those with population over one million.
- Cities will be assessed on a comprehensive set of 79 parameters
- Marks scored will decide the quantum of incentive.
- Divided into 4 main spheres, weightage, components

4 Mains	Weightage	Components
Sphere	(Percentage)	
Social	20	Healthcare, Education
		etc.
Institutional	30	Governance, Tax,
		Audit, etc.
Economic	5	Finance, etc.
Physical	45	Water, energy, waste
		treatment etc

 NITI Aayog is also in the process of formulating an "urban transformation index" for cities across the country. • The key difference between AMRUT and SCM is that cities may take up the funds for core infrastructure development for the full city under the AMRUT programme and choose areas for development under the Smart City Mission.

5.13. MENACE TO FARMER BOON TO FOREST

Why in News?

 Tamil Nadu government has planned to allow Forest Department personnel to cull the wild boar for a limited period of time.

Issue Involved

- Ecologists warn that culling of wild boar will harm biodiversity
- Wild boars: Scavenger in food chain
- Adverse effect on some animals because it is important prey for carnivorous animals.
- Furrowing wild boars ensure germination of seeds in the forest area.

What is vermin?

- Any animal which poses a threat to human and their livelihood especially farming, can be declared Vermin under Schedule V of Wildlife Protection act 1972.
- States can send a list of wild animals to the Centre requesting it to declare them vermin for selective slaughter.
- Wildlife Protection Act 1972, empower every State's Chief Wildlife Warden for culling.
- Wild boars, nilgai and rhesus monkeys are protected under Schedule II and III, but can be hunted under specific conditions.
- However Wild boars are among the most significant causes of losses that farmers face. They devour tapioca, bananas, rice and oil seeds.

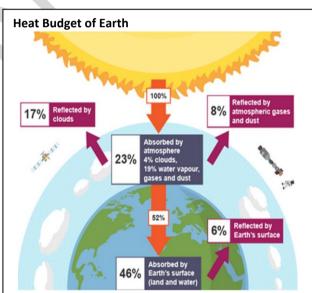
5.14. CLIMATE CHANGE: RAINFALL IN TROPICAL REGION

Why in News?

 A new NASA study has warned that the amount of rainfall in the Earth's tropical regions will significantly increase as our planet continues to warm.

Issue Involved

- Rainfall is not just related to the clouds available to make rain but also to Earth's energy budget (Heat Budget) incoming energy from the Sun compared to outgoing heat energy.
- High-altitude tropical clouds trap heat in the atmosphere. If there are fewer of these in future, the tropical atmosphere will cool.
- It appears that the atmosphere would create fewer high clouds in response to surface warming.
- It would also increase tropical rainfall, which would warm the air to balance the cooling from the high cloud shrinkage.
- When water evaporates into water vapour here on Earth's surface and rises into the atmosphere, it carries with it the heat energy that made it evaporate.
- In the cold upper atmosphere, when the water vapour condenses into liquid droplets or ice particles, it releases its heat and warms the atmosphere.
- It puts the decrease in high tropical cloud cover in context as one result of a planet-wide shift in large-scale air flows that is occurring as Earth's surface temperature warms.
- These large-scale flows are called the atmospheric general circulation, and they include a wide zone of rising air centred on the equator.
- Observations over the last 30 to 40 years have shown that this zone is narrowing as the climate warms, causing the decrease in high clouds.



5.15. SLOW PROGRESS IN ACHIEVING GREEN GROWTH

Why in News?

In June 2017, OECD released a report titled "Green Growth Indicators 2017" highlighting the slow progress in achieving the Green Growth.

What is Green Growth?

- lt is fostering economic growth and development while ensuring the natural assets continue to provide the resource environment services on which our well-being relies.
- Green Growth is measured by Green Growth Indicators covering everything from land use to CO2 productivity and innovation.

Highlights of report

- The BRIICS have a higher average share of renewables at 14.8% than OECD countries at 9.6%, but the share has dropped in the BRIICS since 1990.
- China and the US extract the most non-energy raw materials followed by India and Brazil (mostly biomass), and South Africa and Canada (mostly metals).
- Urban areas are growing rapidly, even in some already highly urbanised countries, and across the OECD built-up areas are growing faster than populations.
- Air pollution remains dangerously high. Less than one in three OECD countries meet WHO air quality guidelines for fine particulate matter and pollution levels are high and rising in China and India.
- About 90% of green technologies originate in OECD countries, but the contributions of China and India are rising fast.
- Countries are making more use of environmentrelated taxes, but their contribution to total tax revenue has declined since 1995.

Steps taken by India for Green Growth

Research

An Initiative on Green Growth and **Development** in India is a collaborative project Global Green Growth Institute (GGGI) and The Energy and Resources Institute (TERI).

- (South Korea) based organization.
- research work.
- Conference on Sustainable Development.
- cooperation.

TERI (The Energy and Resources Institute)

management, Sustainable agriculture, Climate resilience.

Mission

✓ The National Mission for Green India is one of the eight Missions outlined under the National Action Plan on Climate Change (NAPCC).

Infrastructure

- ✓ Green Highways (Plantation, Transplantation, Beautification & Maintenance) Policy.
- Emphasis on green infrastructure in **Smart Cities Mission**.

Tax and other measures

- ✓ Excise taxes on petrol and diesel have escalated by over 150 percent since 2014 this is considered as a de facto carbon tax.
- ✓ The coal cess which is, one-fifth the cost of mining coal.
- Renewable purchase obligations on all electricity distribution companies and producers.

Green Growth Indicators 2017

Carbon and energy productivity

Resource productivity

Multifactor productivity

Biodiversity and ecosystems

Technology and innovation

Prices and transfers

Environmental goods and services

Headline indicators

Environmental and resource productivity

Natural asset base

Renewable and non-renewable stocks 4. Natural resource index

1. CO₂ productivity

5. Changes in land cover

2. Non-energy material productivity

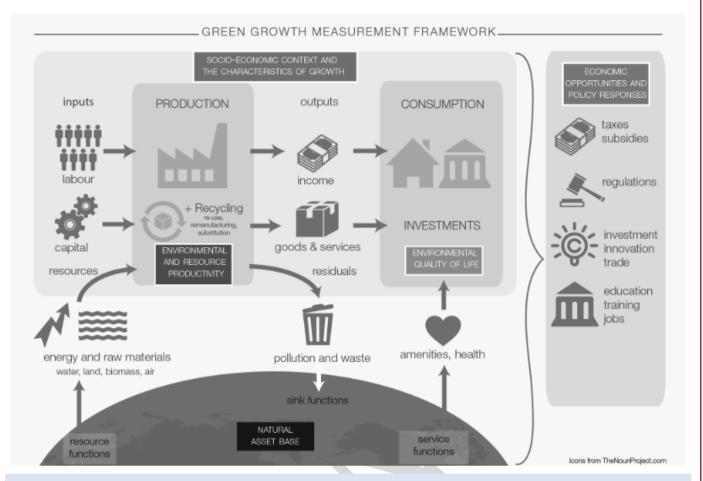
3. Environmentally adjusted multifactor productivity

6. Population exposure to air pollution (PM_{2.5})

Placeholder: no indicator specified

- Seoul inter-governmental
- India is **not founding member** but associated with
- Established in 2012, at the Rio+20 United Nations
- The work with UNFCCC provides a framework for

- A research institute for sustainable development of India and the Global South.
- Focus area clean energy, Water management, Pollution



5.16. MAHARASHTRA HC: MAN-EATER TIGER

Why in news?

The Nagpur bench of the Bombay high court on Thursday quashed a shoot-at-sight order against a tigress of Chandrapur's Brahmapuri forest suspected of killing two persons, dubbed as a "man-eater".

About the judgement

- The petitioner argued that the 2 deaths caused by the tigress occurred in the reserved jungle/ buffer zone, where humans cannot enter normally. Hence, the tigress should not be labelled as a man-eater
- The court observed that the order was absolutely illegal and "it was passed without following the due process of law and is in violation of guidelines issued by the National Tiger Conservation Authority (NTCA).
- The division bench of justices also castigated the forest authorities for their "casual and callous" approach on a serious issue of human safety and the tiger conservation.

The NTCA guidelines say that

- Under no circumstances tiger should be killed unless it is habituated to human death
- Elimination of tiger as "man-eater" should be the last resort after exhausting all the options to capture
- Principal Chief Conservator of Forests should record reasons in writing before declaring a tiger as man-eater
- Identity of the animal must be obtained through a committee constituted for the purpose, through camera trappings or direct sighting or pug impressions, besides collecting pieces of hair/ scats for DNA profiling.

5.17. ENERGY CONSERVATION BUILDING CODE-2017

Why in news?

Recently, Minister of Power launched the Energy Conservation Building Code 2017 (ECBC 2017).

Background

- ECBC was initially developed by the Govt. of India for new commercial buildings on 27th May 2007.
- ECBC sets minimum energy standards for commercial buildings having a connected load of 100kW or contract demand of 120 KVA and above.
- They are voluntary in nature and have been accepted by 22 states with their own modifications to the codes.

More about the Codes

- It was developed by BEE with technical support from United States Agency for International Development (USAID) under US-India bilateral Partnership to Advance Clean Energy Deployment Technical Assistance (PACE-DTA) Program.
- ECBC 2017 sets parameters for builders, designers and architects to integrate renewable energy sources in building design with the inclusion of passive design strategies.
- The code aims to optimise energy savings with the comfort levels for occupants, and prefers life-cycle cost effectiveness to achieve energy neutrality in commercial buildings.
- In order for a building to be considered ECBC-compliant, it would need to demonstrate minimum energy savings of 25%.
- Additional improvements in energy efficiency performance would achieve higher grades like ECBC Plus or Super ECBC status leading to further energy savings of 35% and 50%, respectively.



6. SCIENCE AND TECHNOLOGY

6.1. GSLV MK III

Why in News?

 Recently, GSLV MK III D1 rocket (GSAT 19) was launched successfully from Satish Dhawan Space Centre, Sriharikota, Andhra Pradesh.



Need

 Currently ISRO's geosynchronous satellite (GSLV MK II) can carry satellites weighing only two tonnes.

Background

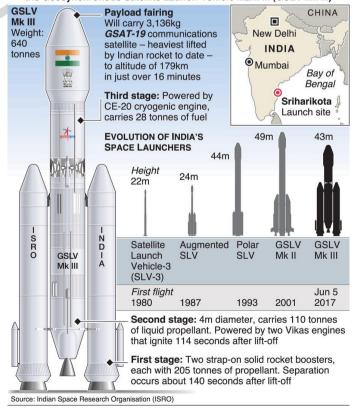
The first experimental flight of LVM3, the LVM3-X/CARE mission lifted off from Sriharikota in 2014 and successfully tested the atmospheric phase of flight. Crew module Atmospheric Reentry Experiment was also carried out in this flight. This was the first testing of the indigenous cryogenic engine.

Features

- It is the heaviest rocket to be launched from India till now. It can lift payloads of up to 4000 kg to Geosynchronous Transfer Orbit and 10000 kg into the Low Earth Orbit.
- It is a three stage vehicle with an indigenous cryogenic upper stage engine (C25). It has been designed to carry heavier communication satellites into the Geosynchronous Transfer Orbit.

India launches most powerful rocket

India has launched its most powerful homegrown rocket to date – the Geosynchronous Satellite Launch Vehicle Mark III (GSLV Mk III)



- Apart from the upper cryogenic stage, the vehicle has **two solid strap-on motors (S200) and a core liquid booster (L110)**.
- For the first time there will be **no transponders on the satellite**. It will be using a new way beaming data down **using multiple frequency beams**. It is therefore called **"a high through put satellite"**.
- For the first time, it would have indigenously made Lithium ion batteries.
- This spacecraft would have advanced technologies including miniaturized heat pipe, fibre optic gyro, Micro Electro-Mechanical Systems (MEMS) accelerometer.

Significance

- It would boost India's communication resources given the fact that there has been a boom of the communication industry in India and there is a high demand for transponders in space related to it.
- It would also save foreign exchange reserves of the government provided that presently the heavier Indian communication satellites are launched from the French Guinea.
- It would also act as a carrier to travel people/astronauts into space.
- The indigenous components of the rocket would help India to become **self-reliant** in terms of technology. The indigenous batteries developed can also be used to **power electric vehicles in India**.
- It would also be a foreign exchange earner with foreign customers using the services of GSLV MK III provided by ISRO.
- The cost of launches would also be reduced because of introduction of the cryogenic engine.

Way forward

• Indigenous cryogenic engine is the first step to expand the capacity of the communication systems of India. Now India should focus on expanding the technology to carry out a payload of about 6-7 tonnes (many developed countries have this capacity). This would help in improving the telecommunication density in India with the rising aspirations of the population of the country.

6.2. ANTIBIOTIC RESISTANCE: WHO REVISES ANTIBIOTICS PROTOCOL

Why in news?

WHO has revised antibiotics protocol to curb antibiotic resistance. This is the biggest revision of the antibiotics section in the essential medicines list (EML)

Details

WHO has divided the drugs into three categories — **access, watch** and reserve.

- The 'access' category includes commonly used antibiotics.
 They will be available at all times as treatment for a wide range of common infections.
- The 'watch' group covers antibiotics that are recommended as first or second choice treatment for a small number of infections. Prescription of these drugs should be reduced to avoid further development of resistance.

Essential medicines are the medicines that "satisfy the priority health care needs of the population".

These are the medications to which people should have access at all times in sufficient amounts. The prices should be at generally affordable levels.

The WHO publishes Model List of Essential Medicines (EML) every two years since 1977. It is used by countries to develop their own local lists of essential medicine.

• The 'reserve' category includes antibiotics that are considered last-resort options, and used only in the most severe circumstances such as for life-threatening infections due to multidrug-resistant bacteria.

Importance

• The new list will help health system planners and doctors ensure that people who need antibiotics have access to them, and they get the right one, so that the problem of resistance doesn't get worse.

Antibiotic resistance

What it is? Antibiotics are medicines used to prevent and treat bacterial infections. Antibiotic resistance occurs when bacteria change in response to the use of these medicines.

Why it occurs? Antibiotic resistance occurs naturally, but misuse of antibiotics in humans and animals is accelerating the process. Poor infection prevention and control further accelerate it.

Impact

- Threats to global health, food security, and development
- A growing number of infections such as pneumonia, tuberculosis etc– are becoming harder to treat as the antibiotics used to treat them become less effective.
- longer hospital stays, higher medical costs and increased mortality.

How to deal with it?

- Individuals to use antibiotics only when prescribed. Prevent infections by maintaining hygiene.
- Health professionals to prescribe antibiotics only when they are needed.
- Agriculture sector: Only give antibiotics to animals under veterinary supervision, Vaccinate animals to reduce the need for antibiotics and use alternatives to antibiotics when available.
- Situation in India

India faces a twin challenge of overconsumption of antibiotics breeding drug-resistant bacteria while ensuring that the poor and vulnerable have easy access. WHO's report states that anti-biotic resistance may cause rise in death of Indians to 20 lakhs per year by 2050.

Steps taken by India

- To strengthen the surveillance of antimicrobial resistance (AMR) in the country, Indian Council of Medical Research (ICMR) has set up a National Anti-Microbial Resistance Research and Surveillance Network (AMRRSN) to enable compilation of National Data of AMR at different levels of Health Care.
- The Drugs and Cosmetic Rule, 1945 were amended in 2013 to incorporate a new Schedule H1. These will be sold on prescription only. They are also marked with Red Line (Red Line Campaign).
- Government has formulated a National Action Plan to combat Antimicrobial Resistance in 2017 and National Policy for containment of antimicrobial resistance in 2011.

6.3. CHILD-FRIENDLY HIV DRUG GETS GOVERNMENT NOD

Why in news?

The Central Drugs Standard Control Organisation (CDSCO) has registered the child-friendly and heat-stable oral pellet formulation of the HIV drug lopinavir/ritonavir (LPV/r).

Why important?

The lack of child-friendly HIV formulations is a major reason for a large treatment gap between adults and children. Due to this gap paediatric HIV is considered neglected disease. The registration of the pellets is a positive sign as the needs of children are being addressed.

Related

The **Central Drugs Standard Control Organization** (CDSCO) is the national regulatory body for Indian pharmaceuticals and medical devices under Ministry of Health and Family Welfare.

Major functions include: Regulatory control over the import of drugs, approval of new drugs and clinical trials, meetings of Drugs Consultative Committee (DCC) and Drugs Technical Advisory Board (DTAB), approval of certain licences as Central Licence

WHO (World Health Organization)

- It is a specialised agency of UN concerned with international public health.
- It was established on 7 April 1948, headquartered in Geneva, Switzerland. Its predecessor was the Health Organization, an agency of the League of Nations.
- The WHO publishes World Health Report.

WHO "Global action plan on antimicrobial resistance" 2015: it has 5 strategic objectives:

- To improve awareness and understanding of antimicrobial resistance.
- To strengthen surveillance and research.
- To reduce the incidence of infection.
- To optimize the use of antimicrobial medicines.
- To ensure sustainable investment in countering antimicrobial resistance.

6.4. CRYPTOCURRENCY

Background: China, South Korea and Japan have adopted use of bitcoins with regulations.

What are cryptocurrencies?

- A cryptocurrency is a digital or virtual currency that uses cryptography for security. Hence it is difficult to counterfeit. It is not issued by any central authority, rendering it theoretically immune to government interference or manipulation.
- The first cryptocurrency to capture the public imagination was Bitcoin, which was launched in 2009 by an individual or group known under the pseudonym Satoshi Nakamoto. Bitcoin's success has spawned a number of competing cryptocurrencies, such as Litecoin, Namecoin and PPCoin.

Factors responsible for growth of cryptocurrencies

- The rise of computational power that allows algorithms to programmatically issue currencies
- Distrust towards governments that can idiosyncratically debase currency or even demonetise at will
- Scarcity of safe assets to store wealth over the long term.

Benefits	Drawbacks
 Easier to transfer funds with minimal processing fees. It uses block chain to store an online list of all the transactions that have ever been conducted with them. This provides a data structure that is safe from hackers. block chain might have important uses in technologies like online voting and crowdfunding. It is difficult to counterfeit 	digital cryptocurrency balance can be wiped out by a computer crash. • Since prices are based on supply and demand, the rate at which a

Acceptability: Since 2014, the American tax authorities have treated cryptocurrencies as 'property' subject to appropriate capital gains tax rate. China, South Korea and Japan have adopted use of bitcoins with regulations.

Indian stand: Over the years, India had ignored cryptocurrencies. However, in April this year, the government has constituted an inter-disciplinary committee to study regulatory frameworks for cryptocurrencies.

Way forward

The government should learn, and innovate based on what China, South Korea, and Japan have done: enshrine minimum capital requirements and make potential criminal activity difficult.

6.5. PLANTS: DROUGHT STRESS

Background

Drought stress is the most prevalent environmental factor limiting crop productivity, and global climate change is increasing the frequency of severe drought conditions. Greater understanding of how plants endure drought stress would thus lead us to help increase crop yields when drought strikes.

Plants have evolved to endure drought stress with morphological, physiological, and biochemical adaptations:

- 1. **Drought resistance (DR)** is a broader term applied to plant species with adaptive features which enables plants to escape, avoid and tolerate drought stress.
- 2. **Drought escape (DE)** is the ability of a plant species to complete its life cycle before the onset of drought. Thereby, plants do not experience drought stress, as they are able to modulate their vegetative and reproductive growth according to water availability. Eg rapid plant growth during wet season and little growth during the dry season.
- 3. **Drought avoidance (DA)** involves the ability of plants to maintain relatively higher tissue water content, despite the water scarcity in the soil (saving for a deficit day).

4. **Drought tolerance (DT)** involves the plant enduring low water content on its tissues through various adaptive traits.

There are at least **five ways in which plants develop above required traits** to fight drought stress:

- **Reducing the level of photosynthesis** by decreasing the leaf area (close and expose less) and slowing down the rate of photosynthesis.
- Regulating the action of the hormones present in the plant, particularly abscisic acid (or ABA). During drought stress, ABA moves from roots to leaves, helping them close the very small openings (called stomata) in them, which allow for entry and exit of gases (CO2, oxygen, water vapour), and reduce plant growth.
- **Controlling transpiration** (water release from the plant to the air) by closing the stomata, reducing water loss and reducing CO2 uptake.
- Changing the growth, size, shape and branching out of the roots.
- **Osmotic adjustment**. Here the pressure exerted by the contents of the cell against cell wall or membrane is maintained sufficiently tense for stiffness (with no breakdown). Botanists call this **turgor** (Latin for swelling).

These five processes are controlled and triggered by genes that express proteins and other molecules called transcription factors.

Transcription factors: are molecules that regulate (allow or stop) the expression of chosen genes into making the relevant protein molecules.

6.6. MILK ADULTERATION

Why in news?

A recent study on milk samples in Delhi found wide adulteration. In 2016 too, Union Minister for Science And Technology told the Lok Sabha that 68% of the milk sold did not conform to standards laid down by India's food regulator FSSAI (2012 report).

Adulteration: Most common harmful adulterants include starch, chlorine, hydrated lime, sodium carbonate, formalin and ammonium sulphate. Milk producers use these to scrimp on milk portions and prepare "synthetic milk" by mixing urea, caustic soda, refined oil and common detergents.

Why adulteration

- The consumption of milk and dairy products in India outstrips milk production
- Expensive and time taking tests to identify adulteration

Impact

- Adulterated milk is linked to a range of health hazards including food poisoning, gastrointestinal disorders, kidney failure and skin diseases, eye and heart problems, and cancer.
- Oxytocin triggers early puberty among girls, male breast etc.

Steps taken

- Focus on higher milk production and milk processing
- The Central Electronics Engineering Research Institute in Rajasthan has developed a new scanner that can detect adulteration in milk in 40 seconds and identify the adulterant.
- In the near future, GPS-based technology could be used to track the exact location where the milk supplied in the cold chain has been tampered with.

Related facts

- A majority of Indians are lactose intolerant i.e. they lack the gene that allows milk to be digested beyond childhood.
- **Neutralizers** are substances added to prevent curdling and increase the shelf life of milk. They could be added in the form of caustic soda, sodium bicarbonate and sodium carbonate.
- Oxytocin is banned but is still used to increase the productivity of cows and buffalos.

6.7. CITIZEN SCIENTISTS FIND COLD NEW WORLD NEAR SOLAR SYSTEM

Why in news?

A brown dwarf over 100 light years away from the Sun has been discovered using a new citizen science tool that helps astronomers pinpoint new worlds lurking in the outer reaches of our solar system.

Backyard Worlds project: It is a citizen science project and was launched in February 2017. The Backyard Worlds project lets anyone with a computer and an Internet connection flip through images taken by NASA's Wide Field Infrared Survey Explorer (WISE) spacecraft.

It aims to discover new brown dwarf stars and other low-mass stars, some of which might be among the nearest neighbors of our solar system.

Wide Field Infrared Survey Explorer (WISE): is a space telescope launched in 2009 by NASA to map the entire sky in infrared wavelengths. Its goal was to find objects that had not been imaged before, including very bright galaxies, very cold stars, and nearby asteroids and comets.

Citizen scientist concept

- Citizen science is the practice of public participation and collaboration in scientific research to increase scientific knowledge. Through citizen science, people share and contribute to data monitoring and collection programs.
- Citizen-science projects may include wildlife-monitoring programs, online databases, visualization and sharing technologies, or other community efforts.
- Examples: the Christmas Bird Count in USA and Canada, Asian Waterbird Census by Birdlife International in India

Brown dwarfs, sometimes called "failed stars", are spread throughout the Milky Way. They are strikingly similar to Jupiter. Scientists study their atmospheres in order to look at what weather on other worlds might look like.

6.8. IMD TO GIVE MALARIA, CHIKUNGUNYA ALERTS

Why in news?

The India Meteorological Department (IMD) is working on a forecasting system to give 15-day warnings on the likelihood of a malaria or chikungunya outbreak, over different regions.

Details

- It is part of a larger initiative by IMD to provide custom, weather-related information to cope with challenges of a global warming and its associated impact on weather.
- IMD's National Climate Centre in Pune is being reorganised to provide such climate services. These include five-day and 15-day forecasts of heat-waves, cold waves and, going ahead, disease outbreaks.

Importance

Global warming has led to extreme rainfall which leads to more instances of humid conditions and waterlogging that could precipitate vector-borne disease outbreaks. Advance warnings will help government to better prepare for outbreaks.

Related facts

- Average Indian temperatures had risen 0.86 C since 1901. But the average annual rainfall (about 120 cm) hadn't changed much.
- National Climate Centre in Pune is forecasts the monsoon and documents monsoon-related statistics.

The India Meteorological Department (IMD)

- 1. IMD established in 1875 and headquartered in New Delhi, is under the Ministry of Earth Sciences.
- 2. It is the principal agency responsible for meteorological observations, weather forecasting and seismology. IMD is also one of the six Regional Specialised Meteorological Centres of the World Meteorological Organization.

6.9. ISRO SET TO LAUNCH BACK-UP SATELLITE

Background

To keep India's regional navigation satellite system fully operational, the Indian Space Research Organisation (ISRO) is preparing to launch a back-up for IRNSS-1A that has been hobbled by the failure of the atomic clocks on board.

Details

- Replacing IRNSS-1A is needed as all the three rubidium atomic clocks on board had stopped functioning.
- IRNSS-1A is the first of the seven satellites comprising the Navigation Indian Constellation (NavIC).
- NavIC is a multi-purpose satellite-based positioning system.
- It has been designed to support vehicle tracking, fleet management, disaster management and mapping services besides terrestrial, marine and aerial navigation for India and its neighbourhood.

An **atomic clock** is a clock device that uses an electronic transition frequency of the electromagnetic spectrum of atoms as a frequency standard for its timekeeping element.

Atomic clocks are the most accurate time and frequency standards known, and are used as primary standards for international time distribution services, to control the wave frequency of television broadcasts, and in global navigation satellite systems such as GPS.

A **rubidium atomic clock** is a frequency standard in which a specified hyperfine transition of electrons in rubidium-87 atoms is used to control the output frequency. It is the most inexpensive, compact, and widely used type of atomic clock.

6.10. HYDERABAD TEAM GROWS MINIATURE EYES USING STEM CELLS

Why in news?

Researchers in Hyderabad based LV Prasad Eye Institute (LVPEI) have successfully grown miniature eye-like organs that closely resemble the developing eyes of an early-stage embryo. These were produced using induced pluripotent stem (iPS) cells.

Why important?

- Stem cells of a healthy eye have been used for restoring vision when only one eye is damaged. But when the damage is present in both eyes, the only way to restore vision is by using the healthy cells taken from a related or unrelated donor.
- Patients have to be on immunosuppressants lifelong when cells are transplanted from donors. However, immunosuppressants are not required when corneal cells grown using the patient's own skin cells are used for restoring vision.

Stem Cells: Stem cells are a class of undifferentiated cells that are able to differentiate into specialized cell types.

Commonly, stem cells come from two main sources: Embryos (embryonic stem cells) and Adult tissue (adult stem cells). Both are generally characterized by their potency, or potential to differentiate into different cell types. For eg: Pluripotent stem cells have the ability to differentiate into almost all cell types.

Induced pluripotent stem (iPS) cells: produced by genetically manipulating human skin cells to produce embryonic-like stem cells that are capable of forming any cell types of the body.

Importance

- Stem cells offer new potentials for treating diseases such as diabetes, and heart disease.
- To screen new drugs and to develop model systems to study normal growth and identify causes of birth defects.
- Study how an organism develops from a single cell and how healthy cells replace damaged cells in adult organisms

Immunosuppressants are a class of drugs that suppress the immune response through various mechanisms. In organ transplantation, they are used to prevent the body from either recognition or attacking the foreign organ

6.11. LIGHTNING OVER OCEAN IS STRONGER THAN OVER LAND

Background

Recent research from Florida Institute of Technology in the US, have confirmed that lightning can be much more powerful over the ocean than land.

Importance

• These findings suggest that people living on or near the ocean may be at greater risk for lightning damage if storms develop over oceans and move on-shore.

• It could inform how off-shore infrastructure and vessels are to be built to minimise the risk of superpowerful lightning bolts from thunderstorms formed over the sea.

Thunderstorm

A thunderstorm is a storm with lightning and thunder. It is produced by a cumulonimbus cloud, usually producing gusty winds, heavy rain and sometimes hail.

How does a thunderstorm form?

Three basic ingredients are required for a thunderstorm to form: moisture, rising unstable air, and a lifting mechanism to lift the air.

The sun heats the surface of the earth, which warms the air above it. As the air rises, it transfers heat from the surface of the earth to the upper levels of the atmosphere (the process of convection). The water vapor it contains begins to cool, releases the heat, condenses and forms a cloud. The cloud eventually grows upward into areas where the temperature is below freezing. As a storm rises into freezing air, different types of ice particles can be created from freezing liquid drops. When two ice particles collide, they grab some electric charge. Lots of these collisions build up big regions of electric charges to cause a bolt of lightning, which creates the sound waves we hear as thunder.

6.12. ASTROSAT RULES OUT AFTERGLOW IN BLACK HOLE MERGER

Background

- Based on findings of US-based LIGO group (gravitational waves emanating from the merger of black holes),
 Hawaii-based ATLAS group identified a fading glow from the part of the sky where these black holes were
 roughly estimated to lie. The group surmised that this was an electromagnetic (light based) afterglow
 emanating from the merger.
- In collaboration with the GROWTH (Global Relay of Observatories Watching Transients Happen) network of observatories, AstroSat team has concluded that this event is due to a gamma ray burst.
- A gamma ray burst is light emanating from a bursting star, that may lead to the formation of a black hole.

AstroSat

ASTROSAT is India's first dedicated multi wavelength space observatory. ASTROSAT observes universe in the optical, Ultraviolet, low and high energy X-ray regions of the electromagnetic spectrum, whereas most other scientific satellites are capable of observing a narrow range of wavelength band.

LIGO: LIGO is the world's largest gravitational wave observatory and a cutting edge physics experiment. LIGO exploits the physical properties of light and of space itself to detect and understand the origins of gravitational waves. Its mission is to detect gravitational waves from some of the most violent and energetic processes in the Universe. The data it will collect will have far-reaching effects on many areas of physics including gravitation, relativity, astrophysics, cosmology, particle physics, and nuclear physics.

GROWTH (Global Relay of Observatories Watching Transients Happen) network of observatories

- GROWTH is an international scientific collaborative project in astronomy studying the physics of fast-changing events in the cosmos like supernovae, neutron stars or black hole mergers, and near-earth asteroids. It is partnership of eleven universities and research institutions from US, India, Sweden, Taiwan, Japan, Israel and Germany.
- It continuously gathers data of cosmic transient events in the first 24 hours after detection to build a more complete picture and better understand the physical processes of their evolution.
- It jointly operates 17 observatories in the northern hemisphere. Girawali Observatory IUCAA in Maharashtra (near Pune) is part of this network.

POLAR project

POLAR is an international mission of China and European collaboration is dedicated to establishing whether the photons from Gama-ray bursts (GRBs) — thought to be a particularly energetic type of stellar explosion — are polarized.

6.13. A QUANTUM STEP TO A GREAT WALL FOR ENCRYPTION

Why in news?

As per some reports, China has combined satellite technology and quantum mechanics to transmit secret information over a thousand kilometres with such safety that any unauthorised attempt to decipher it would be immediately discernible.

Importance

The technology can help us in developing more secure platforms for banking transactions and other applications as well.

Quantum mechanics (QM): QM deals with sub-atomic particles viz electrons and photons. It is used in making products that benefit the real world viz integrated circuit chips and fibre-optic lines for global, instantaneous communication.

Quantum cryptography: It is a recent technique that can be used to ensure the confidentiality of information transmitted between two parties by exploiting the counterintuitive behavior of elementary particles such as photons. Quantum cryptography is different from traditional cryptographic systems in that it relies more on physics, rather than mathematics, as a key aspect of its security model.

6.14. 2017 BIO INTERNATIONAL CONVENTION

Why in News?

The Biotechnology Innovation Organization (BIO) BIO 2017 was held in San Diego, USA in June, 2017.

Details

The Indian delegation was led by Shri Y S Chowdary, Minister of State for Science & Technology and Earth Sciences.

- The minister informed that Indian Government had several prestigious schemes like Ramalingaswamy Fellowship; DST Inspire, DBT-Welcome Trust Fellowship and IYBA etc that facilitate the re-entry of Indian researchers working abroad into India who are desirous of pursuing post-doctoral research in the country.
- India Biotech Handbook 2017, showcasing the strengths of India's fast growing \$ 42 bn bio-economy was released.

Biotechnology Innovation Organization (BIO)

BIO is the world's largest trade association representing biotechnology companies, academic institutions, state biotechnology centers and related organizations across the United States and in more than 30 other nations. BIO members are involved in the research and development of innovative healthcare, agricultural, industrial and environmental biotechnology products.

The BIO International Convention, hosted by BIO since 1993, is the largest global event for the biotechnology industry and attracts the biggest names in biotech, offers key networking and partnering opportunities, and provides insights and inspiration on the major trends affecting the industry. The BIO International Convention helps BIO fulfill its mission to help grow the global biotech industry.

6.15. NASA FINDS 10 EARTH SIZED EXOPLANETS

Why in news?

NASA has revealed 10 new rocky, Earth-sized planets that could potentially have liquid water and support life.

Details

- This is the final catalog detailing exoplanet candidates and confirmations from Kepler's survey taken during the first four years (2009-13) observing part of the constellation Cygnus.
- The catalog suggests that about half of the exoplanets in our galaxy are either gaseous, with no

Kepler Mission

- Kepler is a space observatory launched by NASA to discover Earth-size planets orbiting other stars. It is named after astronomer Johannes Kepler, and was launched in 2009.
- The Kepler telescope detects the presence of planets by registering minuscule drops in a star's brightness that occurs when a planet crosses in front of it, a movement known as a <u>transit</u>.

Future missions

Other missions -- such as TESS, the Transiting Exoplanet Survey Satellite, in 2018 and the James Webb Space Telescope later on -- will continue the search for life beyond Earth.

surface, or have such a heavy atmosphere that life as we know it would not be possible.

Exoplanets

- Planets outside our solar system are called exoplanets. Most of these are part of star systems. There are some "rogue" exoplanets, which are not attached to any star system. The first exoplanet, 51 Pegasi b, was discovered in 1995.
- The search for exoplanets is also the search for alien life and habitable spaces beyond our star system.
- The exoplanets must orbit within a distance of their stars in which liquid water can exist on the planet's surface, receiving about as much sunlight as Earth. This distance is called the "Goldilocks" zone because it is neither too far or too close to the star that life becomes impossible.

6.16. NAG MISSILE

Why in news?

The Defence Research and Development Organisation (DRDO) has successfully test fired the **anti-tank missile** "Nag" in Rajasthan.

Details

The Nag missile is a **third generation** "fire and forget" anti-tank missile and can be **launched from land and air-based platforms.** It is equipped with highly advanced **Imaging Infrared Radar (IRR)** seeker and has integrated avionics technology in its arsenal.

• It is one of the five missile systems developed by the Defence Research and Development Organization (DRDO) under the integrated guided missile development programme (IGMDP). The four other missiles developed under this programme include **Agni**, **Akash**, **Trishul and Prithvi**.

6.17. HOTTEST PLANET IN UNIVERSE DISCOVERED

Why in news?

Scientists have discovered the hottest known planet, designated KELT-9b, located 650 light years from Earth.

Details

• It is Jupiter-like in size and orbits star KELT-9 every day and a half. It is warmer than most stars in the universe. It has a glowing gas tail like a comet. The tail is formed by evaporation of the planet due to intense ultraviolet radiation from the star it orbits.

Tidal Locking

Tidal locking is the name given to the situation when an object's orbital period matches its rotational period. A great example of this is our own Moon. The moon takes 28 days to go around the Earth and 28 days to rotate once around it's axis. This results in the same face of the Moon always facing the Earth.

• It is tidally locked to its star as the moon is to Earth. Hence, the day side of the planet is perpetually bombarded by stellar radiation. As a result, the planet is so hot that molecules such as water, carbon dioxide and methane cannot form there.

6.18. CARTOSAT 2 SERIES SATELLITE

Why in news?

ISRO has successfully launched its sixth CartoSat-2 series satellite. This is the second highest no of satellites (31 in total) launched by ISRO using a single rocket.

Details

 There are 30 other nano-satellites: 29 foreign and one Indian. With this launch, the number of foreign satellites launched by India has crossed 300. Cartosat satellites: The Cartosat series are earthobservation satellites in a sun-synchronous orbit. The imagery sent by satellite are useful for cartographic applications, coastal land use and regulation, utility management like road network monitoring, water distribution, land use maps, change detection to bring out geographical and manmade features and other Land Information System (LIS) and Geographical Information System (GIS) applications.

Nanosatellites or nanosats weigh between 1 kg and 10 kg.

• The Indian nano satellite, NIUSAT, belongs to Tamil Nadu's Nooral Islam University. It will provide multispectral imagery for agricultural crop monitoring and disaster management support applications

Importance

- The Cartosat-2 series satellites are extremely "agile". They can be programmed to take very specific pictures of very specific designated areas.
- This will give India's defence surveillance a major boost as the satellite can spot terrorist camps and even the bunkers in them.
- The launch will help India grab a slice of the global market for nano and micro-satellites, which is set to grow close to \$3 billion in the next three years.

6.19. WIND POWER THROUGH KITES

Background

The target for wind energy generation by 2022 is 60,000 MW while the present installed capacity is around 32,000 MW.

Wind energy is facing challenges: investments, land, competition from solar energy etc. However, these problems may be resolvable through the use of a new technology – scores of kites to generate wind energy.

Kite-driven power stations

The kites, which are light and controllable aerodynamic flying devices, are arranged in a formation at heights of around 750m or more, to harvest the strong and consistent winds available in that region of the atmosphere (wind velocity at those heights is twice that at the ground level) and thus generate low-cost energy.

Benefits

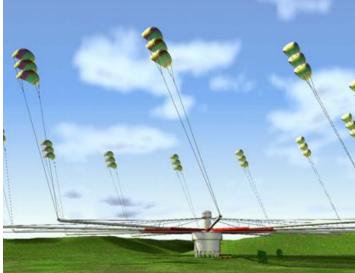
- Low cost of power generation: around 50 to 60 % less than from traditional wind farms.
- **Kite power systems are flexible.** They can be applied to single houses, remote areas and villages not yet connected to the power grid, for autonomous electricity production. They can also serve as huge power plants.
- Advantages over conventional turbines include negligible noise emission and bird hits, near invisibility, and ability to withstand storms.
- More environment-friendly as they do not require scarce metals.

Constraints

- Lightning could damage the small computer placed inside the kite.
- Given the height at which the kites would be flying, the location of these wind farms will have to be carefully planned so as not to interfere with or hamper the flight paths of aeroplanes.

Why important for India?

- Low cost technology will help in reducing financial burden
- Help in achieving INDCs by reducing GHG emissions
- Technology can be decentralized to lowest level, thus achieving the target of Power for All by 2019.



6.20. ANTARCTICA POLICY

number of times till Mains 2017 exam.

- India is drafting a dedicated Antarctica policy and a law that will likely be tabled in the winter session of the Parliament.
- The law is expected to have a clear policy on its activities such as infrastructure, research, tourism, etc. in the region.
- The draft law will also be in concurrence to the Antarctica Treaty to which India has acceded

Antarctica Treaty

- The Antarctic Treaty was signed in Washington on 1 December 1959 by the twelve countries whose scientists had been active in and around Antarctica during the International Geophysical Year (IGY) of 1957-58.
- It entered into force in 1961 and has since been acceded to by many other nations. The total number of Parties to the Treaty is now 53.
- The treaty is framed to ensure 'in the interests of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord.'
- The Treaty prohibits military activity, except in support of science; prohibits nuclear explosions and the disposal of nuclear waste; promotes scientific research and the exchange of data; and holds all territorial claims in abeyance.

"You are as strong as your foundation" **FOUNDATION COURSE FOUNDATION COURSE** PRELIMS GS PAPER - 1 **GS MAINS 2017** Approach is to build fundamental concepts and analytical ability in students to enable them to answer questions of Preliminary as well as Mains examination Duration: 90 classes (approximate Duration: 110 classes (approximately) Includes comprehensive coverage of all the majo Includes comprehensive coverage of all the four topics for GS Prelims papers for GS MAINS Includes All India Prelims (CSAT I and II Paper) Includes All India GS Mains and Essay Test Series Test Series of 2017 Our Comprehensive Current Affairs classes Our Comprehensive Current Affairs classes of of PT 365 for 2017 (Online Classes only) MAINS 365 for 2017 (Online Classes only) Access to LIVE as well as Recorded Classes or Access to LIVE as well as Recorded Classes on your your personal online student platform personal online student platform Includes comprehensive, relevant & updated Includes comprehensive, relevant & updated study material for prelims examination study material The uploaded Class videos can be viewed any The uploaded Class videos can be viewed any

NOTE - Students can watch LIVE video classes of our COURSE on their ONLINE PLATFORM at their homes. The students can ask their doubts & subject queries during the class through LIVE Chat Option. They can also note down their doubts & questions & convey to our classroom mentor at Delhi center and we will respond to the queries through phone/mail. Post processed videos are uploaded on student's online platform within 24-48 hours of the live class.

number of times till Prelims 2018 exam

7. SOCIAL

7.1. INDIA'S FIRST TRANSGENDER SPORTS MEET

Why in news?

India's First Transgender Sports meet was organised by the Kerala State Sports Council at Thiruvananthapuram.

Background

- **Kerala was the first state which formulated the Transgender Policy** to enforce the constitutional rights of transgenders.
- Sporting categories have always been on gender binary lines. This sports event is one of many outcomes from the efforts to close the gap between legislation and its enforcement on the ground.

Problems faced by transgenders

- Social stigma: since birth transgenders are segregated from society and lack social integration.
- **Education**: they lack access to formal schooling. Further, there is lack of special schools for them.
- **Employment**: They represent less than 1% of total workforce.

Way forward

- Transgender is a crucial gender identity issue which needs not only requires action by the government and civil society but requires their integration in the mainstream society.
- International Examples: Ireland, Argentina, Malta, Colombia and Denmark allows the transgender community to self-determine gender without undergoing medical treatment or sterilization.

The Transgender Persons (Protection of Rights) Bill 2016

- **Definition of a transgender person**: The Bill defines a transgender person as one who is (i) neither wholly female or male; (ii) a combination of female and male; or (iii) neither female nor male.
- **Prohibition against discrimination**: It protects transgenders from discrimination or denial of service in essential areas.
- Right of residence in the household
- **Health care**: The government would take steps to provide health facilities to transgender persons.
- Certificate of identity for a transgender person: This will be issued by the District Magistrate on request.
- Welfare measures by the government: The government will take measures to ensure the full inclusion and participation of transgenders in mainstream society via rehabilitation, vocational training, employment schemes etc.
- Offences and Penalties: The Bill recognizes the following offences: begging, forced or bonded labour; denial of use of a public place; denial of residence in household, village, etc.; physical, sexual, verbal, emotional and economic abuse. These offences will attract imprisonment between six months and two years, and a fine.
- National Council for Transgender persons (NCT) will be set up to advice the central government on the formulation and monitoring of policies, legislation and projects with respect to transgender persons.

7.2. BETI BACHAO BETI PADHAO

Why in news?

Recently it was found that certain unauthorized sites/organizations/NGOs/individuals are distributing illegal forms in the name of cash incentive under Beti Bachao Beti Padhao Scheme.

Background

- Census 2011 data showed a **significant declining trend in the Child Sex Ratio (CSR)**, calculated as number of girls for every 1000 boys in age group of 0-6 years, with an all time low of 918 in 2011 from 976 in 1961.
- Alarmed by the sharp decline, the Government of India has introduced Beti Bachao, Beti Padhao (BBBP) programme to address the issue of **decline in CSR in 100 gender critical districts**.

About the scheme

The Overall Goal of the Beti Bachao, Beti Padhao Scheme is to Celebrate the Girl Child & Enable her Education.

The **objectives** of the Scheme are as under:

- Prevent gender biased sex selective elimination
- Ensure survival & protection of the girl child
- Ensure education of the girl child

The initiative has two major components:

- Mass Communication Campaign and
- Multi-sectoral action in 100 selected districts (as a pilot) with adverse CSR, covering all States and UTs.

Mass Communication Campaign

- It aims at ensuring girls are born, nurtured and educated without discrimination to become empowered citizens of this country.
- It interlinks National, State and District level interventions with community level action in 100 districts, bringing together different stakeholders for accelerated impact.

Ministry of WCD

- Promote registration of pregnancies in first trimester in Anganwadi Centres (AWCs)
- Undertake training of stakeholders
- Community mobilization & sensitization
- Involvement of gender champions
- Reward & recognition of institutions & frontline workers.

Ministry of Health & Family Welfare

- Monitor implementation of Pre-Conception and Pre-Natal Diagnostic Techniques (PCP&DT) Act, 1994
- Increased institutional deliveries
- Registration of births

Ministry of Human Resource Development

- Universal enrolment of girls
- Decreased drop-out rate
- Girl Child friendly standards in schools
- Strict implementation of Right to Education (RTE)
- Construction of Functional Toilets for girls.

Multi-Sectoral intervention

- Coordinated & convergent efforts are undertaken in close coordination with MoHFW and MoHRD to ensure survival, protection and education of the girl child.
- The District Collectors/Deputy Commissioners (DCs) lead and coordinate actions of all departments for implementation of BBBP at the District level.

7.3. RAJASTHAN LEADS IN CHILD MARRIAGES

Why in news?

Research by National Commission for Protection of Child Rights (NCPCR) has revealed that Rajasthan has reported the highest incidence of child marriages.

Basic facts

- Child marriage is more prevalent in rural areas (48%) than in urban areas (29%).
- In general, rates of child marriage are highest in the central and western parts of India and lower in the eastern and southern parts of the country.
- In certain states like Bihar and Rajasthan, approximately 60% of females are married as children.

National Commission for Protection of Child Rights (NCPCR)

- NCPCR was set up in March 2007 under the Commissions for Protection of Child Rights (CPCR) Act, 2005.
- NCPCR is under administrative control of the Ministry of Women & Child Development.
- Commission's mandate is to ensure that all Laws, Policies and Administrative Mechanisms are in consonance with Child Rights perspective as enshrined in the Constitution and also the UN Convention on the Rights of the Child.
- Child is defined as a person in 0-18 years age group.
- Other states having rate of child marriage higher than national average: Jharkhand, UP, West Bengal, MP, Andhra Pradesh, Karnataka, Chhattisgarh and Tripura.
- However, even in states with overall low prevalence of child marriage, there are often pockets of high prevalence.

Reasons for child marriage

- **Education opportunities**: low quality of education, inadequate infrastructure and lack of transport.
- Although there is widespread awareness of the Prohibition of Child Marriage Act 2006 (PCMA) and the illegality of child marriage, individually people feel that the traditions and norms are stronger than the law and the institutions and rarely report cases.
- Girls are often seen as a liability with limited economic role.
- The **dowry amount** increases with the age and the education level of the girl. Hence, the "incentive" of the system of dowry perpetuates child marriage.

Law enforcement to prohibit child marriage is relatively weak.

Effects of child marriage

- Child marriage is a **violation of child rights**, and has a negative impact on physical growth, health, mental and emotional development, and education opportunities.
- It also affects society as a whole since child marriage reinforces a cycle of poverty and perpetuates gender discrimination, illiteracy and malnutrition as well as high infant and maternal mortality rates.
- Both girls and boys are affected by child marriage, but girls are affected in much larger numbers and with greater intensity.
- Goal 5 of Sustainable Development Goals calls for elimination of all harmful practices, such as child, early and forced marriage and female genital mutilation

Government strategy and action

- The **Prohibition of Child Marriage Act, 2006** makes it illegal for girls to marry under 18 years and for boys under 21 years.
- Child marriage is a punishable offence with a fine up to INR 100,000, or up to two years of imprisonment, or both. It is a non-cognizable and non-bailable offence.
- Dowry was prohibited in 1961 by **the Dowry Prohibition Act**, with a fine up to INR 15,000, or the dowry amount, whichever is higher, and imprisonment for between six months and five years.
- Other laws that may provide protection to a child bride include the Juvenile Justice (Care and Protection of Children) Act, 2000, the Domestic Violence Act, 2005, and the Protection of Children from Sexual Offences Act, 2012.

7.4. INDIA HAS 31% OF WORLD'S POOR KIDS

Why in news?

About 31% of the world's "multidimensionally poor" children live in India, according to a new report by the Oxford Poverty and Human Development Initiative (OPHI).

About the report

- In terms of countries, fully 31% of the 689 million poor children live in India, followed by Nigeria (8%), Ethiopia (7%) and Pakistan (6%).
- According to the study, 87% of the multidimensionally poor children lived in South Asia (44 percent) and Sub-Saharan Africa (43%).

Oxford Poverty and Human Development Initiative (OPHI)

- It is an economic research centre within the Oxford Department of International Development at the University of Oxford.
- OPHI aims to build and advance a more systematic methodological and economic framework for reducing multidimensional poverty, grounded in people's experiences and values
- A "multidimensionally poor" child is one who lacks at least one-third of ten indicators, grouped into three dimensions of poverty: health, education and standard of living.
- The health dimension comprises indicators such as nutrition, child mortality, and education.
- Under standard of living are indicators such as access to cooking fuel, improved sanitation, safe drinking water, electricity, flooring, and asset ownership.
- OPHI's work is grounded in Amartya Sen's capability approach.

Amartya sen's capability approach

- The Capability Approach is defined by its choice of focus upon the moral significance of individuals' capability of achieving the kind of lives they have reason to value.
- This distinguishes it from more established approaches to ethical evaluation, such as utilitarianism or resourcism, which focus exclusively on subjective well-being or the availability of means to the good life, respectively.
- A person's capability to live a good life is defined in terms of the set of valuable 'beings and doings' like being in good health or having loving relationships with others to which they have real access.

7.5. INDIA AND ZIKA VIRUS

Why in news?

Recently the United States sent out an advisory informing its citizens in India about the number of confirmed Zika infections in India.

Background

- The WHO has placed India as a 'Category-2' country for Zika risk.
- A Category-2, the second highest on a four-point scale and that also includes 2015 Zika-hotspot Brazil, indicates that the virus is being actively transmitted within the country.
- Until April, India was a Category-4 country.
- The three cases of Zika virus were reported from Bapunagar area in Ahmedabad, Gujarat.

Zika virus management in India

India has high prevalence of malaria, dengue, chikungunia, etc. Now India is at risk of spread of zika epidemic.

The factors which add to vulnerability are:

- Poor health facilities
- Lack of effective vaccination against zika virus
- Lack of awareness
- Lack of after care in case of microcephely occurrence.

About zika virus

- Zika virus disease is caused by a virus transmitted primarily by **Aedes mosquitoes**.
- Zika can be passed through sex from a person with Zika to his or her partners.
- People with Zika virus disease can have symptoms including mild fever, skin rash, conjunctivitis, muscle and joint pain, malaise or headache. These symptoms normally last for 2-7 days.
- There is scientific consensus that Zika virus is a cause of microcephaly and Guillain-Barré syndrome.
- An additional area of concern is the difference between Zika on the one hand and dengue or chikungunya on the other. While the latter conditions occur soon after a mosquito bite, the presence of the Zika virus will be known six months later, after the birth of microcephalic infants.
- In the meantime, the virus will have ample time to spread through the population unless public health interventions to control mosquitoes are implemented on a warfooting.

7.6. WIDER DEFINITION OF CHILDREN WHO NEED PROTECTION

Why in news?

The Supreme Court has broader called for a of interpretation the definition of the "children expression in need of care and protection" in the Juvenile Justice (Care and Protection of Children) Act, 2015, as it does not specifically include children of victims of sexual abuse and trafficking in its scope.

Juvenile Justice (Care and Protection of Children) Act, 2015

- The Act clearly defines and classifies offences as petty, serious and heinous, and defines differentiated processes for each category.
- In view of the increasing number of serious offences committed by persons in the age group of 16-18 years and recognizing the rights of the victims as being equally important as the rights of juveniles, special provisions are incorporated in the Act to tackle heinous offences committed by individuals in this age group.
- It gives the Juvenile Justice Board the power to assess whether the perpetrator of a heinous crime aged between 16 and 18, had acted as a 'child' or as an 'adult.' The board will be assisted in this process by psychologists and social experts.
- It establishes a statutory status for the Child Adoption Resources Authority (CARA).
- It proposes several rehabilitation and social integration measures for institutional and non-institutional children. It provides for sponsorship and foster care as new measures.
- Mandatory registration of all institutions engaged in childcare.
- **New offences** including illegal adoption, corporal punishment in childcare institutions, use of children by militant groups, and offences against disabled children.

Background

- Even though a child in need of care and protection is defined in Section 2(14) of the JJ Act, the definition does not specifically include some categories of children.
- Consequently, since the JJ Act is intended for the benefit of children and is intended to protect and foster their rights, the definition of a child in need of care and protection must be given a broad interpretation.

7.7. CHILD LABOUR: INDIA RATIFIES ILO CORE CONVENTIONS TO FIGHT CHILD LABOUR

Why in news?

India has ratified two key ILO conventions on child labour: the Minimum Age Convention (No 138) and the Worst Forms of Child Labour Convention (No 182).

Background

- The main bottleneck in the way of India ratifying Conventions 182 and 138 was addressing forced or compulsory recruitment of children and appropriately raising the age of employment in hazardous occupations from 14 to 18 years.
- Consequent to the passing of the Child Labour (Prohibition and Regulation) Amendment Act, 2016 by the Indian Parliament, prohibiting the employment of children up to 14 years of age, and children up to 18 years of age in hazardous occupations, India could now ratify Conventions 182 and 138.
- However, under the provisions of the ILO Conventions 182 and 138, India will not adhere to a fixed deadline by which the worst forms of child labour must be eliminated.

The Minimum Age Convention (No 138)	The Worst Forms of Child Labour Convention (No 182)
It requires ratifying states to pursue a national policy for effective abolition of child labour and to raise progressively the minimum age for admission to employment or work.	By ratifying this Convention, a country commits itself to taking immediate action to prohibit and eliminate the worst forms of child labour. The worst forms of child labour prohibited under Convention 182 are all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict.

Why ratification important?

- The ratification is a step ahead in the direction of achieving the goal of eradication of child labour as it would be legally binding to comply with the provisions of the Conventions. The progress on ILO conventions are reviewed every four years. So the government has to prove they are making progress.
- Also by ratifying these two core conventions, India would join majority of the countries who have adopted the legislation to prohibit and place severe restrictions on the employment and work of children.

ILO and India

India is a founder member of the International Labour Organization (ILO), which came into existence in 1919. The ILO sets up International standards in the form of Conventions, Recommendations and Protocol.

Conventions and Recommendations: ILO sets **International labour standards** in the form of conventions and recommendations. They are legal instruments. **Conventions** are legally binding international treaties that may be ratified by member states while **recommendations** serve as non-binding guidelines. In many cases, a convention lays down the basic principles to be implemented by ratifying countries, while a related recommendation supplements the convention by providing more detailed guidelines on how it could be applied. Recommendations can also be autonomous, i.e. not linked to any convention.

Fundamental conventions: The ILO's Governing Body has identified eight conventions as "fundamental" or Core. They cover subjects that are considered as fundamental principles and rights at work. These principles are also covered in the ILO's

Declaration on Fundamental Principles and Rights at Work (1998).

With ratification of these two core ILO conventions, India has now ratified 6 out of 8 core ILO conventions. The other four core ILO conventions ratified by India are:

- Forced labour convention (No 29) and Abolition of Forced Labour convention (No 105) relating to abolition of forced labour,
- Equal Remuneration convention (No 100)
- Discrimination (Employment and Occupation) convention relating to removing discrimination between men and women in employment and occupation.

Two core **ILO conventions which are yet to be ratified** by India are:

- Freedom of Association and Protection of the Right to Organise Convention (No 87)
- Right to Organise and Collective Bargaining Convention (No 98)

7.8. INTENSIFIED DIARRHOEA CONTROL FORTNIGHT

Why in news?

 The Ministry of Health and Family Welfare has launched the Intensified Diarrhea Control Fortnight (IDCF) in order to intensify efforts to reduce child deaths due to diarrhea.

Background

- WHO estimated diarrhea is second leading cause of death under five year age of children worldwide.
- Despite of consistent decline in Infant Mortality Rate (IMR) and Under-Five Mortality Rate (U5MR) there has been 1 lakh deaths due to diarrhoea in India.

Intensified Diarrhea Control Fortnight (IDCF)

- Involves three action framework
 - ✓ Mobilize: health personnel, State Governments and other stakeholders (NGOs).

What is Diarrhea?Can be causes

- Can be causes by virus, bacteria and parasite.
- Diarrhea is having frequent, loose stools which causes dehydration
- Can be **spread from affected person**, contaminated food or drinking contaminated water.
- Can be prevented with safe drinking water, sanitation, breastfeeding/appropriate nutrition and hand-washing.

What is ORS (Oral Rehydration Salt Solution)?

- ORS is a glucose-electrolyte solution containing salt and sugar water.
- It can be simple, cheap and effective for all age groups.
- Supplemented with Zinc tablet, the duo is called **ORS Jodi.**

National Oral Rehydration Therapy (ORT) Program in 1985-86

- Improving maternal knowledge related to the use of home available fluids.
- Ensuring availability of ORS packets at health facilities.
- Integrated part of Child Survival and Safe Motherhood (CSSM) Program.
- ✓ **Prioritize investment:** Government and International organisation.
- ✓ Create mass awareness: ORS and Zinc therapy demonstration will be conducted at state, district and village levels.
- ASHA worker would undertake distribution of ORS packets to households with under-five children in her village.
- ORS-Zinc Corners will be set-up at health care facilities and non-health facilities such as Schools and Anganwadi centres.
- The activities are also being supported by other ministries of the Government of India, especially the Education, Panchayati Raj Institutions, Women and Child Development, and Water and Sanitation.
- Apart from oral medicine Health ministry introduced **Rotavirus vaccine** under UIP will also help in reducing diarrhoea mortality.

7.9. VATSALYA- MAATRI AMRIT KOSH

Why in News?

 National Human Milk Bank and Lactation Counselling Centre (Vatsalya – Maatri Amrit Kosh) set up at Lady Hardinge Medical College Delhi. Established in collaboration with the Norwegian government, Oslo University and Norway India Partnership Initiative (NIPI).

Background

- In India nearly 13% of newly born children die below 5 years of age, owing to poor breastfeeding practices.
- Despite the institutional delivery has increased to 78.9% of total delivery the early initiation of breastfeeding is only 40% of total lactating mother.

MAA (Mothers Absolute Affection)

- Flagship programme to ensure that adequate awareness is generated among masses, especially mothers and related family of newly born child, about the benefits of breastfeeding.
- To enhance optimal breastfeeding practices. Programme will
 focus on initiation of breastfeeding within an hour of birth,
 exclusive breastfeeding for the first six months, and continued
 breastfeeding for at least two years
- Training for nurses in government hospitals, Accredited Social Health Activists (ASHA), Auxiliary Nurse Mid-wives (ANM).
- MAA secretariat and a steering committee will be created in all states and at the district level.
- The programme will be monitored by UNICEF and other partners.

More on News

- The centre that will collect, pasteurize, test and safely store milk that has been donated by lactating mothers and make it available for infants in need.
- This facility will protect, promote and support breastfeeding of their own healthy mothers.
- Provide lactation support to mothers through dedicated lactation counsellors.
- The Mothers Absolute Affection (MAA) programme to create awareness regarding breastfeeding has become the most cost-effective way of enhancing the child's immunity.

Benefits of breastfeeding FOR THE BABY: ■Improved growth and nutrition status ■Increased bonding Less likely to die ■ Lower risk of chronic diseases (diabetes, heart Less diarrhoea and disease, asthma, some respiratory infections cancers) ■Lower risk of Less ear infections, overweight/obesity GI disorders, skin conditions and SIDS ■Improved cognitive and motor FOR THE MOTHER: development Faster maternal recovery ■ Mother less likely to become and weight loss post partum pregnant in early months ■Less post-partum depression ■ Lower risk of maternal cancers (ovarian and breast cancer)

7.10. INCLUSIVE INDIA INITIATIVE

Why in News?

• Ministry of Social Justice & Empowerment in collaboration with key partners organised the conference Inclusive India Initiative: Towards an Inclusive India.

• National Trust will be the nodal agency for the initiative.

More on News

- A vision document on 'Inclusive India Initiative' was released with the collaboration of various partner and ministries.
- The three core focus areas of Inclusive India Initiative are:

Inclusive Education

✓ Awareness campaigns and involvement of private organisations for making the infrastructure of educational disabled friendly.

Inclusive Employment

 Engage with corporate sector organisations; public and private, for creating awareness towards inclusive employment

Inclusive Community Life

✓ Civil Society organisations and State Government connect initiative creating awareness among general public, ensuring that the people becomes sensitive towards the focus group.

- The conference stressed need to take advantage of all 10 schemes of the national trust namely;
 - o **DISHA:** Early Intervention and School Readiness Scheme
 - o **VIKAAS:** Day care scheme, primarily for enhancing interpersonal and vocational skills.

The National Trust

- A **statutory body** of the Ministry of Social Justice and Empowerment.
- CEO of trust is Joint Secretary level officer.
- Established under National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities" Act (Act 44 of 1999).
- Works towards providing opportunities for capacity development of Persons with Disability namely education, employment and community sensitisation.
- Evolving procedures for appointments of guardians and trustees for persons with disabilities.

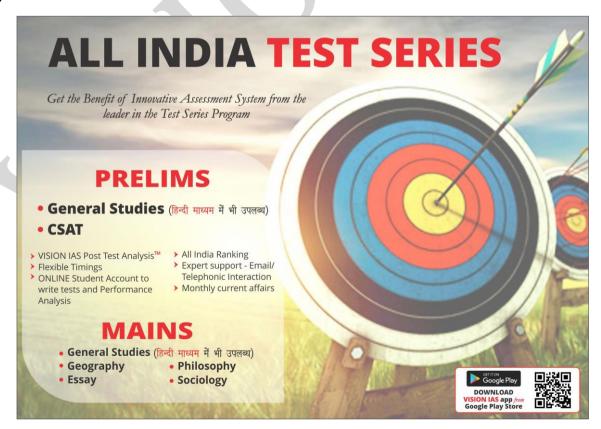
- SAMARTH: Respite Care for orphans or abandoned, families in crisis and also for Persons with Disabilities (PwD) from BPL & LIG families including destitute.
- o **GHARAUNDA:** Group home for adults and an assured home and minimum quality of care services throughout the life of the PwD.
- O NIRAMAYA: AFFORDABLE INSURANCE FOR PWD, HEALTH INSURANCE COVER UPTO 1 LAKH.
- o **SAHYOGI:** Care associate training Scheme skilled workforce of care associates to provide adequate and nurturing care for Person with Disabilities (PwDs) and their families who require it
- GYAN PRABHA: to pursue higher education or skill development courses.
- o **PRERNA:** Marketing assistance to create viable and widespread channels for sale of products and services produced by PwDs.
- o **SAMBHAV:** collate and collect the Aids, software and other form of assistive devices developed with a provision of display and demonstration of the devices.
- o **BADHTE KADAM:** aims at community awareness, sensitisation, social integration and mainstreaming of Persons with Disabilities.

7.11. KASTURIRANGAN COMMITTEE FOR EDUCATION POLICY

- Dr. K. Kasturirangan committee has been constituted to prepare preparation final draft of National Education Policy
- The committee includes members from across the country from various sectors and age groups in the hope of understanding various issues in formulation of policy
- Inputs from TSR Subramanian panel constitutes earlier and thousands of suggestions from educationists, teachers, experts, students and other stakeholders would also be considered by the committee

Key recommendations of Subramanian panel

- Increase public spending on education from 3% to 6% of GDP
- Compulsory **certification for teachers** in government and private schools
- Expand Mid-Day Meal scheme to secondary schools.
- Teacher Entrance Tests (TET) for recruitment
- Discontinue no detention policy after class V
- Extend 25% EWS quota in private schools to minority institutions
- Allow top foreign universities to open campuses in India
- An All-India service Indian Education Service (IES) should be established
- Reduction of UGC role to disbursal of scholarships and fellowships & separate law for management of higher education.



8. CULTURE

8.1. CELEBRATIONS OF SABARMATI ASHRAM IN AHMEDABAD

Why in News?

• The Prime Minister attended the centenary year celebrations of Sabarmati Ashram in Gujarat.

Sabarmati Ashram

- Build by Jivanlal Deshai in 1915, Gandhi ji shifted the ashram on bank of Sabramati in 1917.
- Idea of Ashmarm emanate from Tolstoy Farm (Phoenix Farm) of South Africa.
- The Sabarmati Ashram (also known as Harijan Ashram) was home to Mohandas Gandhi from 1917 until 1930 and served as one of the main centres of the Indian freedom struggle.
- When Gandhi started his padayatra (foot march) in 1930 from Sabarmati Ashram to Dandi for the Salt Satyagraha, he had decided not to return to Sabarmati till independence for India was attained.
- In April 1936, Gandhiji established his residence in the village Shegaon which he renamed as Sevagram, which means 'village of service'.

8.2. NATIONAL MISSION ON CULTURAL MAPPING OF INDIA

Why in news?

Ministry of Culture launched National Mission for Cultural Mapping

National Mission on Cultural Mapping

- Mission is a part of Ek Bharat Shreshtha Bharat' initiative.
- The mission aims at converting the vast and widespread cultural canvas of India into an objective cultural map, designing a mechanism to fulfil the aspirations of the whole artist community of the nation and preserving the rich cultural heritage of this country in the form of a cultural repository of artists and art forms.
- This Mission encompasses data mapping, demography building formalising the processes and bringing all the cultural activities under one web based umbrella for better results.

Ek Bharat Shreshtha Bharat

- It aims to actively enhance interaction between people of diverse cultures living in different States and UTs in India, with the objective of promoting greater mutual understanding amongst them.
- As per the programme, each year, every State/UT would be paired with another State/UT in India for reciprocal interaction between the people.
- It is envisaged through this exchange, that the knowledge of the language, culture, traditions and practices of different states will lead to an enhanced understanding and bonding between one another, thereby strengthening the unity and integrity of India.

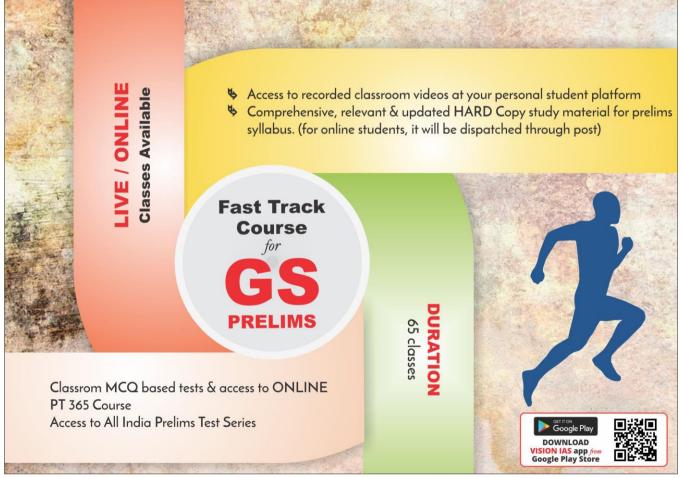
• The Mission also seeks to open a direct channel of communication of artists with the Government and peer to peer communication among artists for talent honing and handholding of each other.

8.3. BICENTENARY OF PUBLICATION OF BENGALI NEWSPAPER

- Governor of West Bengal, Shri Keshari Nath Tripathi released a commemorative volume on the two hundred years of Bengali Newspapers.
- The first newspaper of the country, 'Hicky's Bengal Gazette' was published from Kolkata in 1780. The paper ceased publication on March 23, 1782. It was published just for two years.
- Samachar Darpan was the first newspaper in Bengali language. It was published by Serampore Mission press on May 23, 1818.
- In 1821, a remarkable Bengali journal *Sambad Kaumadi* was published under the patronage of Rammohan Roy.
- Sambad Pravakar was the first Bengali daily newspaper published in 1839, patronized by Iswar Chandra Gupta.

- They early Bengali papers took up the cause of the oppressed workers in the indigo plantation, and of the
 peasants. Notable among them were the Som Prakash, the Grambartha Prakashika and the Amrita Bazar
 Patrika (before it became an English weekly).
- Till the 80s of the nineteenth century Bengal was the hub of newspaper publication. A survey of the Indian Language Press by Sir George Campbell in 1876 showed that half of the total number of 38 newspapers was published from Kolkata.





9. ETHICS

9.1. BAN CULTURE

There seems to be emergence of a banning culture in India and the world with examples such as commercial surrogacy ban, travel ban on muslims, ban on books like "satanic verses", immigration ban, alcohol ban etc. rife in the newspapers.

Why bans are resorted to?

- Perception of right intention It is a clear display of "right intentions" that the person propagating it
 genuinely wants to eradicate the menace. For example with red beacon ban, people feel that it will
 eradicate VIP culture.
- **Political benefits** Bans compartmentalize people and it makes it easier for politicians to consolidate some segment of their voter base
- Public morality Ban is imposed when the legality or morality of the general public at large is affected or disturbed
- **Public safety** Some things such as ban on certain drugs or chemicals are required for public health reasons such as ban on certain combination drugs recently in India

Although bans have worked in certain cases – such as Ban on sati etc., but in most cases bans generally don't work such as ban in India on public smoking etc. Following reasons can be attributed to this:

- **Psychological reactance** Human natural tendency is to regain the freedom they lose which motivates them to indulge in the very behavior that is forbidden
- **Exogenous changes** don't bring about behavioral changes which move the trade in banned products underground through smuggling etc.
- **Undue publicity** The things banned rather getting grounded comes more in public domain in this era of social media. For example India's Daughter documentary
- Thriving demand bans don't hit demand side which enables development of alternative routes in supply chain.

Ethical issues associated with ban culture

- Undemocratic as bans shows the my way or the highway attitude of the banning authority
- **Coercive** It represents coercive power of the law but to be able to impose it efficiently, there is need of sufficient number of people who accept it voluntarily. It mars **justice** when violence is resorted to impose such bans
- **Discriminatory and fearful** Most bans lead to taking away rights of certain section of society be it right to livelihood, association, movement etc. and instill fear in them.
- Intolerance and authoritarianism Ban implies culture of intolerance towards multiple views, habits, culture prevailing in one's society. The debating culture is getting lost in the illogical, unilateral steps by political class.
- **Bureaucratization** enforcement of ban leads to establishment of a bureaucratic structure which also eats up financial resources.

If ban is on a social evil, then motivational psychological counselling and persuasion is going to go a long way in creating a long term behavioral change. Decisions regarding such issues must not be taken by people sitting in the chairs alone rather public opinion should be sought and any public disagreement should be welcomed and not feared. Banning would not let higher ups know what is in the minds of people they govern. This may lead to big "public order" situation due to simmering discontent

However, certain activities need to be banned by law even if their enforcement is not efficient. For example – if the system is not able to stop child marriages, or dowry completely, it does not mean that the ban on them should be repealed.

10. MISCELLANEOUS

10.1. TOTAL YOGA VILLAGE

Why in news?

Kunnamthanam in Kerala has become a complete yoga village with at least one member of each family in the panchayat trained in yoga.

10.2. LAUNCH OF INAM-PRO+

Why in news?

The Minister of Road Transport & Highways and Shipping launched INAM-Pro + in New Delhi.

What is INAM-PRO?

- It is a web portal designed by National Highways and Infrastructure Development Corporation Ltd (NHIDCL) and launched by the Ministry two years back
- It is a common platform to bring cement buyers and sellers together.
- The portal facilitated comparison of price, availability of materials etc. and made it very convenient for the prospective buyers to procure cement at reasonable rates in a transparent manner.

What is INAM PRO+?

• It is an upgraded version of INAM-PRO to include everything related to construction materials, equipments/machinery and services like purchase/hiring/lease of new/used products and services in the domains of Construction Materials

10.3. PORTUGAL SHARES 400-YEAR-OLD ARCHIVES WITH INDIA

- Under a new agreement to promote cooperation in the field of archiving, Portugal has handed over a collection of documents known as 'Moncoes do Reino' (Monsoon correspondence) to India.
- The collection consists of direct correspondence from Lisbon to Goa and documents trade rivalries with the Arabs and European powers and their relations with neighbouring kings in South Asia and East Asia.
- In 1777, these 62 volumes, consisting of over 12,000 documents (pertaining to the period from 1605 to 1651) were shifted from Goa to Lisbon.
- The National Archives of India has received the digital copies of 62 volumes.

10.4. KANYASHREE PRAKALPA SCHEME

Why in news?

- West Bengal Government's Kanyashree Prakalpa scheme has won the United Nations Public Service Award.
- India was named first in the Asia-Pacific group for the category: 'Reaching the Poorest and Most Vulnerable through Inclusive Services and Participation'.

About Kanyashree Prakalpa Scheme

- It aims to improve status of adolescent girls from disadvantaged families (annual family income not more than Rs. 1, 20,000) through small cash transfers.
- Increased educational attainment by incentivizing schooling of all teenage girls, prevention of child marriage and financial inclusion are some of its objectives.

10.5. FIRST RURAL LED STREET LIGHTING PROJECT

Why in news?

- Government would be retrofitting 10 lakh conventional street lights with LED lights in Gram Panchayats of 7 districts in Andhra Pradesh.
- This is the first project for rural LED street lighting in the country under the Government of India's Street Lighting National Project (SLNP).

Street Lighting National Project (SLNP)

- Under this, the government aims at replacement of 1.34 crore conventional street lights across the country.
- Energy Efficiency Services Limited (EESL) is the implementing agency for the scheme.

Energy Efficiency Services Limited (EESL)

- It was set up under Ministry of Power (India) to facilitate implementation of energy efficiency projects.
- It is a Joint Venture of NTPC Limited, Power Finance Corporation, Rural Electrification Corporation and POWERGRID.
- It also leads the market-related actions of the National Mission for Enhanced Energy Efficiency (NMEEE).
- It also acts as the resource centre for capacity building of State DISCOMs.

10.6. FIRST INDIGENOUSLY BUILT FLOATING DOCK

Why in news?

The Indian Navy's first indigenously built Floating Dock (FDN-2) was launched at shipyard in Kattupalli, Near Ennore port, Chennai.

About the dock

- The floating dock is 185 metres long and 40 metres wide. It will enable docking of all kinds of vessels.
- This will include naval ships and submarines of up to 8,000 tonnes displacement.
- It would include draughts of up to seven metres, during both day and night.
- FDN-2 will be based in the Andaman and Nicobar Islands.

Importance of FDN-2

- It will enhance the Navy's technical repair infrastructure.
- FDN-2 adds much more capability and flexibilty to undertake repair and maintenance works

10.7. NASA'S SUPERSONIC JET

Why in news?

NASA has developed a quieter supersonic passenger jet that can safely travel over land.

More

- NASA has completed preliminary design review of the Quiet Supersonic Transport (QueSST) aircraft design.
- QueSST is the initial design stage of NASA's planned Low Boom Flight Demonstration (LBFD) experimental airplane, otherwise known as an X-plane.
- This is the first in a series of 'X-planes' in NASA's New Aviation Horizons initiative.
- The QueSST design is able to create a soft "thump" instead of the disruptive sonic boom associated with supersonic flight today.

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