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CURRENT AFFAIRS
JANUARY 2017

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1. POLITY AND CONSTITUTION

1.1. PUBLIC ACCOUNTS COMMITTEE

Why in news?

- RBI governor Urjit Patel appeared before the committee to brief it on the impact of demonetization.
- A controversy also arose over whether the PAC can summon the Prime Minster.

About Parliamentary Accounts Committee

- It has been in existence from **1921 and was formed under the Government of India Act, 1919.**
- It is constituted by the Parliament **each year** for parliamentary oversight over finances of the government.
- It is a joint committee consisting of **15 members from Lok Sabha and 7 from Rajya Sabha** who are elected according to principle of **proportional representation** by means of the single transferable vote.
- Since 1967, its chairman by convention is selected **from the Opposition parties.**
- The committee is **empowered to call witnesses** to give evidence and produce documents required by the committees.
- All the deliberations of the committee are **confidential.**
- The government submits an **Action Taken Report** on the recommendations of the PAC which is then laid before the parliament.

Primary Functions of the Committee

- To examine the appropriation accounts and the finance accounts of the Union government and any other account laid before the Lok Sabha.
- In scrutinizing the Appropriation Accounts and the Reports of the Comptroller and Auditor-General thereon, it is the duty of the Committee to satisfy itself:
  - ✓ that the money shown in the accounts as having been disbursed were legally available for and, applicable to the service or purpose to which they have been applied or charged;
  - ✓ that the expenditure conforms to the authority which governs it; and
  - ✓ that every re-appropriation has been made in accordance with the provisions made in this behalf under rules framed by competent authority

> **Towards Openness and Transparency**
>
> - In 2016, a committee of the Delhi Vidhan Sabha looking at irregularities in sports administration bodies of cricket and hockey allowed the press to view its proceedings.
> - In 2008, the Goa Vidhan Sabha had also opened up its committee meetings to both the public and press.
> - In the 13th Lok Sabha, the chairman of the joint committee examining the Stock Market Scam briefed the press at the end of each committee meeting.

- To examine audit reports of various autonomous and semi-autonomous bodies, the audit of which is conducted by the CAG.
- It considers the justification for spending more or less than the amount originally sanctioned.
- The functions of the Committee extend however, "beyond, the formality of expenditure to its wisdom, faithfulness and economy" and thus the committee examines cases involving losses, nugatory expenditure and financial irregularities
- The Committee examines cases involving under-assessments, tax-evasion, non-levy of duties, misclassifications etc., identifies the loopholes in the taxation laws and procedures and makes recommendations in order to check leakage of revenue

Issues

- **Secrecy**: The meetings of the committee are closed door meetings. In contrast, in USA statements made before committees are telecast live while in UK, meetings of committee are open to public.
- The members of the committee lack **technical expertise required** to go into intricacies of accounting and administrative principles.
- The work of the committee is more in the nature of a **post-mortem exercise** and is not effective in preventing losses.

- While other Department Related Standing Committees can adopt reports with dissent notes by some members, the PAC must adopt all reports by consensus. This is unique about the PAC, and helps it maintain neutrality
- It does not have suo motu powers of investigations.
- **Politicization of the proceedings:**
  - ✓ With greater public interest shown in some issues like 2G scam, members have started taking strict party lines in committee meetings.
  - ✓ Even during the UPA government, the then PAC Chairperson Murli Manohar Joshi's decision to summon Prime Minister Manmohan Singh in connection with the 2G scam had triggered a massive controversy.

Way Forward

- A stipulated time limit within which CAG audit reports should be presented to the Parliament.
- A time limit should be fixed for government departments to submit Action Taken Report.
- The PAC should have suo motu powers of investigations.
- Sufficient technical assistance should be provided to them through Lok Sabha or Rajya Sabha Secretariats.
- Testimony of witnesses should be made public either by telecasting it or allowing the Press or by making the transcript of testimony public.
- Minutes of meeting of the PAC should be made public.
- The general public should be allowed to view evidence proceedings of committees.

1.2. SECTION-19 OF PREVENTION OF CORRUPTION ACT

Why in News?

- Recently Supreme Court **upheld a past judgement** that a court initiated investigation against a public servant **would require** previous sanction of government.

Background

- **Section 19 of the PC Act** puts a bar on the **court** to take cognizance of an offence by a public servant **except with the previous sanction of government**.
- The bar is against the court to take cognizance **for the purposes of trial**.
- **But** as per Sec 19, there is **no prohibition** to start an investigation by lodging an FIR or through a court-initiated investigation **under Section 156(3) CrPC**.

Issues involved

- The objective of Sec 19 of PC Act is –
  - ✓ **Obligating the government** to Protect honest officers and those acting in good faith towards their duty from frivolous complaints.
  - ✓ Letting the public servants take decisions for good governance without fear or harassment.
- **Previous sanction** protects **the corrupt public servants**, which goes against transparency and accountability.
- SC decisions have **created confusion** over the status of Sec 19 in PC Act and previous sanction. This can be a potential harm to the delivery of good governance.
- Such judgement may also erode trust of the public over the public administration and judiciary.

Previous Sanction under Sec 19 (1) PC Act
- It is given by Union government if Union government has power to remove the official.
- It is given by State government if State government has power to remove the official.
- In case of other public servants, it is given by competent authority.

Chronology of the previous judgments
- **1951 - R.R. Chari v/s State case -** SC held that there was no requirement of sanction for investigation under Section 156(3) CrPC.
- **1998** - **State of Rajasthan v/s Raj Kumar case** - SC upheld no need for sanction before filing a charge sheet under Section 173 CrPC.
- **2013** - **Anil Kumar v/s M.K. Aiyappa case** - SC upheld that Section 19 applies at the threshold itself and investigation under Section 156(3) CrPC requires a prior sanction.
- **2014** - **Subramanian Swami v/s Union of India case** - **Section 6A of Delhi Special Police Establishment Act** requiring prior sanction, was made unconstitutional.
- **2016** - **L. Narayana Swamy v/s State case** – SC upheld the decision of 2013.
- **2016** – Karnataka High Court in **NC Shivkumar v/s the State** has said that 2016 SC judgement ignored the settled principles of earlier judgments rendered by larger benches.

Prevention of Corruption Amendment Bill 2016- Contentious provisions on prior sanction

- Complaints regarding corruption on decisions taken or recommendations made by public servants on official duty shall not be investigated without the **prior approval of the Lokpal or Lokayuktas**, as the case maybe.
- The prior approval will be extended to the retired officials too.

Way Forward

- The independence of criminal investigation from the executive is a sine qua non for success of a criminal justice system, especially in corruption cases. It is imperative that the SC should correct the apparent anomalies in the state of the law on sanction.

1.3. SECTION 123(3) OF REPRESENATION OF PEOPLE ACT,1951

Why in News?

- A seven-judge **Supreme Court** bench ruled by a 4-3 majority that **"religion, race, caste, community or language would not be allowed to play any role in the electoral process"**
- It also said that election of a candidate would be declared null and void if an appeal is made to seek votes on these considerations.

> **Section 123(3) of RPA Act, 1951 declares a corrupt practice if:**
> - "The appeal by a candidate or his agent or by any other person with the consent of a candidate or his election agent to vote or refrain from voting for any person on the ground of **his** religion, race, caste, community or language....."
> - The word **"his"** was included through an amendment in 1961.

The Judgement

- The judgment was handed out as an interpretation of **Section 123(3) of the Representation of the People Act, 1951.**
- **Section 123(3) deals with abiding to "corrupt practices"** for canvassing votes in an election.
- The bench had at hand the task of the interpreting the word **"his" in section 123(3) in RPA.**
    - ✓ The majority believed that "his" here refers to the any candidate or his agent or any other person making the appeal with the consent of the candidate or the elector. To justify this interpretation, the bench took cues from various amendments of RPA.
    - ✓ It also said that to maintain the "purity" of the electoral process; certain arguments must be taken off the table such as religion, caste and language.
    - ✓ The dissenting judges on other the hand believed that Section 123(3) of the RPA does not require such a broad interpretation and the word "his" does not include the elector/voter.
    - ✓ The dissenting judges remarked that markers such as religion are deeply rooted in the structure of the Indian society.
- The bench abstained from commenting on the "Hindutva" case.

Criticism

> **Hindutva Case**
> In 1995, a three-judge bench ruled that seeking votes in the name of Hindutva was not a corrupt practice as Hindutva was not a religion but a "a way of life"

- It is difficult to define what kind of an appeal is religious appeal.
- This interpretation violates the right to freedom of speech under Article 19.
- RPA already has provisions to curb hate speech or speech that spreads enmity.
- A broad interpretation "outlaws" parties like Akali Dal whose very name violates this interpretation.

1.4. PRE-CENSORSHIP TO REGULATE MEDIA

Why in news?

- The Supreme Court rejected a PIL for pre-broadcast or pre-publication censorship of the media by the court.
- It said that role of a court or a statutory body will come only after a complaint is made **when the content is published.**

Ground for Rejection of Pre-Censorship

- The Supreme Court relied on **Article 19(1)(a)** which guarantees Right to freedom of speech and expression.
- Earlier in **Romesh Thapar case**, the Supreme Court expressed that there could not be any kind of restriction on the freedom of speech and expression other than those mentioned in **Article 19(2).**

Current scenario of Regulatory Mechanism

- The electronic media in India is mostly self-regulated.
- A lot of private channels by themselves have set up **the News Broadcasting Standards Authority (NBSA)** of India which issues standards in the nature of guidelines.
- The NBSA is empowered to warn, admonish, censure, express disapproval and fine the broadcaster a sum upto Rs. 1 lakh for violation of the Code.
- If something goes wrong, the Government also may step in and punish the channels e.g. by taking them off the air for a day or so.

Problem with current regulatory regime

- Media regulation in India is not **unified**, and has a multiplicity of bodies.
- Regulatory bodies like NBSA, ASCI **lack force of law** thus are not very effective.
- There is no regulatory body for social media.

Way Forward

- Pre-censorship as denied by the Supreme Court in the present case is correct, but at the same time, **self-regulation has largely been ineffective.**
- In this context, following suggestions by the Supreme Court and Parliamentary Committees can be **feasible options**:
    - ✓ The Supreme Court in (**Secretary, Ministry of Information and Broadcasting v. Cricket Association of Bengal) case** suggested for **creation of an independent broadcasting media authority along the lines of TRAI**.
    - ✓ In May 2013, the Parliamentary Standing Committee on Information Technology (2012-2013) recommended that **either there be a statutory body to look into content from both print and electronic media or that the PCI be revamped with real powers to penalize** for violation of its code.
- The media plays a vital role in democracy. So, there is a need to balance its independence and provide an effective mechanism to regulate media at the same time.

> **Existing Mechanism to Regulate Other Forms of Media**
>
> - **Press Council of India**: It is a statutory body to regulate newspapers, journals, magazines and other **forms of print media** but it **cannot penalize** them for violation of its guidelines.
> - **Central Board of Film Certification**: For controlling content of movies and television shows etc.
> - Radio channels have to follow the same **Programme and Advertisement Code** as followed by All India Radio.
> - Program and Advertisement Codes for regulating content broadcast on the television, are issued under the **Cable Television Networks (Regulation) Act, 1995.**
> - The **Advertising Standards Council of India (ASCI)** has also drawn up guidelines on content of advertisements.

1.5. SUPREME COURT ON ORDINANCES

Why in news?

- The Bihar Government had **re-promulgated a 1989 ordinance for seven successive times** by which it took over 429 Sanskrit schools in Bihar without even once tabling it in the State Assembly.
- Also recently, a seven-judge Constitution Bench of the Supreme Court in **Krishna Kumar Singh vs. State of Bihar** has held that the failure to place an ordinance before the legislature constitutes abuse of power and a fraud on the Constitution.

What does the Constitution Say?

- **Article 123 and Article 213** confers power to promulgate ordinance on the President and the Governor respectively.
- Under the Constitution, an Ordinance can be **promulgated only when**
    - ✓ Legislature or either house of legislature is not in session.
    - ✓ Circumstances exists which **require immediate action.**
- The Supreme Court had already declared in **1986, in D.C. Wadhwa** case, that repeated re-promulgation of ordinances was unconstitutional.

Why frequent resorting to Ordinance Route?

- Reluctance to face the legislature on particular issues.
- Lack of majority in the Upper House.
- Repeated and willful disruption by opposition parties.

Implication of the Judgment

- The court can go into whether the President or Governor **had any material to arrive at the satisfaction** that an ordinance was necessary
- The Court can examine **whether there was any oblique motive**, thus extending power of judicial review
- It makes **mandatory for an ordinance to be tabled** in the legislature for its approval

Way Forward

The Constitution has provided for Separation of Power where enacting laws is the function of the legislature. The executive must show self-restraint and should use ordinance making power only as per the spirit of the Constitution and not to evade legislative scrutiny and debates.

1.6. NAGALAND WOMEN DEMAND ULB RESERVATION

Why in News?

- Nagaland women are demanding 33% constitutional reservation for Urban Local Bodies (ULBs) in Nagaland.

Issues involved

- There appears to be a **conflict between Article 243T** (reservation of seats for women) **and Article 371A of the Constitution**.
- Nagaland's urban areas are facing a **lack of governance in provision of basic services** because of its refusal to hold elections to ULBs since 2011.
- **There is a conflict between women demanding political representation** and the customary law which allows only the men to run the institutions of governance.

Background

- **74th constitutional amendment** (CA) was passed in 1993, providing reservation for women in ULBs.
- Nagaland adopted this provision by **Nagaland Municipal (First Amendment) Act of 2006**.
- Nagaland has not witnessed any ULB election since 2011 due to the conflict between 74th CA and Article 371A principles.
- In April 2016, the Supreme Court (SC) ordered the state government to hold municipal elections.
- Nagaland has a high female literacy rate of 76.11%. Yet, there has only ever been one Naga woman elected to the Parliament.

> **Provisions of 74th amendment related to women reservation**
> - **Article 243T (3)** - Not less than 33% of the total seats by rotation are reserved for women in direct municipal elections.
> - **Article 243T (4)** – Reservation of women for offices of Chairperson of municipalities would be decided by law by the State Legislative Assembly.

> **What is Article 371A (1)?**
> No Act of Parliament in respect of
> - Religious or social practices of the Nagas,
> - Naga customary law and procedure,
> - Administration of civil and criminal justice involving decisions according to Naga customary law.
> - Ownership and transfer of land and its resources.
> - Shall apply to the Nagaland unless it's Legislative Assembly by a resolution so decides

Arguments given in support of women reservation

- **Joint Action Committee on Women reservation** contends that denying reservation to women in ULBs is a Constitutional violation.
- Tribals have no objection to **25% women reservation** in village development boards as per **Nagaland Village and Area Council Act, 1978**. Hence, the opposition to women's election to ULBs is illogical.
- Male dominance in the governing institutions may create a vacuum in gender specific policies.
- It impedes women's socio-economic empowerment though political representation.

Arguments given against women reservation

- Naga Hoho, a body of 16 tribal groups, say that women representation in ULBs is against their customary law.
- They argue that they are not against women's representation in these bodies but they are against women standing for elections. They prefer to nominate women rather than have them stand for elections.

Steps taken by the government

- Nagaland government has agreed to hold ULB elections with 33% reservation for women.
- Centre is working to mandate 50% reservation for women in all the ULBs to promote **development of 'engendered cities'**.

What needs to be done?
- Proposal of 50% reservation to women should be finalized soon and implemented thoroughly.
- Reform customary law to make it gender neutral.
- Political parties or various local councils should themselves set 'voluntary quotas' for fielding women candidates in elections.

1.7. DRAFT INDIAN MEDICAL COUNCIL BILL 2016

Why in News?

- Ministry of Health and family welfare introduced Indian Medical Council (Amendment) Bill to amend the IMC Act 1956.
- The provisions of the Bill are based on reforms suggested by **Arvind Panagariya committee** to address concerns over quality of medical education.

> **Indian Medical Council Act 1956**
> - The Act provides for the constitution of the Medical Council of India (MCI).
> - The MCI regulates -
>   - ✓ Standards of medical education,
>   - ✓ Permission to start colleges, courses or increase the number of seat.
>   - ✓ Registration of doctors.
>   - ✓ Standards of professional conduct of medical practitioners.

Provisions of the Bill

- A uniform exit test (**National Exit Test or NEXT**) to be conducted for **all medical educational institutions at undergraduate (UG) level**.
- NEXT would help MBBS graduates **to qualify for medical practice** or for a Post graduate (PG) course.
- Introduce admission counseling to medical educational institutions at the UG and PG level.
- Government Medical Officers, who served at least 3 years in remote and difficult areas, would get up to 50% reservation by the States/UTs in PG courses of Government Colleges.
- After the PG Degree, the Medical Officers can be mandated to serve for 3 years in remote or difficult areas by the States/UTs concerned.
- MCI will frame regulations on manner of conduct of NEXT and authority to conduct it.

Significance of the Bill

- It is aimed to provide a **level-playing field to both government and private college students**.
- It increases transparency in the license permissions for medical practices.
- It will add to the quality of the medical skilled workforce in India.

Criticisms

- Medical Institutions already have a continuous evaluation process in their MBBS programme. NEXT exam may make the university exams redundant.
- A tedious process may discourage meritorious students to take up medical courses.
- Draft does not clarify on what happens if an MBBS student fails NEXT.
- Up to 50% reservation compels students to pursue PG courses abroad.
- Along with the 50 per cent constitutional reservations at the UG and PG level, an additional 50 per cent reservation leaves about 25 per cent chance for open category students.
- With MBBS course and the provisions of the Bill, it may take a doctor about 13 years to complete his/her education. This will discourage students from taking up medical education.

Recommendations

- Bill should allow students to take NEXT multiple times for admission to post-graduate courses.
- Detailed provisions about the NEXT's structure, process etc. should be included in the Bill.
- The reservation provision should be re-considered on the basis of ideals of equality and merit.

Way Forward

- Government should focus on reforming the medical education in the country without sacrificing the merit criteria. The suggestions of the doctoral community and the students should become the guiding light for the government to finalize the Bill.

1.8. INDIAN SKILL DEVELOPMENT SERVICE

Why in News?

- Ministry of Skill Development and Entrepreneurship (MSDE) has issued a notification to set up Indian Skill Development Services (ISDS).

Need of the Service

- Skill India Mission has the aim to raise a 500 million skilled workforce by 2022. A unit of skilled administrators under ISDS would promote this goal.
- ISDS will **ensure more government control** in a sector that was largely private-led till 2014.
- India has the largest youth population and one of the lowest skill proficiency. This move will tackle both – **tapping our demographic dividend and improving skills in the workforce**.

Features of the Service

- ISDS will be a Group 'A' service where induction will take place through Indian Engineering Service Examination conducted by UPSC.
- ISDS will have 263 all India posts.
- National Institute of Skill Development will train the administrators under ISDS.

Significance

- It is an attempt to **attract young and talented administrators** for Skill Development.
- It will give **new impetus to the skill development ecosystem** of government like Skill India.
- It will help in **efficient and effective implementation of the schemes**.
- It will create a **dedicated workforce of trained skill administrators** to promote the goal of increasing skilled youths.
- It will promote better competitiveness of the Indian manpower as compared to other countries.
- A dedicated cadre of skilled administrators will help specialize the generalist bureaucracy in the MSDE. This will promote better planning, better implementation and better targeting of the future schemes.

> **Background**
> - Cabinet approved the creation of ISDS in 2015 for the Training Directorate of MSDE.
> - With the current notification it will now become a formal service.
> - The training directorate implements schemes like Craftsmen Training Scheme, Apprenticeship Training Scheme etc.

1.9. TRAI CONSULTATION PAPER ON NET NEUTRALITY

Why in News?

- Telecom Regulatory Authority of India (TRAI) released a consultation paper on Net neutrality (NN) for comments.

Background

- **A.K. Bhargava Committee on Net Neutrality** was setup by DoT in 2015
- In 2016, TRAI released a pre-consultation paper on Net neutrality.

> **TRAI**
> - It is a statutory body under TRAI Act 1997.
> - It regulates telecom services, including fixation of tariffs for telecom services.
> - It provides a fair and transparent policy that facilitates fair competition.
> - TRAI Act was amended in 2000 to establish a Telecommunications Dispute Settlement and Appellate Tribunal (TDSAT) to hear appeals on disputes over TRAI's decisions.

Issues Involved

- There are concerns relating to **discriminatory treatment of Internet traffic by access providers**.
- At present there is **no single standard accepted definition of NN**.
- **Unclear regulatory structure on NN** - In India, issues of licensing and spectrum allocation are dealt by DoT while regulatory aspects are dealt by TRAI.
- There is a need for **preserving customer privacy and national security** along with regulating NN.

Provisions of the paper related to Net Neutrality

- **On Internet Traffic Management Practices (TMPs)** -
  o It recognizes a need for a balance between **non- discriminatory TMP** by the service providers (SPs) and **independence to manage traffic to them**.

- It recommends two policy approaches to manage Internet traffic:
  - ✓ **Broad approach** - Defining what would constitute "reasonable" TMPs.
  - ✓ **Narrow approach** - Define a negative list of non-reasonable TMPs.
- It also recognizes certain exceptions needed for **prioritizing emergency services**. Eg. Government Notified content.
- It also examines whether certain services like Internet of Things (IOT), Virtual Private Network (VPN) etc. should be treated under the scope of TMPs or not.

- **On Core principles of Net Neutrality –**
  - It examines whether specific practices like preferential treatment of content be dealt under the NN framework.
  - It recommends following aspects to define NN's core principles –
    - ✓ **User Rights –** Nondiscriminatory access to internet and Fundamental Right to expression.
    - ✓ **Content –** Right to create content and access it without restrictions
    - ✓ **Devices –** Freedom to connect non-harmful devices to the network.
    - ✓ **Harmful practices –** Practices like blocking, throttling (traffic manipulation) and paid prioritizing may not be permitted.
- On the **need of transparency with consumers** related to the type of TMP used by the Service provider.
  - It wants **disclosures of pricing Information, performance characteristics, specialized services** etc. by the SPs.
  - On the way of disclosures, two approaches are recommended:
    - ✓ **Direct approach –** Disclosures directly to the consumers
    - ✓ **Indirect approach –** Disclosures to third parties like regulators linking the end users.
- **On Regulatory approach and monitoring mechanism needed:**
  - The paper analyzes the present approaches that are being used to regulate NN:
    - ✓ **Cautious Observation –** No specific measure to address NN
    - ✓ **Tentative Refinement –** A light handed approach where the countries refine their existing regulatory regime on communication services and do not prohibit certain behaviours.
    - ✓ **Active reforms –** Passing legislations, guidelines and regulations to regulate NN. Eg TRAI's **Prohibition of Discriminatory Tariffs for Data Services Regulations** 2016
  - The paper suggests various options for the regulation of NN –
    - ✓ Wait and Watch approach as being done by many countries.
    - ✓ Self-regulation through the formation of voluntary mechanism.
    - ✓ Responsibility to regulate lies with the TRAI and government agencies or a participatory model with various stakeholders.

Timeline of Net neutrality (NN) in India

19th of Jan 2015	Creation of DoT committee on NN.
27th of Mar 2015	Consultation on regulatory framework for over-the-top (OTT) services.
May 2015	Release of DoT committee report on NN.
9th of Dec 2015	Consultation on differential pricing for data services.
8th of Feb 2016	Regulation on prohibition of discriminatory tariffs for data services.
3rd of Mar 2016	DoT sought Authority's recommendations on NN.
19th of May 2016	Consultation on free data.
30th of May 2016	Pre-consultation on NN.
19th of Dec 2016	Recommendations on provisioning of free data.

DoT – Department of Telecommunications

Net Neutrality
- It was first coined by Tim Wu.
- It means to **treat all content, sites and platforms equally** on a public information network.
- It is an important part of a **free and open internet.**
- It enables **access, choice** and **transparency** of Internet to every user.

Significance of the paper

- The users are free to give their opinions to the paper. Hence, it is a **participatory approach in policy making**.
- It is a step towards promoting equality among consumers.

Challenges

- **Crony capitalism** may undermine the concepts of NN.

- A **great amount of political will** is needed to finalize the intricate aspects of NN.
- Independence of regulation by TRAI without any interference is a sin qua non for having NN.

Way Forward

- TRAI's consultation paper is a welcome step towards deciding the NN framework in India. The success of the paper will depend on the future planning and implementation framework set by the government.

1.10. ODISHA REJECTS PANEL ON MAHANADI RIVER DISPUTE

Why in news?

Odisha government has rejected the Centre's negotiation committee on Mahanadi river water dispute with Chhattisgarh and instead demanded constitution of a Tribunal for adjudication.

River dispute

- The 858 km long Mahanadi River is almost equally divided between Chhattisgarh (53.9 per cent) and Odisha (45.73 per cent).
- River Mahanadi, with Hirakud dam on it, is lifeline of Odisha state and critical for development of the region
- **Dispute is majorly about six water storage structures/ barrages**, being constructed by Chhattisgarh government, on Mahanadi River. These barrages might leave insufficient water to the Hirakud dam.

Way forward

- Water being lifeline to mankind, thus Interstate water disputes need to be resolved timely.
- Firstly **negotiation** with concerned states by central government must be held, demanding time bound outcome.
- Central government should constitute a **permanent tribunal** to decide on all inter-state water disputes that arise.
- **Mahanadi river management board** should be constituted which would work independently and impartially of political parties and manage, divide water resources objectively.
- Political parties must treat water as a national issue and make consensus among each other.
- Water scarcity is increasing with time thus efficient usage and harvesting of water needs to be given importance.

1.11. NON-PROFIT ORGANISATIONS IN INDIA

Why in news?

- According to a CBI report submitted at Supreme Court there are more than 31 lakh NGOs existing in India, while only 8% - 10% of those file annual financial statement.
- Supreme Court demanded a clear data bank about existing NGOs. There is a need to provide institutional and legal framework to NGOs.

> **Legal recognition of NPOs**
> The Indian context, a non-profit entity can be incorporated under:
> - The Societies Registration Act, 1860
> - The Indian Trusts Act, 1882
> - The Co-operative Societies Act, 1904
> - The Trade Union Act, 1926
> - Section 8 of Indian Companies Act, 2013

What is the exact number of NPOs in India?

- CSO's 2012 reports say that more than 31 lakh societies were registered in the country by 2010. These were NPOs registered under the Society Registration Act, 1860**;** data as available in states and districts.
- Data from income tax authorities suggest that only 1.31 lakh NPOs are registered under Section 12A and are filing annual returns in the country.
- There is no way to determine how many NPOs exist. But estimates put the number at 250 lakh entities.

Framework and Accountability

- A comprehensive, clear legal and institutional framework for NPOs is demanded since 1985; various efforts have been made by planning commission to formulate a policy document for NPOs.

- The Second Administrative Reforms Commission (ARC) termed these as "Social Capital: A Shared Destiny." It argued that such organizations are valuable for society but institutional and legal framework is needed.
- Recent governments have focused only on implementation of changes in the Foreign Contribution (Regulation) Act (FCRA), to regulate foreign funding of NGOs.
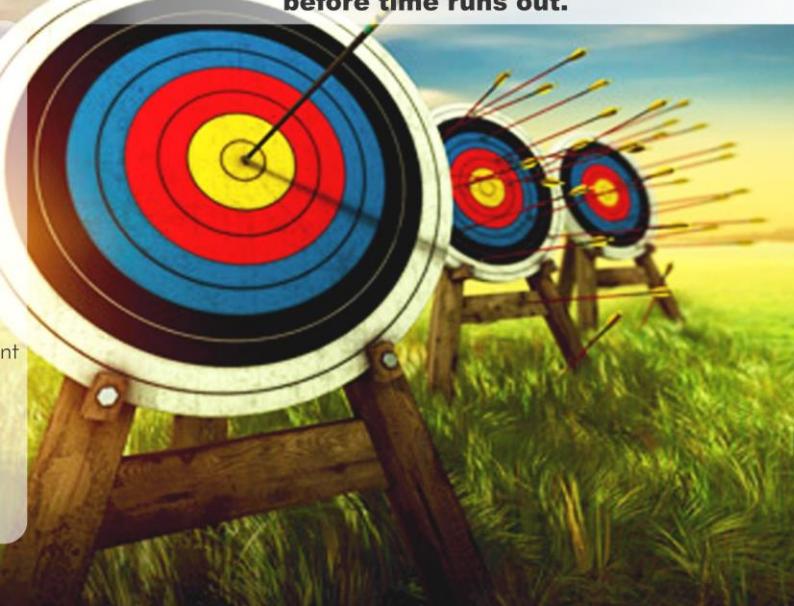
Way forward

- Development requires economic development with inclusivity, gender equality and improvement in quality of life. It is not possible for government alone to effectively undertake such task. This paves the role of NGOs.
- Systemic reform of the institutional and legal framework for NPOs is long overdue, but its absence does not imply that the societal, developmental and professional contributions of NPOs should be devalued.

2. INTERNATIONAL/INDIA AND WORLD

2.1. INDIA-UAE

Why in news?

- Mohammed bin Zayed bin Sultan Al-Nahyan, crown Prince and deputy supreme commander of the armed forces of Abu Dhabi was the chief guest for the Republic Day.

UAE's Importance for India
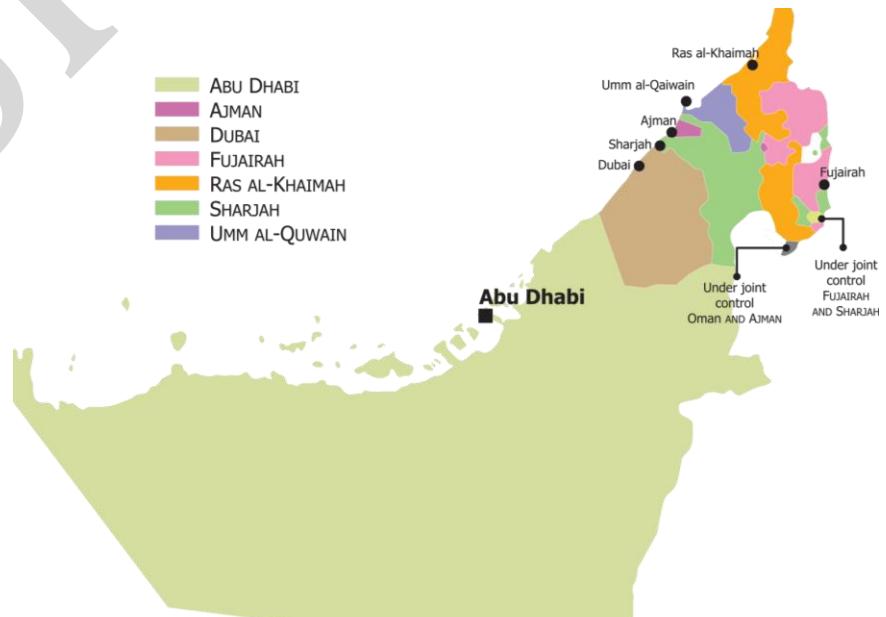
- **Energy security:** UAE is a significant contributor to India's energy security and was the fifth largest supplier of crude oil in 2015-16.
- **Important trading Partner:** UAE is an important trading partner for India in the Gulf region with bilateral trade last year at $50 billion. It has $4 billion in investments in areas ranging from smart cities to real estate.
- **Security and welfare of Indian community:**
  - ✓ Indians make up 30% of the population, 2.6 million — the single largest expatriate community in the UAE.
  - ✓ India receives around 52% of its remittances from its Gulf expatriates.
- **To counter radicalization:** UAE is member **of Gulf cooperation council -** close cooperation is essential for maintaining stable relations in Gulf region and for counter radicalization.
- **To isolate Pakistan:**
  - ✓ In 2015, during PM's visit, UAE made a critical shift in its policy by backing India on terrorism from Pakistani soil.
  - ✓ The unspoken significance of the UAE visit is about **"ending Pakistan's primacy"** in the UAE.

India and the UAE signed **14 agreements**:
- Agreement on Comprehensive Strategic Partnership
- MoU on cooperation in Defence Industry
- MoU on Institutional Cooperation on Maritime Transport
- MOU on technical development and cooperation in cyber space
- MOU on Mutual Recognition of Certificates of Competency
- MoU on Bilateral Cooperation in the Road Transport and Highways Sector
- MOU on cooperation in prevention and combating of human trafficking
- MoU for the cooperation in SMEs and innovation
- MoU in agriculture and Allied sectors
- MOU on mutual exemption of entry visa requirements
- MoU between Prasar Bharati, India and Emirates News Agency (WAM)
- MoU on trade remedial measures to promote cooperation in areas of mutual interest
- Agreement on Oil Storage And Management
- MOU between National Productivity Council and Al Etihad Energy Services Co. LLC

Significance

- India and UAE are islands of stability and there is recognition that by working together, they can contribute a lot more to regional stability.
- India is well positioned to emerge as a credible security and economic partner of the UAE and the larger Gulf region at a time when the West is looking inwards and China's rise is getting hobbled by its aggressive rhetoric on territorial issues.
- A significant aspect was the participation of a military contingent from UAE during the Republic Day parade. These troops embody the UAE and GCC's new **'Look East' policy** of engaging Asia as a counterbalance to the West.

2.2. INDIA-PORTUGAL

Why in news?

- Prime Minister of Portugal Antonio Costa visited India on a State Visit in January. He attended the 14th Pravasi Bharatiya Diwas as the chief guest in Bengaluru.

Agreement: India and Portugal inked seven pacts to expand bilateral engagement in a wide range of areas:

- **Defence Agreement**
  - ✓ meeting security challenges, including in the maritime domain and defence industries.
  - ✓ Prime Minister invited Portuguese companies to **'Make in India' and set up joint ventures** and commercial partnerships based on joint production and technology transfer.
- **Renewable energy:** framework for promoting cooperation in **wind, solar and hydro-electricity sectors.**
- **Start Ups:** MoU on Start Ups and call for regular exchanges between Start-Up India and Start-Up Portugal.
- **ICT:** MoU signed in the area of Information Technology, Electronics and Communications.
- **Marine research:** MoU between **Instituto Português do Mar eda Atmosfera** and Ministry of Earth Sciences.
- **Agricultural trade:** MoU on agricultural trade including market access for agricultural products.
- **visa-free travel:** visa-free travel agreement for diplomatic passport holders of both countries.

Issue of Terrorism

- Recognizing the importance of the Central role of UN in combating terrorism, the two leaders exhorted the international community to effectively implement the measures enumerated by the **1267 UN Sanctions Committee.**
- The joint statement said both sides called for strengthening cooperation in combating terrorism in a **spirit of 'zero tolerance',** underlining that States should not support any terror entity including 'non-state actors' on any grounds.

> On 30 December 2016, China had blocked India's move to list Pakistan-based Masood Azhar as a global terrorist, at the 1267 Sanctions Committee of the UN Security Council. China was the only member on the 15-nation committee to have opposed India's move.

Importance of Portugal for India

- Last year (2016), Portugal supported India's membership of the **Missile Technology Control Regime (MTCR).**
- Portugal is member of Nuclear Suppliers Group (NSG) and it has supported India's membership of the NSG.
- Prime Minister Modi thanked Prime Minister Costa for the support extended by Portugal to India's permanent membership to a reformed and expanded UN Security Council.
- Portugal can act an entry point for Indian companies looking to do business **in EU, Africa and Latin America.**

2.3. INDIA-KENYA

Why in news?

Mr. Uhuru Kenyatta, President of the Republic of Kenya paid a State Visit to India.

Highlights of the visit

- India announced a $100 million Line of Credit to Kenya for agricultural mechanization.
- Mr. Kenyatta invited India to engage more intensely at **COMESA (Common Market for Eastern and Southern Africa**).
- India invited Kenya to join the framework agreement of the **International Solar Alliance (ISA)**.
- India offered its expertise in the area of LED smart street lighting and LED bulbs for domestic use.
- **Defence cooperation**
  - ✓ In maritime surveillance, security, sharing of white shipping information and joint hydrographic surveys.
  - ✓ India has also invited Kenya to participate in exhibitions like Aero-India and DEFEXPO.

> **East African Community (EAC)**
> - The East African Community (EAC), comprising **Kenya, Tanzania, Uganda, Rwanda, Burundi and South Sudan**, has emerged as one of the most successful of Africa's Regional Economic Communities.
> - Having established a customs union, it is building a single market and wants to set up a monetary union.
> - EAC is market of **168 million consumers and have a combined GDP of $161 billion.**

✓ As members of the Indian Ocean Littoral States, both sides emphasised the importance of further consolidating the security and defence cooperation between the two countries.

- **UN Security Council Reform**
  ✓ Kenya staked claim for Africa at the proposed expanded UN Security Council, even as it supported India's campaign for UN reform.

Trade and investment potential in Kenya and EAC

- Bilateral trade, valued at **$4.23 billion in 2014-15**, has the potential for rapid growth if Indian companies are willing to be active in a competitive market.
- Diverse sectors opportunities in Kenya, such as energy, pharma, textiles, agriculture and financial services
- The Indian government and India Inc. need to devise a trade and industrial cooperation strategy to upgrade existing links with the East African Community (EAC).

2.4. INDIA-UKRAINE

Why in news?

Mr. Stepan Kubiv, Deputy PM of Ukraine, paid visit to India. Ukraine commended India for not supporting Russia's claims over the Crimean peninsula and wanted to partner modernization plans of Indian armed forces.

Background

- Following the intervention in Crimea, **Russia annexed** the region in March 2014. However, India has maintained that the situation should be resolved peacefully.
- India and Ukraine are also on track to revive high-level political dialogue. The last big visit from India was 12 years ago when President A.P.J. Abdul Kalam visited Kiev in 2005.
- **Defence cooperation:** Ukraine wants to complete the contract, signed in 2009, on modernisation and overhauling of An-32 fleet for the Indian Air Force.

Significance of visit

- The visit from Ukraine is significant as the last major visit from Ukraine was by President Viktor Yanukovych in 2012 in Delhi.
- Deputy Prime Minister participated in the Republic day celebrations to mark the beginning of a new phase of India-Ukraine ties after a gap of several years caused by Ukraine's war with Russia over Crimea.

2.5. INDIA-USA

Why in news?

- India and the US have signed a MoU to collaborate in the fields of developmental activities and aid in third world countries.
- The MoU has been signed between the Millennium Challenge Corporation (MCC), and Development Partnership Administration (DPA) of the Ministry of External Affairs of India.

> **Millennium Challenge Corporation (MCC)**: MCC is a US agency providing eligible countries with grants to fund country-led solutions for reducing poverty through sustainable economic growth.
> **Development Partnership Administration (DPA)**: DPA looks after implementation of India's development cooperation programmes with partner countries.

Details about MoU

India and US share a vision of reducing poverty globally through sustainable economic growth. Based on this shared vision, they intend to cooperate with the goal of advancing their mutual interests to **strengthen regional integration and connectivity, particularly in the areas of energy, trade, and investment.**

- The two countries would **collaborate on exchange of information** and experience in sectors or issues pertaining to project development or implementation in partner countries.
- India and US might also provide **advisory or technical assistance to third countries** regarding sector policy reform, project and sector management, project implementation, and economic growth promotion strategies in relevant sectors.
- The MoU also facilitates officials of two countries **to site visits to cross-border** or other relevant projects, and capacity building of partner countries.

2.6. RAISINA DIALOGUE

Why in news?

- The second edition of the Raisina Dialogue tackled the theme of '**The New Normal: Multilateralism with Multipolarity'.**
- The conference was attended by delegates from 65 countries.

> **About Raisina Dialogue**
> - It is envisioned as India's flagship conference of geopolitics and geo-economics.
> - It was held jointly by Ministry of External Affairs and the Observer Research Foundation (ORF), an independent think tank.
> - The first edition of the conference was held in March 2016 with the **theme "Asian Connectivity".**

Highlights of PM's speech

- **"Neighbourhood first":** vision for a "peaceful and harmonious" South Asia, putting the "neighbourhood first"**.**
- **Dialogue with Pakistan:**
  - ✓ India alone cannot walk the path of peace. It also has to be Pakistan's journey to make.
  - ✓ Pakistan must walk away from terror if it wants to walk towards dialogue with India.
- **Challenges to globalization:** growing **"sentiment against trade and migration and rising parochial and protectionist attitudes**" were putting globalisation's gains at a risk.
- **China and China-Pakistan Economic Corridor (CPEC)**
  - ✓ It is not unnatural for two large (India and China) neighbouring powers to have some differences.
  - ✓ **"unprecedented business and commercial opportunities"** that he had discussed with President Xi. However, due to rising ambition and festering rivalries (in Asia) are generating visible stress points referring to the issue of "freedom of navigation" in the South China Sea.
  - ✓ PM also highlighted that **connectivity could not "override sovereignty"** in a reference to the $45 billion China-Pakistan Economic Corridor that runs through parts of Kashmir.

2.7. 14TH EDITION OF PRAVASI BHARATIYA DIVAS-2017

Why in news?

The annual global convention for the Indian diaspora, 14th edition of Pravasi Bharatiya Divas 2017 was held in Bengaluru from January 7 to 9 with a record participation since its inception. The theme of 2017 PBD was **"Redefined Engagement with Indian Diaspora".**

> **About Pravasi Bharatiya Divas**
> - It has traditionally been held on January 9 to commemorate the return of Mahatma Gandhi as 'Pravasi' from South Africa over a century ago (1915).
> - Launched in 2003, it is an annual event to step up India's engagement with its diaspora and NRIs and Persons of India origins, the govt. decided to make PBD a biennial event last year.
> - It is also considered to be an important platform to facilitate engagement between Central and state govts with the Overseas Indian Community.
> - Currently, there are 3.12 crore overseas Indians globally, of which 1.34 crore are Persons of Indian Origin (PIO) and 1.7 crore NRIs.

Highlights of Event

- The three-day event started with the Youth PBD, the theme of which was **'Role of Diaspora Youth in the Transformation of India'.**
- The PM urged the diaspora community to switch from their PIO cards to OCI cards.
- The deadline for PIO card conversions to OCI has also been extended to June 30, 2017, without any penalty.
- **Annual remittance from overseas Indians stood at over $69 billion** with India receiving more expat cash than any other country in the world.
- The President concluded the Convention with conferring of the **Pravasi Bhartiya Samman Awards.**

2.8. USA-NEW PRESIDENT

Donald J. Trump took oath as the 45th President of the U.S. He issued many executive orders that will have major global ramifications. Following are the **list of his executive orders:**

2.8.1. TRANS-PACIFIC PARTNERSHIP (TPP) TRADE DEAL

The US president has signed an executive order formally withdrawing the country from TPP trade deal. US would pursue bilateral arrangements with the TPP signatories to find terms more favourable to the US.

Impact

- Withdrawal from TPP will be a significant step in the slide towards a **more protectionist world.**
- In the Asia-Pacific, the US's exit has triggered different responses — from calls to re-focus on the RCEP to revive the TPP with China as its new member.
- China is hoping to galvanize two regional trade proposals — the Regional Comprehensive Economic Partnership (RCEP) and the Free-Trade Agreement of the Asia-Pacific (FTAAP).
- While this may not directly affect India, it could have ramifications on trade pacts being negotiated by the country such as the RCEP.

- The TPP accord was negotiated by former President Barack Obama's administration but never approved by US Congress.
- It had been the main economic pillar of the Obama administration's **"pivot" to the Asia-Pacific region to counter China.**
- Its signatories are Australia, Vietnam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the US and Brunei. They together represent 40 percent of the world economy.

2.8.2. BAR ON REFUGEES AND VISITORS

- President announced that his administration had banned, for 90 days via executive order, travellers from seven nations: **Iran, Iraq, Libya, Somalia, Sudan, Syria and Yemen**. The move does not affect US allies like Pakistan, Saudi Arabia etc.
- This is halting of immigrants from certain countries temporarily until more exhaustive procedures for extensive vetting are in place
- It also placed on hold indefinitely **the U.S.'s asylum programme for refugees from Syria**, and suspended entry of all refugees to the U.S. for 120 days.
- The reason behind the move is to ensure that those approved for refugee admission do not pose a threat to the security and welfare of the United States
- The number of people to be admitted under the **refugee programme in 2017 has been cut to 50,000, less than half** of the previously planned figure of 1,10,000.

Impact

- This could damage **America's reputation as a melting pot of immigrants**, a beacon for bright minds and a humane force against authoritarian excesses across the world.
- The move also indicates refusal **to share the responsibility to deal with the world's worst refugee crisis.**
- The order will probably have **wider fallout in the economic sphere**.
- Top executives of Silicon Valley have criticized this as they fear it will create barriers to bringing talent to US
- This could serve as another excuse for increased terror recruits.
- Preferential treatment for Christian refugees makes a bogeyman of Muslims, a retrograde action that will exacerbate **anti-Americanism worldwide**.

2.8.3. GLOBAL GAG RULE

- President Donald Trump has reinstated and expanded Global Gag rule where even discussing abortion with its patients as an option for family planning is discouraged.
- This will apply to roughly **$9.5 billion dollars in global health funding,** as opposed to roughly $575 million in family planning and reproductive health funding.
- The funding may even obstruct global health organizations from offering **HIV prevention and treatment services, maternal health care, and Zika virus prevention**.

About Global Gag rule

The **Mexico City policy**, also called the **global gag rule** by some human rights organizations, is a US govt policy that blocks federal funding for NGO that provide abortion counselling, advocates to decriminalize abortion or expand abortion services

Bill Clinton repealed it when he took office. George W. Bush reinstated it when he took office. Then Barack Obama again repealed it.

- The ripple effects and unintended consequences may have devastating effects on **health of women and girls around the globe.** Such impacts will be particularly strongly felt in **countries in Africa**.

2.8.4. WALL ALONG THE MEXICAN BORDER

US President has signed two executive orders for the construction of a wall along the Mexican border **to stop illegal migrants** and **speeding the deportation of millions of undocumented immigrants.**

- US-Mexico border is 3,100-km-long and traverses different terrain from dusty desert to lush surroundings.
- USA is seeking to impose a **20% tax on imports** from countries which has a trade deficit with US like Mexico in order to finance the construction of a border wall. However, the proposal is currently only for Mexico.
- Mexico is the second-largest exporter to US, after China. It imported roughly **$300 billion of goods from Mexico** during 2016, and ran a **trade deficit of around $60 billion.**
- US has a range of obligations under the North American Free Trade Agreement (NAFTA) and at the World Trade Organization. And Mexico is likely to challenge any new tax that penalizes its economy.
- Any turbulence in the US—Mexican trade relationship could **have implications for the entire world.**
- Mexican president cancelled his trip to Washington, following order to begin construction on the wall.

2.9. GLOBAL INVESTMENT AGREEMENT

Why in news?

- India, along with Brazil, Argentina and some other nations, has rejected an informal attempt by the European Union (EU) and Canada to work towards a global investment agreement at the WTO.
- The EU and Canada have inked an investment pact that has incorporated the contentious **Investor-State Dispute Settlement (ISDS) mechanism.**

What is Investor-State Dispute Settlement (ISDS) mechanism?

- The ISDS mechanism has become contentious as it permits companies to drag governments to international arbitration without exhausting the local remedies.
- It also allows companies to claim huge amounts as compensation citing losses they suffered due to reasons, including policy changes.

India's Position

- International arbitration tribunals can only be used when all local options have been exhausted for settling disputes between a corporate and a government.
- It also held that such provisions (ISDS mechanism) could be a part of bilateral agreements but they can't be allowed in a multilateral agreement.
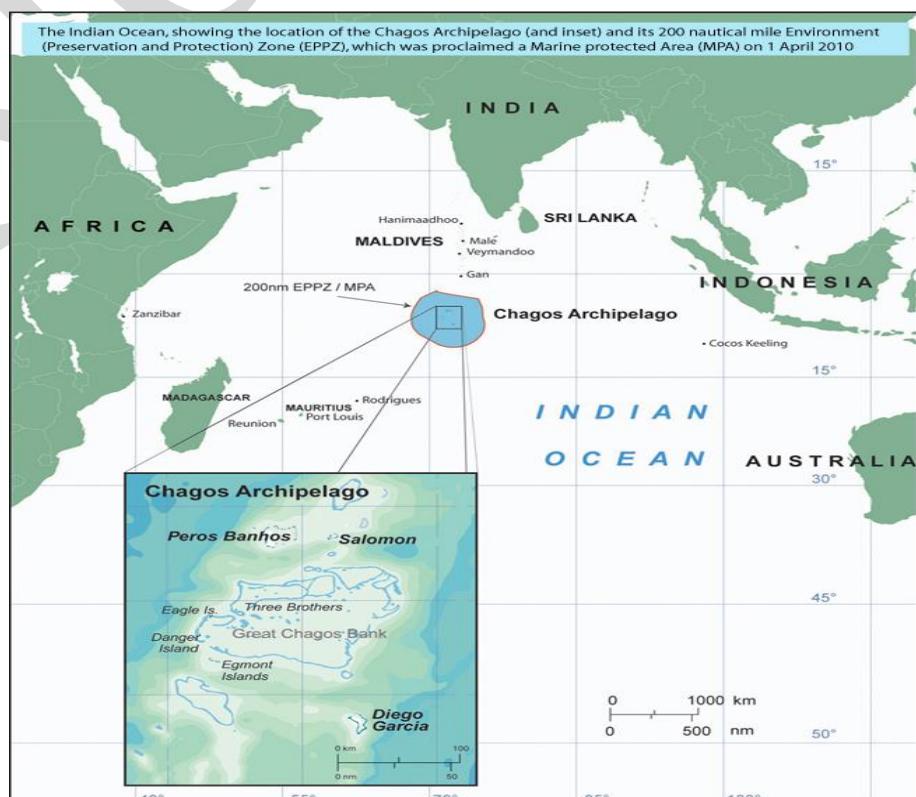
2.10. CHAGOS ARCHIPELAGO DISPUTE

Why in news?

The British Foreign Secretary has sought Indian assistance in resolving current tensions between UK, US and Mauritius over the future of the US military base Diego Garcia, and the Indian Ocean Chagos Archipelago.

About the Chagos Islands

- The Chagos Islands- referred to by the British as the British Indian Ocean Territory, but which is not recognised as such by Mauritius- is home to the **US military base Diego Garcia.**
- In the 1960s and 1970s, inhabitants were removed from the islands.

The Indian Ocean, showing the location of the Chagos Archipelago (and inset) and its 200 nautical mile Environment (Preservation and Protection) Zone (EPPZ), which was proclaimed a Marine protected Area (MPA) on 1 April 2010

- Mauritius has repeatedly asserted that the Chagos Archipelago is part of its territory and that the UK claim is a violation of UN resolutions banning the dismemberment of colonial territories before independence.
- In 2015, the **Permanent Court of Arbitration** unanimously held that the marine protected area (MPA) which UK declared around the Chagos Archipelago in April 2010 was created in violation of international law.
- The British believe that ensuring the future of Diego Garcia would be in **India's security interest in the region too.**

India's Position

- India made it clear that it has a long-standing and principled position on this subject. India conveyed that it is for **Britain and Mauritius to reach an amicable solution on this matter bilaterally.**
- The approach by the U.K. is seen by the Indian side as a **positive move, signalling Britain's eagerness to partner with India on security matters in the region**.

3. ECONOMY

3.1. GENDER RESPONSIVE BUDGETING/GENDER BUDGETING

Why in news?

This year, India ratified the Paris Agreement. Gender equality is one of the 17 goals under Sustainable Development Goals.

What is it?

- **Gender Responsive Budgeting (GRB)** refers to the practice of policy formulation (fiscal policy) and resource allocation in such a way that it furthers the gender agenda and benefits women as much as it benefits men.

Need for GRB

- Women and girl children in India are confronted with gender based disadvantages which may translate into lesser benefits being enjoyed by them.
- Without gender analysis, schemes may reinforce patriarchal mindset due to faulty design or implementation.
- Women lag behind men on many social indicators like health, education, economic opportunities etc.
- India was ranked 87 in terms of gender equality in health, education, economy and political representation by World Economic Forum's annual Global Gender Gap Report in 2016.
- Although policy formulation has been central to the issues concerning the masses, it has failed to benefit women as much as men.

Background

- Gender Responsive Budgeting was institutionalized in India in 2005.
- The annual budget issues a gender budget statement which has two parts.
  - ✓ Part A (first part) has "**women specific schemes**" i.e schemes that have 100% fund allocation for women.
  - ✓ Part B (second part) has "**Pro women schemes**" i.e schemes that have minimum 30% fund allocation for women.
- Apart from being prevalent at the national level, it has been adopted by 16 states.
- No funds were allocated for scheme implementing Domestic Violence Act in budget 2016-17.

Challenges

- Women's declining labour participation, under-representation in Parliament, skewed child sex ratio and prevalent gender based violence.
- Lack of ground level knowledge of needs of women.
- The proportion of gender budget as a proportion of Union budget has either been stagnant or declined.

Recommendations

- Rather than just focusing on women centric schemes, gender-analysis must be carried out for all schemes.
- Greater involvement of women in the administrative and policy making procedure.
- GRB must be adopted not just in social sectors but also in conventionally indivisible sectors like road, transport, energy, and technology.

3.2. ROSE VALLEY CASE

Why in News?

- Two MPs from All India Trinamool Congress (TMC) party have been arrested by CBI in Rose valley case.

What is Rose valley case?

- It is a chit fund scam where two entities - **Rose Valley Real Estates and Constructions and Rose Valley Hotels and Entertainment**, garnered Rs 18000 crores from investors as installments for property purchases promising extraordinary returns of 21%.

Background

- Two TMC MPs were arrested in the **Saradha scam in 2013.**
- In 2014 many unregistered chit schemes were ordered to be wound up and the money refunded to investors.
- Supreme Court also instructed the Enforcement Directorate (ED) and the CBI to probe such chit companies. **As a part of that process, the Rose Valley Group was uncovered**.

Reasons of such scams

- **Multiplicity of regulations and confusion over jurisdiction**. Eg. Centre and State regulate chit funds whereas SEBI regulates other collective investment schemes.
- **Poor regulation**. Eg. Lack of registration of such companies.
- Low financial literacy in the investors about such schemes.
- Quick-get-rich attitude and greed in a consumeristic society.

Steps taken by the government

- **Collective Investment Schemes regulation** gives SEBI sweeping powers to oversee all such schemes that pool investor money.
- RBI has advised banks to carry out quick reviews of accounts opened in the names such as market agencies and retail traders.
- RBI has been sensitising state governments on the **Prize Chits and Money Circulation Scheme (Banning) Act, 1978** and the appropriate action needed.
- **'Direct Selling Guidelines 2016'** by SEBI **clearly defines money circulation schemes** and direct selling to help investigating agencies identify fraudulent players.

What needs to be done?

- Improve financial literacy of the investors.
- Resolve multiple regulation problems.
- Heavy penalty on non-registration of such schemes with the regulator.
- A coordinated effort and a political will by both centre and state governments to tackle the issue.

Conclusion

- The basic aim of such saving and investment schemes is to dupe investors fraudulently. Therefore there is a need to resolve both the supply side problems like regulation deficit etc. along with demand side problems like poor awareness, to curb the financial losses to the economy due to these schemes.

Chit Funds

- A chit fund is a **type of saving scheme** run by an individual or an institution.
- Subscribers pool instalments to the chit fund. After a period, each subscriber gets the entire pooled fund after a discount cut by the chit fund.
- The benefit of chit fund is that a subscriber can get a large amount of money in a short time.
- As per Supreme Court, Chit funds are a part of **concurrent list**.
- Chit funds are **registered by the State governments**. The unregistered ones are usually termed illegal.
- The Prize chits and Money Circulation (Banning) Act 1978 usually defines the illegal Chit funds.

Other fraudulent monetary schemes

1. **Ponzi scheme**
   - It is an illegal investing scam promising high rates of return to investors.
   - It has no underlying assets i.e. it **generates returns for older investors by acquiring new investors and not by earning returns/revenue by any assets like property etc.**
2. **Pyramid Scheme** is an illegal scheme similar to ponzi scheme.
   - While in a Ponzi scheme, participants believe of earning returns from any asset, participants in a pyramid scheme are aware that they earn money by finding new investors.

Direct Selling and Money Circulation guidelines 2016

- It bars entities involved from charging any entry fee from agents.
- It have also **made provision for appointment of monitoring authority at both Central and state level to deal with money circulation schemes.**
- It prohibits such entities from using misleading and deceptive or unfair recruitment practices.

3.3. GREEN BONDS

Why in News?

- According to the **Climate Bonds Initiative**, $81 billion worth of labelled green bonds were issued in 2016, compared to $42.2 billion in 2015.

India's Position on Green Bonds

- Indian Renewable Energy Development Agency Ltd has issued bonds to finance renewable energy **without the tag of green bonds**.
- In 2015, **EXIM bank** launched India's first dollar denominated green bond of $500 million.
- India has become the **seventh largest green bond market in the world**.
- In January 2016, SEBI also released **first Green Bond guidelines** relating to listings, norms for raising money etc.
- Banks have also been permitted to issue green masala bonds.
- The upcoming year will witness **the first 'blue bond' issuance** in India.
- As per Smart cities initiative, municipal bond market will be refueled for water supply projects (a category of Blue Blonds) in cities like Pune and Hyderabad.

Significance of Green Bonds

- India has a target of building **175 GW of renewable energy capacity by 2022.** This requires $200 billion in funding.
- India's INDC for Paris deal obligates India to achieve its emission intensity targets.
- **Budget allocations are insufficient** with most of it allocated to the coal sector.
- Higher interest rates in India raise renewable energy costs by about 25 per cent. **Green bonds carry a lower interest rate than the loans offered by the commercial banks**.
- Investor suffers low risk because the **risk of the project stays with the issuer rather than investor**.

What is Climate Bonds Initiative?
- The Climate Bonds Initiative is an **international, investor-focused not-for-profit organization**.
- It's the only organisation working to **mobilize $100 trillion bond market for climate change solutions**.
- Its **objective is to develop** a large and liquid Green and Climate Bonds Market in developed and emerging markets.
- It would help aggregate money for fragmented sectors and support governments to tap debt capital markets

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Green Bond
- A bond is a debt instrument with which an entity raises money from investors.
- **The capital for green bond is raised to fund 'green' projects like renewable energy, emission reductions etc.**
- First Green Bond was issued by World Bank in 2007.
- There is no standard definition of green bonds as of now.

BLUE BONDS

It is a type of green bond which specifically invests in climate resilient water management and water infrastructure.

Different climate financing initiatives existing today

- **Global Environment Facility (GEF)** is a multilateral body of governments, civil society, banks etc. acting as a financial mechanism to environmental conventions like UNFCCC etc.
- **Green Climate Fund** was created by UNFCCC in 2011 as an operating entity of financial mechanism of the UNFCCC.
- Carbon taxes and cess by the national governments.
- **Clean Development Mechanism** – It involves investment by developed countries in emission reduction projects in developing countries
- **Joint Implementation (JI)** - JI enables developed countries to carry out emission reduction projects in other developed countries.
- **Perform Achieve Trade (PAT)** - It is a market-based trading scheme under National Mission on Enhanced Energy Efficiency (NMEEE). It involves trading in **energy efficiency certificates** to offset emissions.

- It will promote a faster and a sustainable growth as per the 12th FYP.

Challenges in success of Green Bonds in India

- Concerns on **projects targeted under green bond**. **Eg.** French utility GDF Suez's $3.4 billion green bond issue funded a dam project hurting the Amazon rainforests.
- Most green bonds in India have a **shorter tenor period** of about 10 years (compared to international issuances). A typical loan is for minimum 13 years.
- Many target buyers **may not invest in any bonds that are rated lower than the AAA-**.
- There is a lack of viable and bankable projects owing to pricing issues.
- There is inadequate infrastructure (such as inefficient metering in water infrastructure) to implement green projects.
- There is a **limited reliability and creditworthiness of urban local bodies in India.**
- Presently, Indian corporates tap **overseas market due to greater awareness and dedicated investors.**
- Standalone green projects such as rooftop solar still are unattractive to investors due to the small scale and vast geographical spread.

- There is a need for developing a **formal definition of 'green'** to ensure understanding across sectors. Innovative mechanisms such as **aggregation and securitisation** could be used to provide mainstream debt to small-scale green projects. **Collective participation of regulators, policymakers, corporate and financial institutions** is going to be crucial in pushing green bonds further to address climate change.

3.4. NEW HOUSING SCHEMES FOR THE POOR

Why in news?

Government announced two new housing schemes under the **Pradhan Mantri Awas Yojana**, to help the middle class and the poor buy or build homes.

Main Features

- The number of houses being built for the poor, in rural areas, is being **increased by 33 per cent**.
- Subsidized loans will be made available for building or expanding homes in rural India and to **urban poor**.
- **Interest subvention** of 4% on loans of up to 9 lakh rupees and 3% on loans of up to 12 lakh rupees.
- Under the new scheme of housing for all 2022, the central assistance per house for EWS has been planned to increase to 1.5 lakh rupees from 70,000 rupees.

Benefits

- Lower than market price makes it affordable for EWS.
- Buying or making houses registered under such govt schemes offer various benefits, including pricing, location and security of investments.
- Easy and quick legal clearances are also ensured as the govt ensures these things before putting the properties for sale.
- Rural housing schemes can give a boost to employment for the locals.

Challenges

- Availability of land and its acquisition is the biggest impediment.
- Exclusion and inclusion errors in selection of beneficiaries due to faulty BPL lists.
- Such schemes generally concentrate just on house construction and lack other amenities and facilities like drinking water, electricity supply, cooking gas etc when compared to private developers.
- Sub-par construction quality of government schemes turns houses as poor investments for the long term.
- Large section of migrants such as in New Delhi and Mumbai, are left out because of allocation generally on domicile basis.
- Lack of monitoring of the implementation of these schemes and presence of corruption. In many cases houses were not built in spite of release of funds to the beneficiary.
- Slow pace of the implementation of the schemes. 4.4 million new rural houses for poor have to be built this year but rural development ministry has built just 1.1 to 1.8 million houses annually in the last five years.

Way Forward

- Effective targeting of beneficiaries is required before releasing funds under the scheme.
- Capacity building of PRIs and ULBs to ensure proper implementation and monitoring of schemes.
- Convergence of unskilled construction work with NREGA can address scarcity of labour and high labour cost.
- Encouraging participation of private sector to provide efficient water, electricity and other amenities.

3.5. 24X7 POWER FOR ALL

Why in News?

- Tamil Nadu Govt. has signed a MoU with Ministry of Power, GOI for Ujwal DISCOM Assurance Yojana.
- The state has also signed up for the "24X7 Power for All" initiative.

Background

- "24X7 PFA" aims to provide 24X7 power access in the country anywhere any time by 2019.

- With TN signing the MoU, roadmap for all states except UP have been finalized and under implementation.
- Andhra Pradesh and Rajasthan were the first states to sign up to provide 24X7 power.
- Rigorous analysis showed that the states lacked financial viability to provide power for all.
- This led to the formation of UDAY, to replenish loss-making DISCOMs (distribution companies).
- Apart from UDAY, the government has also launched several other initiatives in the past two years to achieve 24X7 PFA such as UJALA (distribution of LED light bulbs), DDUGJY and IPDS.
- Allocations for DDUGJY (Deen Dayal Upadhyaya Gram Jyoti Yojna) and IPDS (**Integrated Power Development Scheme**) have been increased by 25% in budget 2017-18 to achieve 24X7 PFA**.**

> **Meaning of Electrification of a Village**
>
> According to the definition of electrification that came into effect from 2004-05, a village would be declared electrified if,
>
> - Basic infrastructure such as Distribution Transformer and Distribution lines are provided in the inhabited locality as well as the Dalit Basti hamlet where it exists.
> - Electricity is provided to public places like Schools, Panchayat Office, Health Centers, Dispensaries, Community centers etc.
> - The number of households electrified should be at least 10% of the total number of households in the village.

Challenges

- Resolving price related issues and identifying as to why discoms have accumulated losses over the years.
- Smaller villages do not have the required infrastructure to provide 24X7 power. Also, transporting power grids and laying distribution and transmission lines takes time.

Recommendations

- Alternative methods such as solar power can also be used to achieve the 24X7 PFA vision by 2019.
- Electrification can be carried out at the village level by installing off-grids/ mini-grids.

Significance

- UDAY is expected to clear the debt burden of discoms so that they are able to buy more units without adding to losses and achieve 24X7 PFA. It will also give the discoms an opportunity to start afresh.
- 24X7 PFA will not only have a positive impact on productivity and efficiency of firms but a positive correlation between access to electricity and declining poverty has also been witnessed.
- 24X7 PFA is the implementation of integrated planning and cooperative federalism.

3.6. AUTONOMY OF RBI

Why in News?

Questions on autonomy of the RBI were raised after note-ban in November.

Where Does RBI Stand in Terms of Autonomy?

- According to a paper published in the *International Journal of Central Banking* in 2014, RBI was listed as the least independent among 89 central banks considered under the study.
- The study took four factors into account.
    - ✓ Government intervention in appointing central bank's head
    - ✓ Government intervention in policy decisions
    - ✓ Price stability being the sole or primary goal of the monetary policy
    - ✓ Limits on the ability of the government to borrow from the central bank

> **RBI and its Functions**
> - It was established in 1935 under the provisions of **RBI Act, 1934.**
> - RBI has seven major functions:
>   - ✓ **Print Notes**: RBI has the sole autonomy to print notes. GoI has the sole authority to mint coins and one rupee notes.
>   - ✓ **Banker to the Government:** It manages government's deposit accounts. It also represents govt. as a member of the IMF and World Bank.
>   - ✓ **Custodian of Commercial Bank Deposits**
>   - ✓ **Custodian to Country's Foreign Currency Reserves**
>   - ✓ **Lender of Last Resort:** Commercial banks come to RBI for their monetary needs in case of emergency.
>   - ✓ **Central Clearance and Accounts Settlement:** As RBI keeps cash reserves from commercial banks therefore it rediscounts their bills of exchange easily.
>   - ✓ **Credit Control:** It controls supply of money in the economy through its monetary policy.
> - The power to appoint RBI Governor solely rest with the Central Govt. and he holds office at the pleasure of Central Government (tenure not exceeding 5 years).

- These rankings are likely to have improved since the adoption of **inflation targeting** in February 2015 and formation of **monetary policy committee** in October 2016.
- However, vacancies in RBI's board and government's reluctance to fill them up raises questions about the decisions taken and whether proper deliberations on those decisions are being held.
- Time and again successive governments have tried to curtail RBI's independence by various means.
- During the previous government, a Financial Sector Legislative Reforms Commission was formed which made various recommendations to cut down RBI's powers.
- In 2013, a financial sector monitoring body, called Financial Stability Development Council was established which was to be chaired by the Finance Minister.
- In essence the **RBI Act** does not empower RBI absolute autonomy. However, it does enjoy some independence when it comes to performing its regulatory and monetary functions.

3.7. MODIFIED SPECIAL INCENTIVE PACKAGE SCHEME

Why in News?

- The cabinet recently approved amendments to the **Modified Special Incentive Package Scheme (M-SIPS)** in a bid to achieve net zero imports in the electronics sector by 2020.

What is MSIPS?

- The M-SIPS policy was launched in July 2012 for a three year period by the **Ministry of Electronics and Information Technology (MeitY).**
- Its primary objective was to encourage investments in **Electronics System Design and Manufacturing (ESDM) Sector** and speed up the disbursement process.
- The policy encourages companies to produce domestically by providing them 20-25% subsidy on capital expenditure.
- The Government has increased fund allocation to this scheme in budget 2017-18.

Importance

- The scheme is expected to boost domestic production in the electronics sector.
- It is the key strategy towards achieving net zero balance of electronics w.r.t imports and exports.

National Policy On Electronics (NPE)
- NPE's vision is to create a globally competitive Electronics System Design and Manufacturing (ESDM) industry to meet the country's needs and serve the international market.   - Develop an ecosystem for a globally competitive ESDM sector in the country by attracting investment in excess of USD 100 Billion and generating employment for 28 Million people at various levels.   - To develop core competencies in strategic and core infrastructure sectors like telecommunications, automobile, avionics, industrial, medical, solar, information and broadcasting, railways, intelligent transport systems, etc.   - A number of state governments have also come up with separate state specific policies for electronics sector.

- Several government driven initiatives and incentives for electronics sectors are – Electronics Development Fund (EDF), Electronics Manufacturing Clusters (EMCs) scheme, National Knowledge Network & National Optical Fibre Network.
- Domestic production will make the country self-dependent in electronics and will also aid in job creation.

3.8. PROMOTING DIGITAL PAYMENTS THROUGH LUCKY DRAWS

Why in News?

- The center has awarded Rs. 60.9 crores as prize money under under its two lucky draw schemes launched post demonetization- **Lucky Grahak Yojana** and **Digi Dhan Vyapar Yojana**.

Lucky Grahak Yojana and Digi Dhan Vyapar Yojana

- The two schemes were launched post demonetizations to incentivize people to use digital method as a means of payment (cashless transaction).
- The schemes opened on 25 December, 2016 and will remain open till 14 April, 2017.
- The main focus of these two schemes has been to bring the poor, middle class individuals and small merchants under the purview of cashless economy.

Some of the Other Initiative Undertaken to Boost Cashless Economy.

- A total of 100 Digi-Dhan Melas were to be organized across the country. Out of this 24 have already taken place.
- Common Services Centers (CSCs) have also been carrying out training programmes.
- Discounts have also been offered for various digital transactions such as payment of premium on PSU insurance online portals, Central government petroleum PSUs.
- 2 POS (point of sale) devices to be deployed in villages above 1 lakh population.

3.9. DISINVESTMENT

Why in News?

- The **Cabinet Committee on Economic Affairs (CCEA)** has approved divesting 25% of stake in five general insurance companies.
- The five general insurance companies are Oriental Insurance, National Insurance, New India Assurance, United India Insurance and General Insurance Corporation of India.

What is Disinvestment?

- Disinvestment refers to the government selling or liquidating its assets or stakes in PSE (public sector enterprise). It is also referred to as divestment or divestiture.
- Disinvestment was popularized in India post the New Economic Policy of 1991.
- Disinvestment is mainly done when a PSU has been running in losses for years and is not contributing anything to the exchequer but has rather becomes a burden on the government.
- Disinvestment proceeds can help the government fund its fiscal deficit.

> **National Investment Fund (NIF)**
> - It was created in 2005. All the proceeds from the disinvestment of Centre Public Sector Enterprises were to be channelized in this fund.
> - 75% of the income of the NIF is used in social sector schemes such as those that promote education, health and employment while 25% is to be utilized in the revival of PSUs.
> - This rule was relaxed during global economic slowdown and the govt. approved 100% NIF income utilization for social sector from 2009 to 2013.

3.10. SMALL FINANCE BANK

Why in News?

- Recently micro lenders, **Suryoday and Utkarsh**, have started the **small finance banks (SFBs).**
- They are offering interest rates of more than 6% in order to compete with commercial lenders for savings bank deposits. Most of the commercial banks offer 4% on savings accounts.

Background

- **Small finance banks were key recommendations of the committee on financial inclusion chaired by Nachiket Mor.**
- The RBI estimates that close to **90 per cent of small businesses today have no links with formal financial institutions.**
- Taking into account of the above **it was concluded that small finance banks can play an important role** in the supply of credit to micro and small enterprises, agriculture and banking services in unbanked and under-banked regions in the country.

What are Small Finance Banks?

- Small finance banks are **niche banks** (banks that focuses and serves the needs of a **certain demographic segment of the population)** with main function to perform lending activities among weaker section
- The SGBs are essentially scaled down versions of commercial banks, with **both deposit-taking and loan-making functions.**

Characteristics of SFBs:

- Resident individuals/professionals carrying 10 years of experience in banking and finance and companies and societies owned and controlled by residents will be eligible to set up small finance banks.

- **SFBs** have a minimum paid up capital of Rs.100 crore.
- **SFBs** are mainly for the growth of agriculture and Micro, Small and Medium industries.
- **SFBs can** sell forex, mutual funds, insurance, pensions and can also convert into a full-fledged bank.

3.11. DRAFT NATIONAL STEEL POLICY

Why in News?

- The Indian **Ministry of Steel** has released **draft National Steel Policy (NSP), 2017.**

Problems Faced By This Sector

- Steel companies are plagued with huge debts.
- Lack of domestic demand.
- Quality of metallurgical coke is not good enough. Coke is the raw material used in blast furnace iron making. It is made through carbonization of coal.
- High input costs.
- Cheap imports from China, Korea and other countries are also a matter of concern for domestic producers.

> **Importance**
> - India is the **third largest producer of finished steel** in the world coming after China and Japan.
> - The steel sector in India is valued at over 100 billion dollars and contributes 2 percent to the GDP.
> - The sector employs 6.5 lakh people directly and 13 lakh people indirectly.
> - India has been importing finished steel since 2007-08 with the exception of 2013.
> - Until two years ago, India was also the third largest consumer of steel.
> - Despite the global economic slowdown, India was the only economy that showed positive growth in steel sector in 2015.

Reforms Proposed By the Draft National Steel Policy

- The aim of the draft NSP is to develop a **self-sufficient steel industry** that is globally competitive.
- The policy proposes setting up **Greenfield Steel Plants** along the Indian coastline under the **Sagarmala Project.**
- This has been proposed in order to tap cheap imported raw materials such as coking coal and export the output without incurring huge cost burden.
- The policy has also proposed the idea of **gas-based steel plants** and **use of electric furnaces** in order to bring down the use of coking coal in blast furnaces.
- The policy targets to achieve production of 300 million tonnes by 2030-31.

3.12. BANKING CASH TRANSACTION TAX

Why in News?

- The **Committee of Chief Ministers on Digital Payments** has recommended bringing back **BCTT (Banking Cash Transaction Tax)** in order to promote digital payments.

BCTT (Banking Cash Transaction Tax)

- BCTT is a type of tax that was levied on cash transactions above a **specified limit by an individual or HUF** from any non-saving account of a scheduled bank in a single day.
- It was not applicable in the state of Jammu and Kashmir.
- Cash transactions were taxed at 0.1%.
- The tax was first introduced in **2005** under the Finance Act, 2005. It was later rolled back from **1 April, 2009.**
- The tax was introduced to track unaccounted money and trace its source and destination.
- **Tax Administration Committee headed by Parthasarathi Shome had** also recommended reinstating the BCTT in 2014.

> **HUF (Hindu Undivided Family)**
> - It is a separate entity created by members of a family for taxation purposes.
> - It cannot be created by individuals. Members of the HUF are lineal ascendants or descendants.
> - Every member has equal share in the HUF.
> - Hindus, Buddhists, Jains and Sikhs can open HUFs.
> - HUF gets a separate PAN and is taxed separately.
> - It can only be funded through gifts from relatives or through inheritance under the gift tax laws.

Other Recommendations by the Committee of Chief Minister on Digital Payments

- Provision of tax refund to consumer using digital payments up to a certain proportion of annual income.
- No retrospective taxes for merchants engaging in digital payments

- Ceiling on cash usage on all types of large-sized transactions.
- **Ministry of Electronics** has been recommended to provide a subsidy of Rs. 1000 for smartphones for small merchants and those outside the income tax bracket.
- 50 percent subsidy for biometric sensors (iris and fingerprint scanners).

3.13. PROPOSAL TO AMEND PLANTATION LABOUR ACT

Why in News?

- The Centre is planning to amend the Plantation Labour Act (PLA), 1951 **to exclude 'in kind' components** that are regarded as wages.

Need of such amendment

- To **correct human right violation** in tea gardens as reported by NHRC.

- The tea **industry does not pay statutory minimum wages**, saying that the **monetized value of the facilities under PLA 1951 compensates for wages.**

- By the amended PLA, the government wants to **share the cost of social sector schemes** in the tea estates with the plantation industry.

> **Plantation Labour Act**
> - It provides for the welfare of plantation labour and regulates the work conditions in plantations.
> - In every plantation medical facilities for the workers and their families are given.
> - It provides for canteens, crèches, suitable accommodation and educational facilities for the workers in and around the plantation estate.
> - The Act is administered by the Labour Ministry.

Significance of proposed amendments

- **Article 43** of the Constitution directs the State to secure, by law, a **living wage**, **a decent standard of life** and full enjoyment of leisure and socio-cultural opportunities to all workers.
- A minimum wage for all workers will **fulfil government's proposal of a Minimum Wage Code** as a part of its labour reforms.
- The tea industry, which is the largest among the plantation sectors, will benefit many workers from this move.

3.14. TRADE RECEIVABLES DISCOUNTING SYSTEM (TREDS)

What is it?

- It is an institutional mechanism to facilitate the financing of **trade receivables of Micro, Small and Medium Enterprises (MSMEs)** from corporate buyers through multiple financiers.

> **What are trade receivables?**
> The total value of trade receivables for a business at any time represents the amount of sales which have not yet been paid for by customers.

Need of TReDS

- **Recent CRISIL report** says that demonetization by the government has impacted liquidity of MSMEs. It also says that
  - ✓ **Every third MSME is facing delays in receivables** from corporate and the government itself.
  - ✓ They are unable to repay creditors and pay salaries on time.
  - ✓ The steel sector has been most impacted followed by textiles.
- **As per the Federation of Indian MSMEs (FISME)**, MSME businesses have come to a **"grinding halt"** post demonetization.
- **MSME Development Act** says that the buyer of goods or services shall make payment to the supplier within 45 days of acceptance. Therefore **delays are violating the law**.

> **Importance of MSME**
> According to MSME ministry, there are about 51 million enterprises in the MSME segment in India. They have generated employment for about 117.1 million persons and account for 37.5 per cent of the country's GDP.

Objective of TReDS

- **Create Electronic Bill Factoring Exchanges** that could electronically accept and settle bills. It would enable MSMEs to cash their receivables without delay.
- The TReDS will facilitate the discounting of both invoices as well as bills of exchange.

3.15. INDIAN RAILWAYS LAUNCH NON-FARE REVENUE POLICIES

Why in news?

- Railway Ministry has unveiled the Railways' **first non-fare revenue policy** including out-of-home advertising policy, train branding policy, content-on-demand, rail radio policy and an ATM policy.

Need of the policy

- In 2015-16, Indian Railways posted the lowest revenue growth of 4.6% since 2010-11. It is much lower than the 10-19% growth in last four years.
- Freight which earns 60% revenue to railways saw just 0.6% growth in volume, compared with 4-5% growth in the last four years.
- Lack of pricing freedom on passenger segment causes its high cross-subsidization with freight revenues. This creates economic inefficiencies.

Provisions of the policies

- The **non-fare revenue policy** includes
  - ✓ Selling outdoor spaces at railway stations for advertising hoardings and billboards.
  - ✓ Providing radio and video content through Wi-Fi on stations and on trains.
  - ✓ Leasing out spaces at platforms to ATMs.
  - ✓ Selling branding of rights of trains and stations.
- **Train branding policy** would allow advertising of vinyl wraps on train exteriors and interiors on a 10 year contract basis.
- **Out-of-home advertising policy** shall allow advertising at areas hitherto unused. Eg. Road Over Bridges, Level Crossing Gates etc.

Significance of the policy

- It would provide **recreational activities for the passengers** on their personal electronics. This will **boost customer satisfaction**.
- The move will **reduce its dependence on traditional revenue** streams such as passenger and freight traffic.
- Move can **increase rail competitiveness** compared to other transport sectors like airways and roads. As a spill over, it may **decongest roads and also make public travel cheaper**.

Way Forward

As per Railway Budget 2016-17, Indian railways earned less than five per cent of revenues from non-tariff sources. In Japan, 25-30 per cent of revenue comes from non-fare sources. Railways should aim to reach that level in seven to eight years. This will be a right step towards modernizing our railways.

3.16. PROVIDENT FUND CONTRIBUTION VIA PRIVATE BANKS

Why in news?

- Labour Ministry has allowed employers to make provident fund (PF) contributions to Employees Provident Fund Organization (EPFO) through scheduled banks (SCBs) in India including private sector banks.

Need of the proposal

- At present, contribution to EPFO can be made only through nationalised banks and payment portal PayGov.
- EPFO receives nearly 25 per cent of the payments through private banks.
- Not allowing all scheduled commercial banks caused a delay in depositing money with the EPFO.
- No transaction through SCBs also caused transaction charges to EPFO.

> **What is EPFO?**
> - It is a statutory body under Employees Provident Fund and Miscellaneous Provisions Act 1952.
> - It administers
>   - ✓ The Employees Provident Fund scheme
>   - ✓ The Employees' Pension Scheme
>   - ✓ The Employees Deposit linked Insurance scheme for the workforce engaged in the **organized sector in India**.
> - It is administered by a Board known as Central Board of Trustees (**headed by Labour Minister**).
> - It has representation from government, employers and employees.
> - It is under the administrative control of Ministry of Labour and Employment.

Significance of the proposal

- It would **cut down the delay with the payment aggregators** by two to three days.
- It would lead to an earning of Rs 15 crore every year for the EPFO.
- It will also **increase the ease of doing business** within the country.
- It would enable EPFO to **seamlessly credit payments to the subscribers and to improve its service delivery**.

Way Forward

- This is a welcome step. Now amendments to the existing provisions of the EPF Scheme are required to add SCBs for collection of PF dues and authorise other private banks in future. This should also be done soon to reap the benefits of the step.

4. SECURITY

4.1. SECURITY COUNCIL RESOLUTION 2322

Why in news?

- The Security Council unanimously adopted a resolution aimed at enhancing and fortifying judicial cooperation worldwide in countering terrorism.
- Resolution 2322 aims to enhance the efficacy of international legal and judicial systems in their fight against terrorism through operational collaboration.

Major Highlights

The Resolution emphasizes five major issues related to counter terrorist activities:

- Use of applicable international instruments like bilateral and multilateral treaties and designation of national central authorities **for mutual legal assistance and extradition.**
- International cooperation in checking the flow of **foreign terrorist fighters and their return** from conflict zones and sharing of available information regarding foreign terrorist fighters including their biometric and biographic information
- It emphasizes the importance of providing such information regarding foreign terrorists to **multilateral screening databases**, which is now done at bilateral level.

> **Issues Facing Counter-Terrorism**
>
> - In most of the recent terrorism cases, including cases in Mumbai, Brussels, Paris etc. significant components of the case, such as evidence, suspects, and witnesses were spread across the jurisdictions of several States.
> - The lack of cooperation amongst police forces, judiciary, and absence of international databases regarding terrorist groups and their members.
>   - ✓ Firstly, the lack of clear evidence or unfeasibility of collecting evidence from several states often directed enforcement agencies to wrong targets.
>   - ✓ Secondly, it resulted in a judicial development that shifted the burden of proof from the prosecution to the accused. The Indian amendments to the UAPA (Unlawful Activities (Prevention) Act in 2008 as a response to the Mumbai attacks are a case in point.

- The resolution suggests that States make **financing of terrorism** as a serious criminal offence and also to deny safe haven to terror financiers.
- **Increasing role of information technology in gathering and sharing evidence**
- Role of **multilateral agencies such as UNODC** (United Nations Office on Drugs and Crime) and INTERPOL in preventing terrorist activities.

Analysis Resolution 2322 provides an opportunity to strengthen the multilateral counter-terrorism endeavors in many ways:

- The proposed judicial cooperation would help in mobilizing tangible evidence to ensure admissibility in courts.
- A systematic use of international databases would be helpful in preventing terrorists from entering/travel from the territory of one State to another. This is significant in the light of the imminent threat posed by the return of foreign terrorist fighters from Syria and Iraq.
- The resolution, if implemented in letter and spirit, would help in getting evidence regarding their actions in Syria and Iraq rather than allegations which could not be proved in a court of law.
- Moreover, active legal cooperation at the international level, as envisaged by resolution 2322 would open ways to end the stalemate in extradition of wanted terrorists, and would put an end to the practice of providing safe havens to such persons by other States.

Conclusion

- The Security Council resolution on international judicial cooperation is a significant development in countering the scourge of terrorism, particularly by transnational terrorist groups.
- The response to threat posed by terrorism should be at global level.
- It can be viewed as the first step to overcome the practical challenges associated with the prosecution of terrorists in their country of origin or elsewhere, for their criminal activities in a foreign country.

4.2. ISSUES OF PARAMILITARY FORCES

Why in news?

- The Delhi High Court asked the Centre on steps taken after a BSF constable's allegation of meagre and poor quality food at LoC border postings.

Background

- Paramilitary forces allege of **step motherly treatment done by the government** as compared to military. For E.g.
  - ✓ A video by jawan alleged disparity in pay and allowances as compared to military personnel.
  - ✓ Another alleged of ration diversion in the paramilitary forces.
  - ✓ A paramilitary soldier was **against the sahayak/buddy system** where soldiers were forced to do personal chores for senior officers.
  - ✓ They also allege of victimization with court martial proceedings for complaining against problems.

> **Central Armed Police Forces as per MHA**
>
> - **Assam rifles**: It came into existence in 1835. It has functions of counter insurgency and border security operations along Myanmar border.
> - **Border Security force:** It came into existence after 1965 India-Pakistan war. It is the primary border security force of India manning western borders of India.
> - **Central Industrial Security Force:** It was set up in 1969. It is the largest such force in the world. Its job is to provide security to various PSUs and commercial places.
> - **Central Reserve Police Force**: It was set up in 1939. It is the largest central armed police force in India. It looks after internal security in India like naxal operations. It also helps with UN peacekeeping missions.
> - **Indo-Tibetan Border Police:** It was formed after India-China war in 1962. It guards the China border. It is also trained in disaster management, UN peacekeeping etc.
> - **National Security Guard**: It combats terrorist activities and also internal disturbances in States.
> - **Sashastra Seema Bal**: It was established in 1963 and guards Nepal and Bhutan borders. It also helps control anti-national activities at these borders.

- A **study by the Bureau of Police Research and Development** (2005) found serious stress-related problems among the paramilitary forces.
- A **study done by the Ministry of Home Affairs (MHA)** found that over 400 paramilitary men have died since 2009 much higher than similar deaths in the Army.

Issues involved

- There is an **absence of a dedicated grievance redressal system** for paramilitary forces.
- Grievance redressal through social media is considered as **an act of insubordination**.
- It also threatens to **affect the morale of the other soldiers thus impacting India's defence preparedness**.
- **A defence bureaucracy** creates delays in the solution of root problems in paramilitary.

Reasons of discontentment

- Without an organized service status, they do not get the **non-functional up gradation (NFU)** required for promotion like in other Group A services.
- **They are overburdened** by doing the job of both the army and the police. Eg. They guard the borders and also battle terrorists and insurgents.
- **Manpower shortage** adds to their burden.
- **Top posts are taken by Indian Police Service (IPS) officers** who don't understand paramilitary's root problems. It lowers the morale in the force.

> **Differences between army and paramilitary**
>
> - **Paramilitary forces are all under Home Ministry** while military is under the Defence Ministry.
> - In ideal case, Army is deployed mostly for border warfare and sometimes in natural calamities.
> - Paramilitary forces are deployed for internal disturbances, insurgency, border protection, elections, VIP protection, terrorism etc.
> - Paramilitary's working hours are mostly longer and inflexible than defence personnel.

- Poor working conditions like no housing facilities, poor food and low allowances adds to problems. (**Napoleon once said "An Army marches on its stomach"**).
- They are devoid of justice. For e.g.
  - ✓ Armed forces tribunal does not cover them.
  - ✓ They have a court martial like system called **Security Forces Court with lesser safeguards**.
  - ✓ Appeals to courts and home minister are expensive and complex.
  - ✓ Even **Article 33** deters them to approach civilian judiciary.

What steps government has taken?
- Better dispute resolution, communication facility in field areas, yoga etc. have been introduced.
- Increased interaction between jawans and officers were part of the 14 measures undertaken by government **to boost morale**.
- In 2015, Delhi HC ordered government to give pay upgrade to **Group A** officers of paramilitary according to 6th Central Pay Commission.
- To improve **gender equality** in the paramilitary -
  - ✓ The government approved **reservation of 33% women** at the constable rank in CRPF and CISF.
  - ✓ It also set a **15% quota** in the border forces BSF, SSB and ITBP **for women.**

What needs to be done?
- **The DoPT notification to bring paramilitary forces under the organized service category has been refused by MHA.** MHA needs to notify it soon.
- The **Assam Rifles** was shifted to MHA. But it is still under Defence Ministry's operational control. MHA should be given complete control for better synergy.
- The demand of the paramilitary forces should be considered for e.g.
  - ✓ **A Military Service Pay**
  - ✓ Timely career promotion,
  - ✓ Better infrastructure
  - ✓ **Martyr status when they die fighting**.
- There can be a **separate Ministry to take care of their needs**.
- There is a need of a separate grievance redressal mechanism and a separate tribunal for paramilitary forces.
- For parity in allowance **"one area, one allowance"** should be implemented. It gives same allowance for both military and paramilitary deployed in same area.
- They also want **greater hardship allowance**.

4.3. COLD START DOCTRINE

Why in News?
- In an interview, the chief of army staff has acknowledged the existence of Cold Start Doctrine (CSD) which India has not acknowledged officially yet.

Background
- India from 1984 till 2004 followed Sundarji Doctrine (SD) on possible war with Pakistan.
- As per SD, **seven holding corps** at the Pakistan border and **three strike corps** in Central India would be deployed.

> **What is Cold Start Doctrine?**
> - **CSD** aims to retaliate Pakistan's attack with a significant harm before any international community interferes.
> - It is to be done in such a way that Pakistan is not provoked for a nuclear attack.
> - Its main elements include -
>   - ✓ **Enhancing the offensive operations capability of defensive or 'PIVOT' corps** to launch offensive from a "cold start".
>   - ✓ **Moving Strike Corps cantonments closer to the border**.
>   - ✓ A number of **"integrated battle groups"** to be formed to launch **limited offensive operations** to capture Pakistani territory.
>   - ✓ The captured territory would act as a bargaining chip to force Pakistan to wind down its institutional support to terrorists.

- The holding crops would hold offensive strike of Pakistan till the strike corps, having offensive potency give punitive response to Pakistan.
- **After Parliamentary terrorist attack of 2001**, SD was used under **Operation Parakaram**. It took about 3 weeks to mobilize soldiers due to the long distance.
- By then international pressure prevented India from taking action.
- CSD was developed after the failure of SD. **Whereas SD adopts a strategy of defensive offense, the CSD adopts a strategy of Offensive Defense**.
- **In 2001, Operation Vijayee Bhava and Operation Sudarshanshakti** successfully reduced the mobilisation time drastically to 48 hours as per CSD.

Significance of the Doctrine
- In the wake of recent terror attacks at Pathankot and Uri this doctrine can help improve our defence preparedness.
- It can also prepare India's strategy on any responsive surgical strike.
- It carefully avoids risking escalation of the conflict to the nuclear level.

- The strategy helps sensitise Pakistan to India's tolerance threshold and reinforces deterrence.
- This would bring about self-restraint in Pakistan's employment of proxy war.

Criticisms of the Doctrine

- It gives a justification for Pakistan to build its nuclear forces. E.g. Short range missiles called **tactical nuclear weapons** aimed at deterring a limited Indian military incursion.
- India's defence budget has also increased in this response diverting money away from various social sector schemes.
- Some argue that India lacks the manpower and ammunition to implement it.
- It increases nuclear arms race and also the threats of nuclear terrorism and theft.

Way Forward

- The CSD is a good doctrine from India's point of view, but it adversely impacts strategic stability of India since Pakistan's strategy is to counter India's conventional military superiority with a nuclear shield. Any misadventure on the part of India could lead the region to nuclear catastrophe and therefore demands both the nuclear powers exercise restraint.

4.4. QUANTUM CRYPTOGRAPHY

Why in news?

Russian Quantum Center (RCQ) said that it is ready to offer "quantum cryptography" that could propel India to the forefront of **hack proof communication** in sectors such as banking and national and homeland security.

What is Cryptography?

- This is the process of encoding and decoding information or messages so that it is sent securely over communication network.
- Until the 1990s, cryptography was based on algorithms - a mathematical process or procedure.
- These algorithms are used in conjunction with a key which is a collection of bits (usually numbers).
- Without the proper key, it's virtually impossible to decipher an encoded message, even if one knows what algorithm to use.

What is Quantum Cryptography?

- Quantum cryptography uses quantum physics and not mathematics.
- In this, key is generated using polarized photons.
- Since, it uses polarized photons, i.e. spin of photons as key, there's little chance it can be cracked using mathematics.
- It is important in the wake of increased cyber-attacks.

About RCQ

- RQC conducts scientific research that could lead to a new class of technologies.
- These include developing 'unbreakable cryptography' for the banks and the government organisations.
- The research is mostly funded by the government money.

4.5. INS KHANDERI

Why in News?

- INS Khanderi, second of the Scorpene class submarine, was launched in Mumbai at the Mazagon Dock Shipbuilders Limited (MDL).

Project 75
Under Project-75, French Company DCNS will provide design and technology to public sector Mazagon Docks to make six Scorpene diesel submarines by 2022.

- It will undergo trials before being inducted in the Indian Navy.

Need of new submarine
- Submarines help wage a covert war against the enemy and also helps maintain naval superiority giving navy the capability to fight under water.
- Addition of new submarines is also necessary to replace the earlier aged submarines.
- It is also important in light of rising accidents in the old submarines. Eg. Fire accident at INS Sindhurakshak.

Significance of the mission
• Khanderi is second of the six submarines of Project 75 of Indian Navy. The first was Kalvari. • It would increase our strategic ability to wage a **stealth fight**. • It would **protect our sea lanes of commerce** • It would help India maintain primacy in the Indian Ocean. • It would boost indigenous manufacturing and self-sufficiency in submarine manufacturing.

Features of the submarine
- The Kalvari class submarines include **superior stealth and precision guided weapons.**
- INS Khanderi is designed to **operate in all theatres**, including the tropics.
- It also has interoperability with other components of a Naval Task Force.
- INS Khanderi can undertake **diverse types of missions** like anti-submarine warfare, intelligence gathering, mine laying, area surveillance etc.
- It has ability to launch attacks with torpedoes.

4.6. PINAKA ROCKET

- Recently, DRDO conducted the second successful flight test of the **Guided PINAKA rocket** from Integrated Test Range at Chandipur, Odisha.
- Guided **PINAKA Mark-II** is an improved version of **Mark-I** with increased range of 70 km (earlier 40 km) and better accuracy of 50m (earlier 500m).
- PINAKA Mark-II is converted into **guided** version by equipping it with navigation, guidance and control kit developed by Research Centre Imarat (RCI), Hyderabad. PINAKA Mark-I was **unguided.**
- It is jointly developed by Pune based Armament Research & Development Establishment (ARDE), RCI and Defence Research and Development Laboratory (DRDL), Hyderabad.
- PINAKA II like PINAKA I is fired using **multi-barrel rocket launcher** which can fire 12 Rockets loaded with explosives within 44 seconds and destroy a target area of 4 sq km at a time.
- Successful test show the country's capability of converting **unguided** weapon into **precision** weapon.

4.7. MAKE IN INDIA IN DEFENCE: ISSUES

Why in news?

Many projects under the 'Make in India' programme in the defence sector are pending due to not finalizing the strategic partnership (SP) model to choose private Indian companies for indigenous defence manufacturing.

Stuck Projects Include

- Construction of submarines for urgent replacements in the Navy's submarine fleet under project P 75I
- Manufacturing of a fighter aircraft to supplement the 36 Rafale fighters in the medium weight category. Three foreign companies, Boeing, Lockheed Martin and Saab, wants to make their fighters — F-16, F-18 and Gripen - in India but are awaiting the finalization of the SP model.
- Construction of the Naval Utility Helicopters also awaits a decision on the Indian manufacturer.

Background

- Defence Procurement Procedure (DPP) issued in March 2016 did not list down the criteria for selecting the private Indian defence companies under the SP model.
- The SP model was first envisaged by the **Dhirendra Singh Committee** in which it proposed assured contracts for all requirements of a particular military platform to be given to a particular chosen private firm.
- It means that one company could get all the contracts for making submarines in India while another, could make all the planes in India for the next 20 years.

Reasons for Delay in Finalization of SP Model

- The acquisition wing of the ministry wants two or more companies to be selected as strategic partners for each platform to allow for price discovery through competitive bidding.
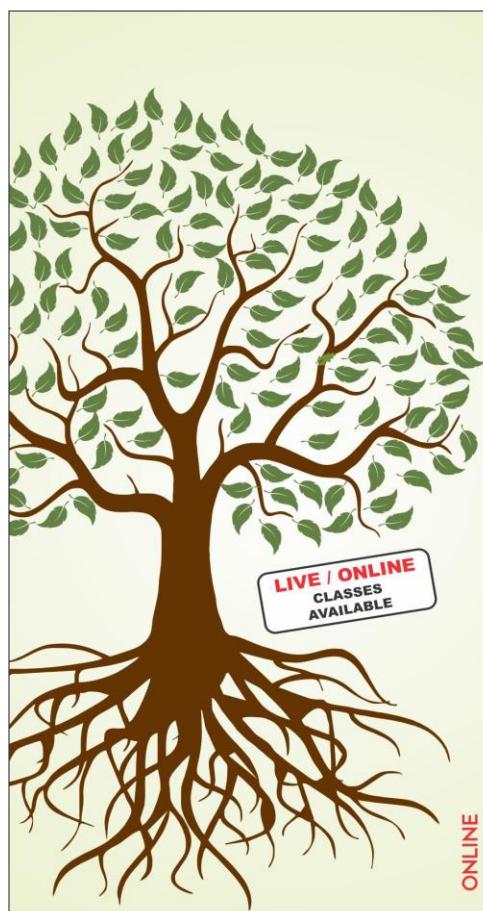
- While Department of Defence is in favour of the SP model and the price is determined on a cost-plus model.
- The proposed cost-plus model has been done away with by even defence public sector units, which was seen as a reason for highly inflated costs for indigenously-produced equipment.
- The total quantum of assured deals would exceed Rs. 1000 crore which is beyond the powers of the ministry and would have to go for approval to the Cabinet Committee on Security, which can insist on competitive bidding.
- The SP model may also face legal challenges from losing companies.

Way Forward

- The indigenization of the sector is crucial for the self-sufficiency of the country with 3rd largest armed force.
- Also, the sector has the potential to boost manufacturing and add one million direct and indirect jobs.
- The issues raised by different wings of the Defence ministry and industry must be amicably solved by taking all the stakeholders on board.

4.8. NEW POST OF MILITARY ADVISER

- Lt General D B Shekatkar Panel has recommended creation of a new post of military adviser who will be of four-star rank, i.e. equivalent in rank to the current chiefs of the Army, Navy and Air Force.
- The report says that the new post which may be called either the Chief of Defence Staff (CDS) or Permanent Chairman Chiefs of Staff Committee (PC-COSC), is essential for smooth functioning of the armed forces in the prevailing security environment.
- India's armed forces have to defend the nation and stabilize the neighbourhood, and their main priority, the report argues, is "to degrade the combat endurance, combat capability, combat potential and combat capacity" of Pakistan.

5. ENVIRONMENT

5.1. KYOTO PROTOCOL

Why in News?

- Recently the Union Cabinet had approved the ratification of the second commitment period (2013-2020) of the Kyoto Protocol on containing the emission of greenhouse gases.

About Kyoto Protocol

- The Kyoto Protocol was adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005.
- The detailed rules for **the implementation of the Protocol were adopted at COP 7 in Marrakesh**, Morocco, in 2001, and are referred to as the **"Marrakesh Accords." Its first commitment period started in 2008 and ended in 2012.**
- The protocol was developed under the **United Nations Framework Convention on Climate Change-UNFCCC.**
- The participating countries have ratified the Kyoto Protocol and **committed to cutting the emissions of the Green House Gases** such as Methane (CH_4), Nitrous oxide (N_2O),Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur hexafluoride (SF_6) and carbon dioxide(CO_2).

Classification of Parties to the Kyoto protocol

- **Annex I**: Parties to the UNFCCC listed in Annex I of the Convention. These are the **industrialized (developed) countries** and "economies in transition" (EITs). EITs are the former centrally-planned (Soviet) economies of Russia and Eastern Europe. The European Union-15 (EU-15) is also an Annex I Party.
- **Annex II**: Parties to the UNFCCC listed in Annex II of the Convention. Annex II Parties are made up of **members of the Organization for Economic Cooperation and Development (OECD)**. Annex II Parties are required to provide financial resources to enable developing countries in reducing their greenhouse gas emissions (climate change mitigation) and manage the impacts of climate change (climate change adaptation).
- **Annex B**: Parties listed in Annex B of the Kyoto Protocol are Annex I Parties with first or second round Kyoto greenhouse gas emissions targets.
- **Non-Annex I**: Parties to the UNFCCC not listed in Annex I of the Convention are **mostly low-income developing countries**. Developing countries may volunteer to become Annex I countries when they are sufficiently developed.
- **Least-developed countries (LDCs)**: 49 Parties are LDCs, and are given special status under the treaty in view of their limited capacity to adapt to the effects of climate change.

Mechanisms to stimulate green investment

- **Emission Trading**: Emissions Trading-mechanism allows parties to the Kyoto Protocol to buy 'Kyoto units' (emission permits for greenhouse gas) from other countries to help meet their domestic emission reduction targets.
- **Clean Development Mechanism (CDM):** Countries can meet their domestic emission reduction targets by buying greenhouse gas reduction units from (projects in) non Annex I countries to the Kyoto protocol.
- **Joint Implementation**: Any Annex I country can invest in emission reduction projects (referred to as "Joint Implementation Projects") in any other Annex I country as an alternative to reducing emissions domestically.

Initiatives by India to Counter Climate Change

- **National action plan on climate change (NAPCC):** Government of India has launched **eight Missions** as part of NAPCC in specific areas which include assessment of the impact of climate change and actions needed to address climate change.
    - National Solar Mission
    - National Mission for Enhanced Energy Efficiency
    - National Mission on Sustainable Habitat
    - National Water Mission
    - National Mission for Sustaining the Himalayan Ecosystem
    - National Mission for a "Green India"
    - National Mission for Sustainable Agriculture

> ➤ National Mission on Strategic Knowledge for Climate Change
- **National Action Programme to Combat Desertification:** It is proposed to initiate activities such as assessment and mapping of land degradation, drought monitoring and early warning system, drought preparedness plans, and on-farm research activities for development of indigenous technology etc.

5.2. OLIVE RIDLEY

Why in News?

54 carcasses of Olive Ridley turtles were found on the Shore of **Hope Island,** off the coast of Kakinada **(Andhra Pradesh)** in last one month indicating that their breeding season has been severely affected this year.

Why there population declining?

- Rampant and irresponsible use of **mechanized fishing boat** under which turtles are stuck and crushed.
- Despite being exhorted by fisheries department, boat owners are still unwilling to use **Turtle Excluder Device (TED)** to help turtles pass through the net probably because of **lack of awareness**.
- Direct harvest of Adults and Eggs contribute to dwindling population.
- Yet another reason is **unavailability** of TED in the open market.

About Olive Ridley Turtles

- They are smallest and most abundant of all the sea turtle species. They are **Omnivores.**
- Gets their name from **olive green colouration** of its heart shaped shell.
- They are found only in **warmer waters**, including the southern Atlantic, Pacific and Indian Oceans.
- They are known for their **arribadas (synchronised mass nesting)** during which time tens of thousands of female turtles come ashore to nest in the span of a few days.
- **Gahirmatha** located in the **Bhitarkanika Wildlife Sanctuary, Odisha** houses the world largest mass nesting site of these turtles.
- Past few years, Sandy stretches of **Hope Island** of the **Coringa Wildlife Sanctuary, Andhra Pradesh** have also emerged as a breeding ground for these turtles.
- Their breeding season is from October to February where female can lays 100-150 eggs at one time.
- Despite high population, their numbers have declined significantly in past few year. They have been categorized as **Vulnerable** in **IUCN Red list** and Listed as **Schedule I** species in the Wildlife (Protection) Act, 1972, thereby being offered maximum protection.

5.3. DEER ANTLERS

Why in News?

- Kerala has sought permission from Union government to allow the use of **Antlers** of **Spotted** and **Sambhar** deer in Ayurvedic medicines by amending **Wildlife Protection Act, 1972.**
- Antlers are extension of Deer's skull and all the three species of deer found in Kerala **Spotted deer**, **Sambhar deer** and **Barking deer** shed their antlers annually which **regrow** again.
- State governments and other wildlife authorities have huge quantity of antlers in their custody as their sale and use are banned in India under **Wildlife Protection Act, 1972.**
- Though proposal only includes collection of antlers already shed, it may **trigger** the reckless hunting of deer.

Some Additional Information

- The Act of 1972, has included **antler** in the definition of **wildlife trophy** which is defined as the "whole or any part of any captive animal or wild animal".
- **Trophy hunting** is the shooting animals for pleasure where **trophy** is the animal (or its head, skin, antler or any other body part) that the hunter keeps as a **souvenir**.
- Wildlife and wildlife trophies are considered as **owned** by the government.
- The Act prescribes imprisonment up to 3 years and fine of Rs. 25,000 for offences involving wildlife trophies.
- Antlers have **medicinal values** to invigorate spleen, strengthen bones/muscles, boost blood flow, etc.

5.4. HAKKI HABBA

- It is a three day bird festival which was held at **Daroji Sloth Bear Sanctuary** near world famous **Hampi** in Ballari district, Karnataka.
- It was the **3rd edition** jointly organized by State's Forest Department and Eco Tourism Board in association with the local birdwatchers' association.
- The first two editions were held in **Ranganathittu Bird Sanctuary,** Mandya district and **Kali Tiger Reserves**, Uttara Kannada district.
- The objective of the festival is to create **awareness** among the people about conservation of birds.

> **Sloth Bears**
> - Indian Sloth bears are a species of bear found **only** in **India, Nepal** and **Sri Lanka.**
> - It is **nocturnal** animal, locally known as **KARADI**, lives in open scrub forests having outcrop of rocks, boulders and caves as shelter.
> - They have poor vision and hearing but good sense of smell.
> - Daroji sanctuary established in 1994 is biggest sloth bear sanctuary in Asia.
> - Current status: **IUCN RED list – Vulnerable**, in **CITES** included in **Appendix I** and **Schedule I** of wildlife protection act, 1972.

- Birds like **Great Indian Bustard, Bar-headed geese**, **Partridges**, **Painted Sand grouses**, **Yellow throated bulbul**, **Great horned Owl, Black Storks** were sighted along the bank of River Tungabhadra in Hampi.

5.5. ZINGIBER PSEUDOSQUARROSUM

Why in news?

- It is a new species of ginger recently discovered by botanists of **The Botanical Survey of India (BSI)** in the Andaman and Nicobar Islands.
- It belongs to **Genus Zingiber** and used for its medicinal values by the local Particularly Vulnerable Tribal Groups (PVTGs) of the Andamans.

> **Botanical Survey of India**
> It is an institution established in 1890 with the objectives of exploring the plant resources of the country and identifying plant species with economic virtue.

Its properties

- Like other Ginger it is also edible and its **pseudo stem** is red in colour.
- Its **monocotyledonous** flowers are lotus shaped with reddish tinge, fruits are pot shaped while Inflorescence buds are like pitcher.
- This particular species have tuberous roots and the buds have no smell.
- The juice of its fleshy tuberous roots is used to treat **abdominal pain** and **anti-helminthic troubles**.
- Its **rhizomes** are widely used as a spice or a traditional medicine.
- The odd shape of this species of ginger makes it distinct from the many others in the genus Zingiber.
- Most common species of Ginger, **Zingiber Officinale**, known for aromatic smell is grown widely across India.

5.6. IDUKKI WILDLIFE SANTUARY

Why in News?

- Recently there was a **birds and butterfly survey at the Idukki Wildlife Sanctuary (Kerala)**.

About Idukki Wildlife Sanctuary

- **The Forest type:**
  - ➤ West Coast Tropical Evergreen forests,
  - ➤ Semi Evergreen forests,
  - ➤ Moist Deciduous Forests,
  - ➤ Hill shoals and Grass Lands.
- **Average rainfall** is 3800mm and the **highest peak is Vanjur Medu (1272m)**.
- **Biodiversity: common animals** found are - Elephant, Sambar, Barking Deer, Mouse deer, Bonnet macaque, Nilgiri Langur, Malabar giant squirrel.

- **Birds: Osprey (fish eagle)**, listed in the **IUCN red category**, Great Indian Hornbill, Grey-headed Bulbul, etc.
- It is also notorious for illegal cultivation of marijuana – world renowned "Idukki Gold" or "Kerela Gold"

The highlights of the survey

- Newly spotted birds in the sanctuary - Scally Thrush, Booted Warbler, Paddyfield Warbler, Blue Rockhill, etc.
- The rarely sighted newly spotted butterfly species - Malabar Hedge Hopper, Malabar Tree Nymph, etc.
- It is becoming a favored **destination for migratory birds** as it is closely located to **Idukki Arc Dam.**
- The **Idukki Arch Dam is the Asia's biggest Arch Dam of 555 feet high.**

5.7. CHINA BANS IVORY TRADE

Why in news?

- China has announced to ban all ivory trade and processing activities by the end of 2017, a move described by wildlife conservationists as a **"potential game changer"** for African Elephants.
- As per the new rule, owner of ivory products can either keep them or give them as gifts or sell them at supervised auctions with official approval.
- The move follows a resolution at the **Convention on International Trade in Endangered Species (CITES)** in South Africa last October to close domestic ivory markets.

Present situation

- Though ivory trade is ban in international market since 1989, legal domestic markets have continued in many countries around the world.
- As per **Great Elephant Census, 2016** population of African elephants have declined by 30% in past 7 years primarily because of poaching with just **415,000** left in the wild.
- China has the **biggest ivory** market in the world - some estimates suggest **70%** of the **world's trade** ends up there where it is seen as a status symbol and prices can reach as high as **$1100 per kg.**
- Conservationists estimate that more than **20,000-30,000** elephants were killed for their ivory last year, with similar tolls in previous years.
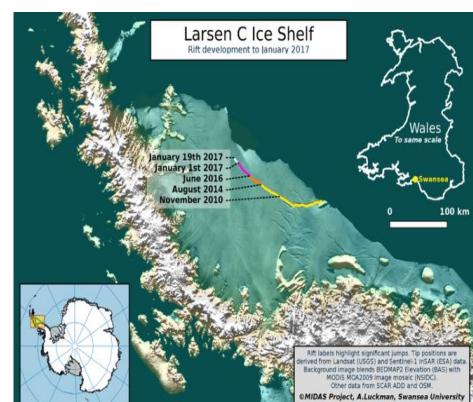
Impact

- Setting such an aggressive timeline to close- once and for all-the largest domestic ivory market in the world is **globally significant** and will immensely **boost conservation efforts**.
- It will make it harder for Ivory traffickers to sell their illegal stocks.
- Such ban will pressurize countries like Britain, Japan and especially neighbouring Honkong **(world biggest legal retail market for elephant ivory)** to close their ivory markets.

5.8. LARSEN C ICE SHELF POISED TO CALVE

Why in News?

- **Larsen C ice shelf**, located on Antarctic Peninsula witnessed an enormous rift, which has disproportionately grown in past few months, now extending upto 175 Km long.
- British researchers monitoring the rift as a part of **Project MIDAS** says that only 12 miles (19 km) now connect the chunk of ice to its parent iceshelf.
- If the rift fully extends, the resulting iceberg would be approximately 5000 sq km and will be one of the biggest icebergs ever recorded.
- Though there is lack of credible evidence to directly correlate calving of iceberg with global warming but it indeed show climate change has caused the thinning of the ice shelf.

Impact

- If iceberg separates, Larsen C Ice shelf will be at its **most retreated** position ever recorded, fundamentally changing the landscape of the Antarctic Peninsula.

- New configuration will be less stable than prior to the rift and might meet the same fate as its neighbours **Larsen A** (collapsed in 1995) and **Larsen B** (collapsed in 2002).
- **Land ice** that have been blocked by the breaking iceberg, will drop into the ocean and eventually would raise the sea level.

Ice shelf

- It is a floating extension of **land-based glaciers** which flow into the ocean.
- As they already float in the ocean, their melting does **not directly** contribute to sea-level rise.
- The breaking of ice shelves is a **natural process** but global warming is thought to have accelerated this process.
- In recent decades many major ice shelves have disintegrated or lost substantial volume like **Prince Gustav channel**, **Larsen Inlet, Wordie**, **Muller**, **Jones Channel**, **Wilkins**, **Larsen A, Larsen B**, etc.

5.9. BAN ON IMPORT OF EXOTIC ANIMALS SKIN

Why in News?

- **Director General of Foreign Trade** has prohibited the import of skins of animals like reptiles and furs of minks, foxes and chinchillas.

Present Situation

- India's import policy allows import of raw hides, skin, leather, fur, skins of reptiles, mink, fox etc.
- But they are subjected to regulation under **Wildlife (Protection) Act, 1972** and the **Convention on International Trade in Endangered Species of Wild Fauna and Flora** (**CITES**).
- **The Prevention of Cruelty to Animals Act, 1960** allows the slaughter of animals only for subsistence but this too is regulated to minimize the pain and suffering of animals.

Way forward

- Various nations are switching to cruelty-free alternatives like fake snake, mock croc, faux fur etc. so that animals don't have to be slaughtered for their skin feeding fur, skin and leather industries.
- Also animals are not fabric and thus no amount of justification can be enough to wear their skin/fur.
- With this ban, India showed its commitment to eliminate unnecessary pain and suffering to animals.

> **Director General of Foreign Trade:**
> - It is an attached office of the Ministry of Commerce and Industry.
> - It is responsible for formulating and implementing the Foreign Trade Policy with the main objective of promoting India's exports.
> - It plays a role in developing trading relations with other nations.

About CITES (Came in force in 1975, Also called Washington Convention)

- It is an international agreement between governments aiming to ensure that international trade in specimens of wild animals and plants does not threaten their survival.
- It is a **legally binding treaty** where different species are categorized into groups called Appendices.
- **Appendix I**: Includes species threatened with extinction, trade only in exceptional situation; **Appendix II:** Includes species not necessarily threatened with extinction, trade strictly regulated; **Appendix III:** species that are protected in at least one country, which has asked other CITES Parties for assistance in controlling the trade.

5.10. POLACHIRA WETLANDS

Why in News?

- Recently the **27th annual waterfowl** census was conducted in the **Polachira Wetlands,** in **Kollam, Kerala**
- This year **15 Eurasian spoonbills** were sighted at Polachira. They are **migratory birds** breeding from **the UK and Spain in the west** through to Japan in the **East**.

What are Wetlands?

- Wetlands are **areas where water is the primary factor** controlling the environment and the associated plant and animal life.

- These areas **have the soil covered by water** or are present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season.
- **Wetlands, natural and manmade, freshwater or brackish, provide numerous ecological services.**
- The **density of birds in a particular** area of wetland can be **indication of the ecological health** of a wetland.

About Polachira Wetlands

- The wetlands are the **breeding ground for the Migratory Birds** from all around the world.
- Some of the birds sighted during the census are **Comb ducks, Black headed** ibis, Painted storks, Glossy Ibis, Indian moorhen, **Eurasian coot, Pheasant-tailed jacana**, **Grey heron**, **large cormorant and large egret.**

Ramsar Convention
- It is international treaty for conservation and sustainable use of wetlands.
- It is named after the **city of Ramsar in Iran,** where the convention was signed in 1971.
- There are **26 Ramsar Sites** in India designated as Wetlands of International importance.
- **Chilika Lake** (Odisha), **Point Cailmere Wildlife** and Bird Sanctuary (Tamil Nadu), **Sambhar Lake**(Rajasthan) and **Upper Ganga River**(Uttar Pradesh) are a few noted ones.
- The **2nd of February** each year is noted as the **World Wetlands Day.**

Significance of Wetlands

- It helps to **maintain sedimentation and balance of soil,** helpful in water, carbon and nutrient cycles.
- It helps to **regulate the amount of water** as excess water from rainfall and floods gets absorbed and can be used in times of need.
- It is **source of livelihood** through fishing and rice farming to travel, tourism and water provision.
- Wetlands host a large variety of life, **protect our coastlines**, **provide natural sponges** against **river flooding and store carbon dioxide to regulate climate change.**
- They provide habitat for wildlife and migratory birds and help in conservation of environment.

5.11. MINING ACCIDENTS

Why in News?

- In December 2016, 23 workers got trapped under debris at the **Lalmatia open-cast coal mine** in Jharkhand's Godda district.

Background

- Digging up more coal has become a national priority for India to meet its electricity needs.
- Alongside ship-breaking, mining is the most dangerous profession in India.
- NHRC in its 2014 report titled 'Views on Mine Safety in India' says:
  - The frequency of incidents has increased in recent years.
  - There has been a fatality every seven days in 2016.

COAL INDIA LIMITED (CIL)

'up to June
FA: Fatal Accidents, FTY: Fatalities, SA: Serious Accidents, SI: Serious Injuries

Reasons of such accidents

- Poor safety conditions for workers.
- Not following Standard Operating Procedures (SOPs).
- PSUs outsource work to private companies that do not follow rules and regulations. eg.
  - To prevent flying of coal dust water is not sprayed on open cast mines.
  - Trucks are not covered with tarpaulin sheets.
- This is despite the Coal Mines (Nationalisation) Act 1973, which nationalized private sector, accused of neglecting safety Standard Operating Procedures.
- Careless use of explosives.

Occupational Hazards
Occupational hazard is a danger to a worker that is the result of the occupation he/she is involved in. The danger can range from diseases to even death. Examples:
- ✓ Silicosis in stone crushing industry due to fine silica getting deposited in lungs.
- ✓ Frostbites to soldiers posted on high mountains.

Other Issues involved in mining

- Environmental degradation
- Human Rights violation of local residents mostly tribals. Eg. Tribals constantly fear of their displacement.

- Hiring of contract labourers from outside the area to circumvent protests by locals.
- Labourers do not enjoy social security. Employment of child labour.
- Outright corruption in projects sanctions for minerals exploitation.
- Illegal mining by land owners and mafia.
- Mining areas, especially coal mining, are located near Maoist zones adding to security costs.

Government initiatives on mining safety

- Mines Act 1952 covers protection of health and safety of workers in mines.
- Major incidents are investigated by the **Oil Industry Safety Directorate** and a committee set-up by the Ministry of Petroleum and Natural Gas.
- Root Cause Analysis (RCA) and lessons learnt report is shared with oil companies to prevent similar incidents.
- Ministry of Mines has recently started **Anti-collision system for dumpers, electronic telemonitoring system, slope stability system and gas monitoring system** in some areas.

What needs to be done?

- NHRC in its 2014 report mentioned the need for the mining sector to adopt best practices including-
  - ✓ Using **scientific 'training need assessment'** for officers and workers
  - ✓ Developing **effective training delivery mechanisms**
  - ✓ Working on comprehensive **specialised training on accident investigation**.
- **Occupational health is not integrated with primary healthcare**. It is the mandate of the Labour Ministry. This has to be shifted to Health Ministry for better synergy and finance allocation.
- A regulator on occupational health safety is needed.

Way forward

- The mining industry is a labour intensive industry. Therefore the government and the companies involved needs to devise a multi-pronged strategy that encompasses occupational safety along with protection of the rights of local residents and the environment.

6. SCIENCE AND TECHNOLOGY

6.1. COALITION FOR EPIDEMIC PREPAREDNESS INNOVATIONS (CEPI)

Why in news

* It was officially launched in Jan 2017 at World Economic Forum (WEF) at Davos with an initial investment of $460 million from the **Germany**, **Japan** and **Norway** including **Bill & Melinda Gates Foundation**.

What is CEPI?

* It is a **Global alliance** of governments, intergovernmental institutions like WHO, health specialists, and philanthropists to finance and coordinate the development of new vaccine to prevent and contain infectious disease epidemics.
* CEPI has signed a MoU with WHO. It is using WHO's priority list to choose which diseases to pursue.
* CEPI has finalized three diseases to start developing vaccines for: Middle East Respiratory Syndrome (MERS), Lassa fever and Nipah.

Why Need of CEPI?

Significance
• It will provide a **permanent, sustainable model** for epidemic vaccine development through sharing of risk and benefits of vaccine development.   • It will help in building regional capabilities of various stakeholders in the long run.   • It will **shorten the time** it takes to make vaccines to protect against virus epidemics, which can emerge suddenly as global public health threats.
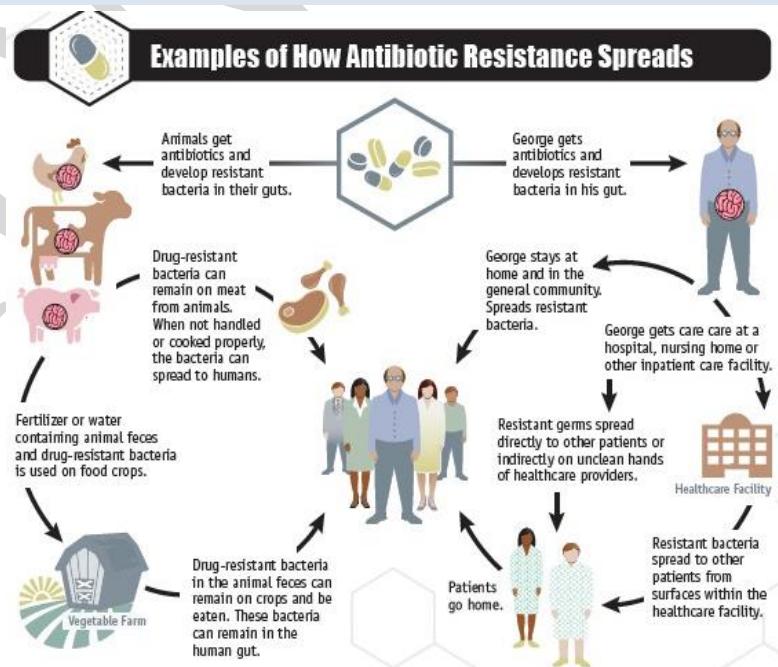
* Infectious disease epidemics cost the world $60 billion each year endangering lives, disrupting societies and damaging economies esp. of low and middle income countries.
* Recent cases like **Ebola outbreak** in West Africa and **Zika** in the America have exposed serious flaws in the world's capacity to prepare for and respond to infectious disease outbreaks.

6.2. KLEBSIELLA PNEUMONIAE BACTERIA

Why in News?

* A US woman died from an infection that was resistant to all 26 available antibiotics, raising new concerns about rise of dangerous superbugs.
* The bacterium found was **Klebsiella pneumonia** that contained the enzyme called as **New Delhi metallo-beta-lactamase** (NDM-1) in its gene.

What is a superbug?

* Bacteria can carry genes that allow them to survive exposure to the antibiotics we currently have. These are called superbugs or antibiotic resistant.
* There are two reasons for emergence of resistance:
  ✓ Spontaneous mutation of bacterium's DNA
  ✓ Transfer of ABR genes from one bacteria to another
* Major reason for increasing number of superbugs' emergence is the misuse or overuse of antibiotics.

Examples of How Antibiotic Resistance Spreads

How can we stop the spread of superbugs?

There is a lot we can do as individuals and as a community, through our governments, to improve the situation and reduce the risk of being infected with a superbug.

* Reducing individual risk
  ✓ Maintain good personal care and hygiene
  ✓ Limit the antibiotics you receive

- Use in this in animals to be avoided: Worldwide, about 80% of all antibiotics are used in <u>food animals</u> but many a times antibiotics provide no or marginal benefit.
- Renew our focus on safe water- NDM-1 is found in New Delhi's chlorinated water supply.
- Research and development can only be the long term solution for the problem
- Awareness among the individuals regarding the spread of superbugs and International cooperation.

Way Forward

Indian Red Line Campaign is a good move in the direction of awareness and further steps should be taken such as putting various antibiotics in Schedule X (medicine not to be sold without prescription).

(For spread of superbugs- Refer VisionIAS Current Affairs – September 2016 issue)

6.3. WASTE TO ENERGY PLANT

About

- Waste to energy plant can have two types of municipal solid waste (MSW).
    - ✓ One, which burns all the municipal waste and the other,
    - ✓ Which burns Refuse Derived Fuel (RDF).
- RDF is produced from combustible components of MSW removing out components such as glass, etc. The waste is shredded, dried and baled and then burned to produce electricity.
- Three major concerns for the plants are
    - ✓ **Technology:** combustion or conversion technologies such as pyrolysis and gasification are not very well known to us and also they are very costly.
    - ✓ **Emissions** from the plants causing concerns for environment and also to health of individuals in particular
    - ✓ **Financial viability** with respect to high cost of plants and also the high cost of generation of energy as compared to conventional sources of energy.
- Other external concerns include hue and cry from the people living in the vicinity of the plants, the NGOs and also from the state authorities such as pollution control boards, NGT, etc.

Benefits of the waste to energy plants

- It can be a reliable source of energy as the MSW will always be there as a fuel
- Landfill sites are limited and hence they are very much needed
- It is net greenhouse gas reducer as Methane is mostly emitted out of decomposition of landfill sites
- By-products can be used as fertilizers
- Reduction on reliance to fossil fuels and also a source of energy.

What can be done to make the plants more viable?

- Proper segregation of waste at source and also before induction into the plant.
- Induction of technologically advanced plants such as that uses pyrolysis or gasification as the technique which have emissions in permissive limits
- Pollution control boards are expected to provide technical assistance and keep a check on the emissions/environmental footprint of plants.
- Government support and subsidies are needed to make them financially viable.

Way forward

The focus should be on the 3R's of MSW (**Reduce, Reuse and Recycle**) but there will definitely be MSW even after 3R's. So these plants can help getting rid of the waste and also provides with the energy.

6.4. SCIENTIFIC SOCIAL RESPONSIBILITY

Why in News?

- Prime Minister advocated **scientific social responsibility (SSR)** on the lines of **corporate social responsibility (CSR)** at the 104th Indian Science Congress.

What is Scientific Social Responsibility?

- It is analogous to CSR. CSR includes initiatives that benefit society.
- Similarly, SSR shall include encouraging innovation and applying scientific models for the benefit of society.
- SSR also includes promoting greener options/ climate friendly innovations and research models.
- SSR would promote scientific excellence in all stakeholders including educational institutions.

Way Forward

- All leading institutions, colleges, schools, universities in each major city must be interlinked with research institutions and science laboratories.
- This will make it easier to share ideas and resources and also impart scientific training to the youth.
- Scientists should also be warned of disruptive technologies and be prepared to leverage them for growth.

6.5. FLOATING LIQUIFIED NATURAL GAS (LNG) PLANT

Why in news?

- Recently a Chinese company has developed its own version of system for floating LNG plant.
- Each plant, as single unit will have all features like loading and storage facilities for LNG, Regasification and Power generation.
- Smallest floating plant will have a capacity to generate 10 MW while largest will generate 800 MW of electricity.

Advantages

- It provides a **clean alternative** to coal based power plant with far less environment footprint because of less carbon emissions.
- **Investment friendly** and **cost effective** as it minimizes land acquisition process and also involves less civil works.

> **LIQUEFIED NATURAL GAS**
> - It is natural gas converted into a liquid by cooling it to -260°F (-162°C).
> - LNG is 85 to 95% methane, along with few percent ethane, even less propane and butane, and trace nitrogen.
> - It is odorless, colourless, non-corrosive and non-toxic liquid.
> - The volume of gas is contracted by 600 times during liquefaction, making it easier and safer to store and ship.
> - In liquid state, it does not ignite.

6.6. EXOPLANET: WOLF1061C

- Recently astronomers have studied an **Exoplanet** called **Wolf 1061c** and found that this celestial body could be habitable in the future as it in within habitable zone **(goldilocks zone)** of its star.
- **Wolf 1061c** is a rocky planet more than **4 times** the mass of earth, and part of **Wolf 1061** system.
- Wolf 1061c might have a **chaotic climate** because it changes orbit at much faster rate than earth which have slower variations in its orbit around sun. It could cause freezing or heating of the planet quite frequently.
- They believed that **Wolf 1061c** could sustain life only under one condition – the short time scales over which its orbit changes could be enough that it could actually cool the planet off.
- More research needs to be conducted to fully understand this exoplanet surface and atmosphere.

Exoplanet (Also known as Extrasolar planet)

- It is any planet that orbits a star other than the Sun, they can orbit their stars at any distance.
- Some of them orbit just at the right distance from star that they are in **"habitable zone"**, which means they have the right temperature to have **liquid water** at their surface.

Wolf 1061 system

- It is an **M class red dwarf star** located 14 light years away in constellation **Ophiuchus.**
- It has 3 planets called Wolf1061 b, Wolf 1061c and Wolf 1061d.
- All there planets are super earths (**Super-Earth** is an **exoplanet** with a mass between 1 and 10 times that of Earth. The super-Earth classification refers only to the mass, and not surface conditions or habitability).

6.7. G-PROTEIN COUPLED RECEPTORS (GPCR)

Why in news?

- Researchers from IIT Kanpur have found that regulation of **GPCRs** by the drug molecules can be far simpler than earlier thought by simply engaging with **end (tail)** of receptor.

Background

- **Presently**, for any drug to be effective it has to bind at **two sites** of receptors – at the tail, outside the cell and at the core, present inside the cell.
- However researchers were able to prove drug could be equally effective by just binding at one of the site i.e. at the tail of receptor. They through specific engineering, made the other site i.e. **core of the receptor** ineffective.

How GPCRs works?

- **Receptors** are found on the cell surface with a part of it embedded in the cell membrane and other part protrudes outside membrane and inside of the cell.
- These Receptors reacts to **external stimuli** by changing their shape which brings a corresponding change in the shape of receptors inside the cell. This change in shape inside the cell allows the receptor to bind to a particular protein called **G-Protein** triggering a specific change in the cell which brings physiological changes in our body.(**G- Proteins** are a family of proteins, which act like a **switch mechanism** inside cell and is activated by **GPCRs**).
- These **external stimuli** can be brought about by any hormones, drugs, photons, neurotransmitters, growth factors or glycoproteins.
- In a person with high blood pressure, a prescribed drug binds to receptor and activates corresponding protein inside cell **arrestins (effector proteins of these particular GPCRs)**. As a result arrestin pulls the receptor inside the cell (Process called **receptor endocytosis**). This prevents the **angiotensin** (**hormone** responsible for increasing blood pressure) from binding to the receptor even if it is present in blood and thus interrupts signaling process, thereby helping in controlling the blood pressure.

Significance

- This research will help in designing simple, cheaper and more efficient drugs and thus provide better healthcare service.
- Gives a ray of hope to researchers to provide effective cure to non-communicable disease like high BP, diabetes, heart failure, obesity, cancer and many other diseases that target GPCRs.
- It can give a boost Indian to Indian Biotechnology and pharmaceutical sector.

6.8. GRAVITATIONAL WAVE TELESCOPE: NGARI

Why in news?
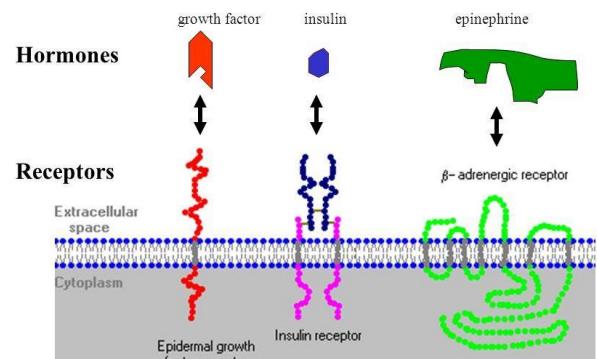
- China has started the construction of two-phase **Ngari wave observatory** in Ngari territory of Tibet close to Indian border, which will house world's highest altitude **Gravitational Wave Telescope.**
- The main aim of this project is to find more about the **Big Bang theory** which is about the birth and configuration of the cosmos.

Highlights of the Project

- **Phase 1** of the project consists of a telescope located at **5250**m above sea level and expected to be operational by 2021.
- It will be able to detect and gather data on **gravitational waves** in northern hemisphere.
- **Phase 2** consists of series of telescopes to be constructed at **6000**m above sea level and will expand the observation frequency band to improve accuracy.
- **Ngari** is one of the world's best spot because of high altitude, clear skies and minimum human activity.

6.9. NASA MISSION TO EXPLORE ASTEROIDS

Why in news?

- NASA has announced launch of two missions to explore asteroids in search of clues about early solar system.
- The first mission named **Lucy**, scheduled to launch in 2021, will explore Jupiter's Trojan asteroids while second named **Psyche**, to be launched in 2023, will explore a giant metal asteroid known as 16 Psyche.
- Lucy is slated to arrive at its first destination, a main belt asteroid, in 2025. From 2027 to 2033, Lucy will explore six Jupiter Trojan asteroids.

About 16 Psyche Asteroid

- It is **massive asteroid** in the primary asteroid belt between Mars and Jupiter.
- Its distance from the sun is three times the distance of the earth from the sun. It measures **130 miles (210 km)** in diameter.
- It is made of mostly **iron** and **nickel**, not ice and rock like other asteroids.
- Some researchers think that it may be the **exposed core** of early planet that lost its rocky exterior during a series of violent collisions not long after it was formed.

Significance

- This mission will help in gaining more information about our earth core like how it separated into layers of crusts, mantle and core.
- It will also help in understanding how the sun and its family of planets formed, changed over time, and became places where life could develop and be sustained and what the future may hold.

(For information on **Asteroids** and **Trojan asteroids** refer to **article 6.3** of **December 2016** edition)

6.10. ASHALIM PROJECT

Why in news?

- Israel is building its largest solar power station in Negev desert called Ashalim Project.

Highlights of the Project

- Ashalim solar Tower will be encircled with 55000 projecting mirrors called **Heliostat**
- It will house world tallest solar tower standing at 250 m (820 feet).
- The project will generate 310 MW of power enough for 130,000 households.
- It will use **Solar-thermal method** where these mirrors will focus sun's rays to heat the boiler creating steam to spin turbine and generate electricity.

> **HELIOSTAT:** It is an apparatus containing a movable or driven mirror, used to reflect sunlight in a fixed direction. As the sun moves across the sky, a heliostat makes small adjustments to the position of a mirror in order to keep reflected light on a target. The larger the mirror, the more energy and light is delivered to the target.

Significance of the project

- It will help the country achieve its goal of generating 10 percent of its electricity from renewable sources by 2020. Presently only 2.5% of its energy needs are met through renewable sources.
- Locally, the plant would also provide long-term employment opportunities during construction, operation and maintenance of the facility.

6.11. INDIA BECOMES AN ASSOCIATE MEMBER OF CERN

Why in News?

- India became an associate member of CERN, after govt. completed approval procedures on the agreement it signed last year.

Background

- India and CERN signed a Cooperation Agreement in 1991, setting priorities for scientific cooperation.
- India's involvement with CERN **began in the 1960s** with Tata Institute of Fundamental Research, Mumbai, participating in CERN experiments.
- **In the 1990s**, scientists of Raja Ramanna Centre for Advanced Technology, Indore **built accelerator components for CERN**.
- India was inducted as an observer in CERN in **2004**.

India's contribution to CERN

- Many Indians have made contributed to the **construction of the LHC accelerator, ALICE and CMS** experiments at CERN.
- Indian scientist's role in LHC helped in the **discovery of Higgs Boson**.
- In the field of large-scale computing, India has designed, developed and deployed **software for the Worldwide Large Hadron Collider Grid (WLCG).**

Significance of Associate member status

- It will enhance participation of young scientists and engineers in various CERN projects.
- This will also help bring back the knowledge gained in CERN to the domestic programmes.
- Indian industry will be entitled to bid for CERN contracts directly, opening opportunities for in areas of advanced technology.
- India can take part in meetings of the CERN Council and its committees (Finance Committee and Scientific Policy Committee).
- Indian scientists will become eligible for staff appointments.

Way forward

- Associate membership will cost about Rs 80 crores annually. Also India would not enjoy any voting rights like the members. But this membership is surely a step in the right direction to advance the scientific research in India and improve India's stature at the global arena.

CERN (European Organization for Nuclear Research)

- CERN is the world's largest nuclear and particle physics laboratory,
- At CERN, scientists and engineers are **probing the fundamental structure of the Universe**.
- CERN is **based in Geneva**.
- Presently CERN has 22 member states, four associate member states, and seven observers including four states and three International Organizations.
- Projects at CERN
  - **Large Hadron Collider** - The Large Hadron Collider (LHC) is the world's largest and most powerful particle accelerator.
    - ✓ It aims to study the fundamentals of universe.
  - **Compact Muon Solenoid (CMS)** - It is a general-purpose detector at the LHC.
    - ✓ Its studies the Standard Model (including the Higgs boson)
    - ✓ It is also searching for extra dimensions and particles that make up dark matter.
  - **ALICE** is the acronym for **A L**arge **I**on **C**ollider **E**xperiment.
    - ✓ It researches in the physics of matter at an infinitely small scale. Eg. Research on quarks which make protons and neutrons.

6.12. E-CIGARETTES

Why in News?

- A study by University of California says that E-cigarettes are attracting a new population of adolescents who might not otherwise have smoked tobacco products.

Background

- Supreme Court has banned orally ingested tobacco products recently.
- Government has put high taxes on cigarettes.
- The above steps seem to have pushed the sale of e-cigarettes.

E-cigarette is a type of Electronic nicotine delivery systems (ENDS).

- It is a battery-powered device using electricity to vaporise a nicotine containing fluid.
- These do not have tar like conventional cigarettes.
- It resembles a cigarette by having a red LED to simulate the tip of a real cigarette.
- It also produces a bluish vapour that resembles cigarette smoke.

It can be an **Electronic non-nicotine delivery system (ENNDS) too** where the liquid is not nicotine.

- The liquid here is dissolved into propylene glycol or/and glycerine to create an aerosol.

WHO has termed both ENDS and ENNDS as **'vaping'** — a 'tobacco-free' version of the cigarette in which a liquid is inhaled through a vaporiser.

Problems in E-cigarettes

- There is no convincing evidence proving that e-cigarettes help quit smoking.
- With different flavours, it may promote 'nicotine addiction' by inducing habit of smoking in non-smokers.
- Some aerosols of the E-cigarettes have cancer causing agents like formaldehyde.
- Nicotine is considered to promote cardiovascular diseases. Nicotine may also affect the brain development in foetuses.

India's Position

- WHO Global Report 2015 says that number of smokers in India is on the decline.
- As e-cigarettes contain nicotine and not tobacco, these do not fall within the ambit of the COTPA Act 2003.

> **WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL (FCTC) 2003**
> - WHO FCTC is the first global public health treaty in response to the globalization of the tobacco epidemic.
> - It is **legally binding** to its members. **India has also ratified it.**
> - Its recommends **demand side measures of tobacco control** like
>   - ✓ **Price and tax measures** to reduce the demand for tobacco.
>   - ✓ **Non-price measures** like Packaging and labelling of tobacco products; public awareness and Tobacco advertising etc.
> - It also **gives some supply measures of tobacco control** like preventing illicit tobacco trade; control sales to minors etc.

- Most e-commerce websites sell e-cigarettes as therapeutic products thus increasing appeal.
- A committee in 2014 recommended to ban e-cigarettes having nicotine. Only few states banned it.
- **Lack of a uniform approach enables the sellers to exploit loopholes**. E.g. Punjab has classified nicotine as a poison, while Maharashtra treats it as an unapproved drug.

> **Cigarettes and other Tobacco Products Act 2003**
> - Section 5 prohibits all forms of advertisements (both direct and indirect) of tobacco products.
> - This Act mandates health warnings on the packaging and advertisements of tobacco products.

What needs to be done?

- WHO Report on the Regulation on ENDS recommends -
  - ✓ prohibit the addition of flavours to ENDS
  - ✓ ban the use of ENDS indoors and in public places
  - ✓ restrict its advertising, promotion, and sponsorship
  - ✓ Regulations to stop ENDS promotion to non-smokers and protect existing tobacco control efforts.
- An independent scientific research is also needed to assess the benefits and risks of ENDS.

Way Forward

We have made remarkable progress in terms of tobacco control, but the increasing popularity of e-cigarettes threatens to undermine years of hard work. There is urgent need therefore to act now, to protect public health.
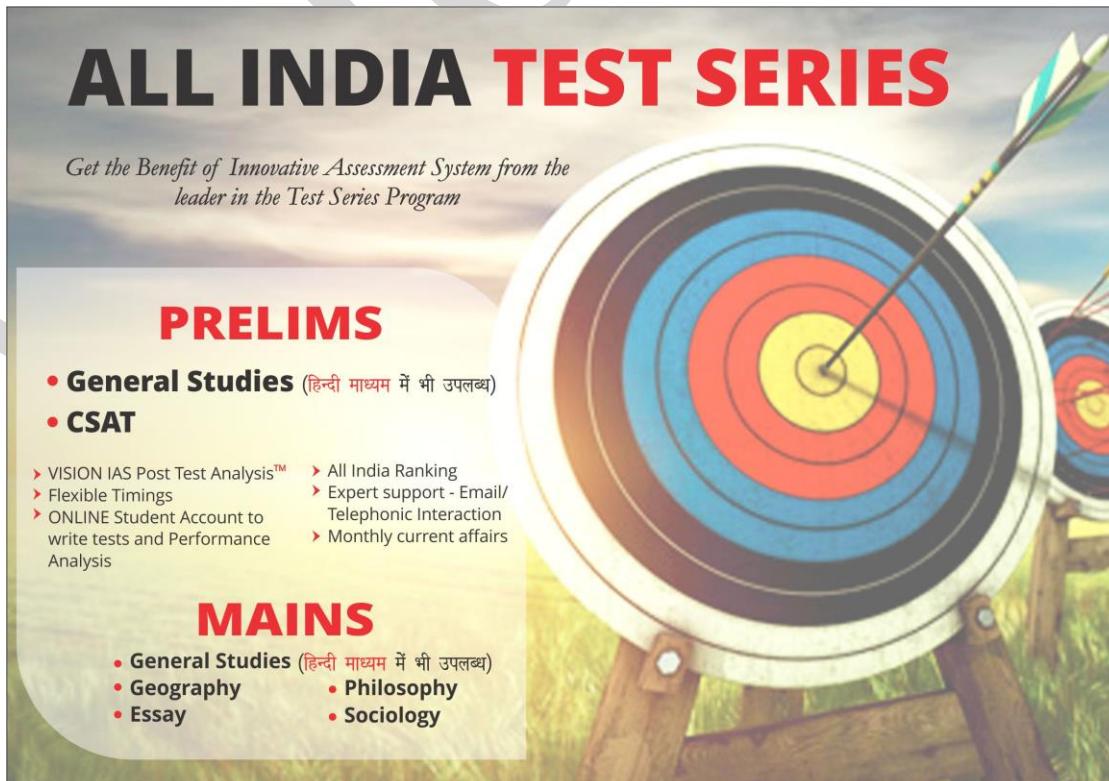
7. SOCIAL

7.1. SECC

7.1.1. SUMIT BOSE PANEL SUBMITS REPORT ON SECC

Why in News?

- An Expert group headed by Sumit Bose on Socio Economic and Caste census (SECC) recently presented its report to Ministry of Rural Development (MoRD)
- Sumit bose panel was set up to -
  - ✓ Study the criteria for allocation of resources to states as per SECC.
  - ✓ Identification of beneficiaries under various pro-poor programmes using SECC data.

Need of the report

- SECC data on rural areas was released in 2015. The committee was needed for the better use of the data in the government schemes and target beneficiaries.

Socio Economic and Caste Census (2011)

- SECC was conducted **both in urban and rural areas** in the country, to collect socio-economic and caste data of households.
- It was conducted by MoRD, Ministry of Urban Development, Ministry of Housing and Urban Poverty Alleviation, The Office of the Registrar General and Census Commissioner and the State Governments.
- It used different committee methodologies in urban and rural areas –
  - ✓ **NC Saxena committee (for rural areas)** – It was established to suggest design of new BPL census. It recommended **a three-fold classification of households (HHs)** -
    - o **Excluded** - These HHs would be **identified by assets and income** and would be excluded from welfare benefits of the Government.
    - o **Automatically included** – It would include HHs with extreme social destitution and would be automatically included for government benefits.
    - o **Others** – They would be ranked on the basis of multiple deprivation indicators and would be eligible for graded benefits. Eg. Presence of an able and literate adult etc.
  - ✓ **SR Hashim committee (for urban areas)** –
    - o It also followed a three step approach like NC Saxena.
    - o Only difference is that **both committees used different parameters for classification**.
      Eg. In urban areas pucca houses with greater than 4 rooms **was excluded** whereas in rural areas it was three rooms or more.
- **Major findings of SECC are** – Only rural SECC has been publicly released till now.
  - ✓ About 19% of India's rural population was having **at least one of seven socio-economic parameters** of deprivation.
  - ✓ 30% of rural HHs are landless and derive income from manual, casual labour.
  - ✓ The second most common form of deprivation was literacy with 23.5% rural HHs having no literate adults above the age of 25.

Findings of the report

- It recommends replacing Below Poverty Line (BPL) by multidimensional SECC for different govt. schemes.
- It recommends using SECC data for **all schemes of central and state governments** to ensure targeting of right beneficiaries.
- The panel made recommendations on the use of SECC data for various programs of the MoRD -
  - ✓ **MNREGA** – Its focus should shift to the regions with a greater concentration of deprived households and landless manual labourers.
  - ✓ **National Rural Livelihood Mission (NRLM)** - Committee noted that NRLM faces issues due to a lack of capacity and insufficient human resources. So it recommended
    - o Using SECC data to plan for **poverty free Panchayats**.
    - o Resource allocation to states under NRLM **using an index with deprivation parameters** like -
      - ▪ Female headed households with no adult member
      - ▪ SC/ST households with no literate adult
      - ▪ Landless households deriving major part of income from manual casual labour.

Initially, allocate 70% resources using this index and later scale it to 80% and 100%.
- ✓ **Pradhan Mantri Awas Yojana (Gramin) -** Presently, resource allocation is based on 75% weight to SECC housing deprivation data and 25% to the head count ratio of poverty.
  - ✓ The committee recommends 100% weight to SECC housing deprivation data.
- ✓ **National Social Assistance Program (NSAP) –** Committee recommends -
  - ✓ Assistance under NSAP to be decided by SECC data.
  - ✓ Starting programs, including widow pension, school fees and medical insurance for disabled children.
  - ✓ Increase pension under NSAP as per Consumer Price Index.
  - ✓ States should provide at least an equivalent contribution as Centre towards NSAP.

Significance of the report

- The report gives broad guidelines to implement SECC data.
- The report notes that **using SECC would help to** -
  - ✓ Improve the efficacy of programme interventions and its improved outcomes.
  - ✓ Streamline programme administration.
  - ✓ Expand coverage of the programmes and reduce duplication of benefit and fraud in them.
  - ✓ Dynamic monitoring of the living standards of beneficiaries over time.
  - ✓ Better targeting of vulnerable sections of the society and enabling expansion of coverage.
  - ✓ Better budgetary planning and allocation of resources for various programmes.

Challenges observed

- The report wants regular update and verification of SECC data that would **put additional burden on public resources**.
- The urban caste data has not yet been released thus limiting the use of SECC data to only schemes in rural areas as of now.

7.1.2. SOCIO-ECONOMIC CASTE CENSUS, 2011: BOON OR BANE

Why in news?

- Government has decided to use **SECC 2011** instead of **Poverty line method** for implementing **socio-economic welfare programmes** to effectively tackle poverty by removing undeserving beneficiaries.
- SECC will now be used in schemes like **MGNREGA**, **Pradhan Mantri Awaas Yojana-Gramin**, **National Rural Livelihood Mission, etc** to identify beneficiaries and expand the **direct benefit scheme** as a part of its plan to build upon the **JAM (Jan Dhan-Adhaar-Mobile) trinity.**

Background

- Identifying the poor is the **first crucial step** in designing any welfare program. Since Independence, India has used a **poverty-line method** to count the number of poor.
- Families below the poverty line **(BPL)** are eligible for several government benefits like subsidized food (through the Public Distribution system), pensions, and self-employment programs, etc.
- Presently in India BPL is determined according to **Suresh Tendulkar committee**. It is based on a poverty line basket which includes both **food items** (determined using calorific norms) and **non-food items** (clothing, education, rent, etc). As per this committee poverty line stood at **Rs 27** and **Rs 33** for rural and urban area with total poor population estimated at **27 crore** (**22%** of population).

Why SECC is better than Poverty line method

- While poverty line method identifies number of poors, SECC identifies who actually are the poor. Hence it is more **targeted** and **precise.**
- It will even help in fine tuning the beneficiaries list by excluding undeserving candidates' especially affluent people and thus tackle fraud and duplication issue.
- The BPL approach was narrow as it focused on **income** and **consumption expenditure** on the other hand SECC gave a **holistic** and **complete picture.**
- Binary approach of BPL method either include the households in all schemes or exclude them from all however if SECC will be used each household will be mapped on different deprivation factors and if found

deprived they will be eligible for that specific scheme. For example some households may be eligible for food subsidy while other may be eligible for LPG subsidy. So SECC will help in eradicating not only poverty but also **various deprivations.**

Way forward

- SECC data must be regularly updated and verified to remove beneficiaries especially those who were on the fringes and have overcame their deprivation, which would put additional burden on public resources.
- SECC provides government with suitable opportunity to single out **"actual deprived"** people and aid in alleviation of poverty in the long run.

7.2. ADOPTION REGULATIONS 2017

Why in News?

- Government recently notified **Adoption regulations 2017** framed by Central Adoption Resource Authority (CARA) to replace the 2015 adoption guidelines.

CARA
- It is a statutory body of Ministry of Women & Child Development under Juvenile Justice Act, 2015.
- It is a nodal body for adoption of Indian children.
- It deals in orphan, abandoned or surrendered children.
- It deals with **inter-country adoptions** according to the Hague Convention on Inter-country Adoption, 1993.

Background

- Earlier legal adoption was available only to the Hindu community under Hindu Adoptions and Maintenance Act 1956.
- Other communities could only act as legal guardians under the Guardians and Wards Act 1890.
- Juvenile Justice Act (JJ Act) promoted uniform code for adoption for all communities.

Section 68 of the Juvenile Justice Act 2015 makes CARA responsible to
- Promote in-country and interstate adoptions.
- Frame regulations on adoptions.
- Promote intercountry adoptions as per **Hague Convention on Intercountry Adoption.**

Issues involved

- The regulation creates an institutional mechanism to regulate the process of adoption and thus **increases transparency and accountability.**
- India has the largest population of children in the world.
- Adoption is a **solution for both childless couples and the homeless children**. It can be an **alternative option to surrogacy** which is considered to be exploitative.

Need of the regulation

- While the 2015 guidelines had no legal powers, the **2017 regulations will have enforcement powers**.
- The regulations **will lay timelines for stakeholders** to clear the adoption procedure, application of birth certificates, passports, petitions etc.

What does the regulation say?

- Intercountry and intra-country adoption procedures have been defined clearly.
- CARA will report and facilitate all adoptions under the JJ Act, 2015 through **CARINGS**.
- For safeguards, CARA would maintain adoption records and ensure post-adoption follow up.

Central Adoption Resource Information Guidance System (CARINGS)
- It is an e-governance measure to facilitate child adoption.
- It will be a centralized data bank of adoptable children and PAPs.
- All DCPUs will be connected online to CARINGS

- Currently **only biological parents or adoptive parents are recognized** leaving out the step parent of any legal responsibility. The regulation –
  - ✓ **Defines the step parent legally**
  - ✓ Allows birth certificate of the adopted child to have their name in it.
- **District Child protection Unit (DCPU)** will maintain a panel of professionally qualified or trained social workers.
- Couples with more than three children shall not be eligible for adoption except in special needs.

Significance of the regulation

- It is a part of reforms towards a **Uniform Civil Code as per the Constitutional Article 44**.
- It would **remove the challenges faced by CARA and adoption agencies** to streamline adoption process.
- It makes the **adopted children legal heirs in matters of inheritance of property**.

Challenges

- **Lack of proper implementation** can make the adoption process exploitative for children.
- **Capacity building of the workforce** is a prerequisite for the success of the regulation.

Way Forward

- Adoption regulations 2017 will help in streamlining the process of adoption. Further steps like strengthening CARA by appropriate funding and skilled workforce will add to the better regulation of the adoption industry. It is a welcome step towards fulfilling child rights and adult parenthood.

7.3. NATIONAL ACTION PLAN FOR CHILDREN, 2016

Why in News?

- National Action Plan for Children, 2016 (NAPC) was launched by Ministry of Women and Child Development (WCD) to celebrate the National Girl Child Day.

Issues Involved

- Children are one of the most vulnerable communities in India lacking in political, social and economic rights.
- They suffer from a gamut of issues like poor child education and health care, child labour, child marriage etc.
- **Article 23 of the constitution** gives the right to people (especially children) against exploitation and the State's duty to protect it.

> **National Policy of Children 2013**
> - It recognizes a child to be a person below the age of 18 yrs.
> - It recognizes that **children are not a homogenous group** and require different responses.
> - It aims to give a social safety net to family to help nurture child.
> - It says that every child has universal, inalienable and indivisible human rights.
> - It has four priority areas:
>   - **Survival, health and nutrition**
>   - **Education and development**
>   - **Child Protection**

Need of the initiative

- The National Policy for Children was adopted by the Government of India (GOI) in 2013.
- NPAC links the 2013 Policy to actionable strategies under its priority areas.
- It aims to coordinate all stakeholders including GOI and civil society organizations to address child rights.

India brought the National Policy of Children in 2013 for emerging issues and also proposed a National Action Plan to implement it.

Provisions of the Action Plan

Some of the provisions of the National Child Action Plan of 2016 are as follows-

- **On Child Survival, Health and Nutrition**
  - ✓ It will help in the improving child health by universalizing the maternal and child healthcare.
  - ✓ It will also give emphasis on new born care by initiatives like universal immunization.
  - ✓ It will prevent mental and physical disabilities through timely measures for pre-natal, peri-natal and post-natal care of mother and child.
- **On Education and Development**
  - ✓ It will provide universal and equitable access to quality Early Childhood Care and Education (ECCE) for all children below six years of age.
  - ✓ It will promote affordable and accessible quality education up to the Secondary level for all children.
- **On Child Protection**
  - ✓ It will help strengthen legislative, administrative, and institutional redressal mechanisms for Child Protection at all level.

- **On Child Participation**
  - ✓ It will ensure that children actively participate in planning and implementation of programmes concerning them.

Significance of the Action Plan

- NPAC will take **Sustainable Development Goals (SDGs) in account** and provide a roadmap to achieve them.
- NPAC puts focus on **emerging concerns for children** such as online child abuse, children affected by disasters and climate change etc.
- According to the 2013 Policy, NPAC will form a **National Co-ordination and Action Group** (NCAG) under the Ministry of WCD. It will coordinate, implement and monitor the plan.

7.4. FOOD REGULATIONS

7.4.1. DRAFT REGULATIONS ON FORTIFICATION OF FOODS

Why in News?

- Food Safety and Standards Authority of India (FSSAI) issued draft regulations to allow food fortification in foods for public health benefit.

Need of the regulation

- **Global Nutrition Reports** have repeatedly alarmed India over its stagnant malnutrition problems.
- To avoid malnutrition, one of the viable solutions is food fortification.

Background

- In 2016 a **Group of Secretaries on "Education & Health – Universal Access and Quality"** identified food fortification in items like salt, milk etc. with micronutrients to be completed in 3 years to address malnutrition in India.
- **National Summit on Fortification of Food** was held in New Delhi in 2016.
- In 2017, FSSAI also released the comprehensive draft regulations on food fortification.

Issues Involved

- It is **still not mandatory** to fortify food and is limited to only voluntary initiatives.
- There are **no fortification standards** to enhance the efficacy of the fortified food.

About the regulation

- These regulations prescribe standards for fortification of salt, oil, milk, vanaspati, atta, maida and rice.
- FSSAI **may make fortification of food mandatory** on Government of India (GOI) orders based on extent and severity of public health.
- It **defines both the minimum and the maximum threshold** of micronutrients to be added in food.
- **For quality assurance, the following steps are proposed** –
  - ✓ Certification required from a food laboratory notified by FSSAI.
  - ✓ Record keeping including the source of fortificant being procured.
  - ✓ Random testing of fortified food.
  - ✓ Regular audit of the processing stages.
  - ✓ Adoption of Good manufacturing practices as ordered by FSSAI.

FSSAI

- It is a statutory body as per Food Safety and Standards Act 2006.
- It comes under the Ministry of Health and Family Welfare.
- Its aim is to establish a single reference point for all matters relating to food safety and standards.

Food Fortification

- It is the addition of vitamins and minerals such as iron, iodine, zinc, Vitamin A, D to staple foods such as rice, milk and salt to improve their nutritional content.
- These nutrients may or may not have been originally present in the food before processing.
- It helps overcome micronutrients (vitamins and minerals) deficiency.
- It neither changes existing food patterns, habits nor individual compliance.

Bio-fortification

- Biofortification improves nutritional quality of food crops through agronomic practices, conventional plant breeding, or modern biotechnology.
- Biofortification increases nutrient levels in crops **during plant growth rather than through manual means during crop processing** as in conventional fortification.

- All fortified foods whether mandated or voluntary **should bear the fortification logo** and details of fortificant on its package.
- **FSSAI shall be responsible to encourage** the production, manufacture, distribution, sale and consumption of fortified food in ways like –
  - ✓ Advising about fortified food in Government-funded programmes.
  - ✓ Organizing public awareness, education and advocacy campaigns on fortified food.
  - ✓ Conducting technical assistance programmes for small manufacturers in fortification.
  - ✓ Encourage governments to give financial incentives like subsidies and loans for manufacturers and packers for food fortification.
- Provisions of the Infant Milk Substitutes, Feeding Bottles and Infant Foods Act 1992 would not be affected by the regulation.

Significance of the regulation

- The regulations provides for **specific role of FSSAI in promotion for food fortification**.
- It **allows mandating of food fortification** based on health severity as per scientific analysis.
- There would be a fortification logo for the first time which will **help raise consumer awareness**.
- It will **help solve the problem of hidden hunger** i.e. the absence of vital micronutrients in human body.
- It shifts focus from only food security towards **attaining a nutritional security**.

Challenges

- FSSAI **lacks in 3Fs** – Funds, Functionaries/Manpower and Functions. These loopholes have a potential to make the regulations a non-starter.
- The regulation **does not explicitly give the penalties** on not following its said provisions.
- It will **still not be mandatory for all essential foods** to fortify food.
- There is no mention of **Bio fortification** which has a better reach than conventional food fortification.

Way Forward

- A fortification initiative will combat high malnutrition, promote food processing industry and also improve customer satisfaction. Therefore the government must reform its institutional structure and its overall implementation to mainstream this key initiative.

7.4.2. LAW COMMISSION RECOMMENDATION ON FOOD LAWS

Why in news?

The Law Commission of India in its 264th report has recommended life imprisonment for traders, businessmen and shopkeepers found guilty of the death of their customers by intentionally selling them adulterated or "noxious" food and drink.

Why Food Legislation is necessary?

- Increasing daily need and fast growing lifestyle have led to **ever growing food and food products markets** providing an opportunity for greedy people to make quick money by food adulteration.
- Most of the food adulterants are very harmful and toxic driving the citizens to **health hazards** that ultimately result in various ailments and even premature deaths.
- Food legislations are enacted to ensure that the acceptable minimum level of food safety is ensured; and the standards that secure such safety are strictly enforced.

> **Food Adulteration under the IPC**
>
> - Indian Penal Code, 1860 (IPC) under sections 272 and 273 also provides for penal provisions with food adulteration.
> - The food act provides for a maximum punishment of life imprisonment.
> - In comparison to the Food Act, the IPC prescribes punishment of maximum 6 months of imprisonment or a fine of one thousand rupees or both.
> - States like Odisha, Uttar Pradesh and West Bengal have brought in legislations to amend IPC to enhance the punishment to imprisonment for life and also the fine.

The Present Legal Framework and its Criticisms

- Food Safety and Standards Act, 2006 (Food Act) was brought in to consolidate all previous existing food laws thus creating a single reference point for all matters relating to food safety and standards.

- It establishes an independent statutory authority- **Food Safety and Standards Authority** (Food Authority) which **has following functions**-
  - ✓ Laying down scientific standards for articles of food and
  - ✓ Regulating their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption.
- The Food Authority along with the State Food Safety Authorities is responsible for monitoring and verifying the relevant requirements under the Act and its enforcement.
- The Act provides for the appointment of a Commissioner of Food Safety at state level and local Food Safety Officers for efficient implementation of food safety and standards under the Food Act.

Recommendations of Law Commission

- **Sections 272 and 273** of the IPC should be amended to bring the penal framework in it on par with the existing punishments scheme provided in the Food Act and the State Amendments to the Code.
- **The punishment should be graded with proportion to the harm caused** to the consumer due to consumption of adulterated food and drinks.
- IPC should be amended to **provide for life imprisonment** as maximum punishment in cases where food adulteration leads to death.

Way Forward

The IPC should be amended to provide for stricter punishment and increased fines so that it works as a deterrent for anti-social persons who indulge in food adulteration with the greed and profit motive.

7.5. OXFAM REPORT ON INCOME DISPARITY 2017

Why in News?

- International NGO **Oxfam released a report 'An Economy for the 99%'** recently. It is a part of annual series of reports launched just before World Economic Forum Davos meet.

Issues Involved

Trickle-down theory
• It argues for tax breaks or other financial benefits to businesses, investors and entrepreneurs to stimulate economic growth.

• **It hinges on two assumptions**:
    ✓ All members of society benefit from growth
    ✓ Growth is most likely to come from those with the resources and skills to increase productive output.

- **Inequality is rising over time**. **For Eg**. Thomas Piketty's Capital in the 21st Century, says that income growth of the bottom 50% has been zero compared to 300% growth of the top 1%.
- **Income Inequality is increasing despite an increase in the world population** which will further add to the vicious cycle.
- **This is a failure of Trickle Down theory.**
- It shows that market isn't always right and government's welfaristic role is the need of the hour.
- **Concentrating wealth goes against the ethical concepts** like Trusteeship and Sarvodaya as propounded by Mahatma Gandhi.
- **Constitutional Art 38** wants State to minimize the income inequalities and eliminate inequalities in status and opportunities. So, Oxfam's report shows a **failure of governance.**

Background

- 1989 saw emergence of **Washington Consensus** centered on the ideas of market expansionism and individualism.
- In 1990s, India adopted a **mixed economy centered on planning by inducement**.
- Government was to frame the broad policy and private sector was to work within those contours.
- Barack Obama in his UNGA speech in 2016 said – "A world where 1% of humanity controls as much wealth as the bottom 99% will never be stable".

Findings of the report

- Wealth of the world's top-eight billionaires (six from USA) together is more than that of the bottom 50% of the world's population.
- Bottom 50% of the world's population has just 0.2% of the world's wealth.

- India's richest 1% holds 58% of the country's total wealth - higher than the global figure of about 50 per cent.
- CEO of India's top information firms earns 416 times the salary of a typical employee in his company.

Reasons of the rising income disparity

- **Tax avoidance and Tax evasion** to gain windfall profits without having to pay taxes for the benefit of society. It is supplemented by **secrecy of tax havens**.
- **Wage discrimination** across race, gender, caste, religion etc.
- **Existence of Parallel economy** because of black money also boosts inflation and increases inequality.
- Large population concentrated in the low pay sectors like **subsistence agriculture**.
- **Presence of crony capitalism**. For eg. Oxfam in its 2016 report '**An Economy for the 1%**', showed corporations using their power and influence to shape government policies.

Consequences of income inequality

- Lower wages **decrease the consumption levels** of individuals thus lowering demand and slowing down growth.
- Lower tax collection causes a **deficit of spending in welfare schemes** like MNREGA which further affects employment.
- S**ocio-economic backwardness continues** due to not enough opportunities for backward to change their status.
- **Materialistic and consumeristic behavior** gets promoted leading to loss of emotional connectedness in humanity.
- **Environment is exploited by the rising inequality**. Eg. Affluence promotes Climate Change by wastage of resources.
- It increases **crime and insecurity** in the society.
- Democratic principles of **equality, fairness and justice are undervalued** with the monetary influence in political scenario. Eg. Inequality is a reason of rise of Right parties.

Indian Government steps

- Government is **pursuing land reforms** like land leasing to make the agriculture profitable to all. It has also fixed a target to **double farmer income** by 2022.
- **Support to MSME industries** is being given in the form of direct subsidy and exemptions of duty.
- **Poverty Alleviation programs** like MNREGA, National Social Assistance Program etc. are also being implemented.
- To curb regional economic special area programs like Drought Prone Area Development are being implemented.
- India has also **revised its Double Tax Avoidance Agreement** to curb tax avoidance.
- Government is even planning to introduce Universal Basic Income for all.

Steps needed to curb inequality

- Oxfam recommends it is time **to build a human economy** that benefits everyone. It recommends the richest persons to do something constructive with their wealth.
- There is a need to **promote Corporate Social Responsibility** worldwide.
- **Behavioral change is needed to stop any discrimination**.
- There needs to be better implementation of welfare schemes.
- **Increase collaboration on** sharing tax information and collating intelligence is needed.

Way Forward

- India needs to be in forefront to implement the SDG 10 to reduce inequalities. Accountable and visionary governments, businesses working in the interests of workers, women's rights and a strong system of fair taxation, are central to reduce this monstrous inequality.

7.6. SEX RATIO IN HARYANA

Why in news?

- Haryana for the first time in past 2 decades has crossed 900-mark in **Sex Ratio at Birth (SRB)**. **SRB** in December 2016 was recorded at **914.**
- The **SRB** refers to the number of girls born per 1000 boys.

> **Haryana:** As per the **Census 2011**
> ✓ It has the **lowest** sex ratio of **877** females to that of 1000 males as compared to national average of **943.**
> ✓ Even it recorded the lowest **child sex ratio** (0-6 years) of **834** among all the states compared to national average of **919**.

Steps taken

- **Beti Bachao Beti Padhao (BBBP)** campaign launched in Panipat in January 2015 by central government provided initial flip and motivation to improve the pathetic sex ratio in the state.
- **Convergence**, **cooperation** and **coordination** of all departments was strictly enforced at district level
- **Special B3P cell** was created at the chief minister office for regular monitoring of the programme.
- State Government ensured strict implementation of **Pre-conception and Pre Natal Diagnostic Techniques (PCPNDT) Act, 1994** and **Medical Terminal of Pregnancy (MTP) Act.**
- State launched a massive drive against **sex selection, sex selective abortion** and **female foeticide.**
- Regular meeting, rallies and street plays were conducted both at urban and rural areas to **sensitize** the public. Campaign like **"Selfie with daughter"** was immensely successful in achieving this.
- Haryana girls like **Deepa Malik**, **Sakshi Malik**, **Geeta Phogat**, **Babita Phogat** wining laurels for the country in sports significantly promoted the cause.
- Recent state government schemes like **"Aapki beti hamari beti"**, **"Haryana kanya kosh"** proved to be step in the right direction.

> **Haryana government scheme:**
> - **Aapki beti hamari beti scheme:**
>   ✓ It is launched to combat the problem of declining child sex ratio in the state.
>   ✓ As per the scheme, first girl child born on or after **January 22, 2015**, in SC family and BPL families will be eligible to receive Rs 21,000
>   ✓ Similarly, all **second girl** child born on or after January 22, 2015 of all families will get Rs 21,000.
>   ✓ Families, where **twin girls** or **multiple girls** are born, will get Rs 21,000 per girl child.
>   ✓ They will be provided fund from **Haryana Kanya Kosh**.
> - **Haryana kanya kosh:**
>   ✓ It is a special fund set up for welfare and development of **girl child** and **women** in the state.
>   ✓ The girl child belonging to the families of **poor** and **Scheduled Castes** will be provided financial assistance from this fund.
>   ✓ **Anybody** could contribute in this fund for the welfare of girls.

Challenges

- Patriarchal mindset still prevalent in India where preference is given to son over daughter.
- Mushrooming of illegal practice among ultrasound centers in neighbouring states of Rajasthan, Uttar Pradesh, Punjab, Delhi where parents are told about the sex of foetus in liu of some money.

Way forward

- Inter-state co-ordination in necessary to crack down upon unholy nexus between doctors, quacks and illegal ultrasound centres.
- It is high time to understand that no society can flourish if half of its population is discriminated.
- Educating girls and encouraging them to be at par with boys will help to achieve the goal of higher sex ratio in the long run.

## 7.7. MILLETS: FUTURE OF FOOD AND FARMING

Why in news

- Smart Food (SF) initiative, which focuses on popularising millets and sorghum, has been selected as one of the winning innovations of 2017 by LAUNCH Food programme.

What are millets?

- They are group of **small-grained** cereal grasses.
- Millets are categorized as major **(Sorghum and pearl millet)** and minor based on **grain size**. Off late, the classification is also an indication of the area under these crops.
- Though small millets are grown in almost every state/region, the distribution of individual millet is not uniform.

Advantages of millets

- They are climate change compliant crops as it can withstand more **heated regime**, **erratic rainfall**. For example Millets can easily withstand climate change while wheat is **thermal sensitive**.

Millet* Production, Area and Yield

	Production (mn tonnes)	Area (million hectares)	Yield (kg/ha.)
1955-56	14.07	36.34	387
2011-12	18.63	18.6	1,096
CHANGE (%)	32	-49	183

*Includes bajra, jowar, ragi and other small millets

Millets vs Common Grain
Numbers in red indicate higher level of nutritional content
(in 100 gms of dry grain)

	Fat (g)	Calcium (mg)	Iron (mg)	Zinc (mg)	Thiamine (Vit. B1) (mg)	Fibre g
Bajra	5	42	8	3.1	0.33	1.2
Jowar	1.9	25	4.1	1.6	0.37	1.6
Ragi	1.3	344	3.9	2.3	0.42	3.6
Fox tail millet (korra)	4.3	31	2.8	2.4	0.59	8
Proso millet	4.7	17	9.3	3.7	0.21	7.6
Barnyard millet	2.2	20	5	3	0.33	9.8
Kodo millet	1.4	27	0.5	0.7	0.33	9
Rice (milled)	0.4	10	3.2	1.4	0.06	0.2
Maize	3.6	10	2.3	2.8	0.42	2.7
Wheat-flour	1.7	48	4.9	2.2	0.49	1.2

Source: National Academy OF Agricultural Sciences

- They are astonishingly **low water consuming crop**. For example rainfall needed for **Sorghum, Pearl Millet** and **Finger Millet** is less than 25% of sugarcane and banana and 30% that of rice. In future, where water and food crisis stares us in the face, millets can truly ensure the food security.
- They provide tons of benefit to human body like:
  - ✓ Provides protection against cardiac disease, diabetes.
  - ✓ Lowers bad cholesterol level.
  - ✓ As it is alkaline and it digests easily
  - ✓ Prevents onset of breast cancer.
  - ✓ Detoxify body and effective in lowering blood pressure.
  - ✓ Easily solves the problems like constipation, excess gas, bloating, and cramping.
  - ✓ Helps to optimize kidney, liver and immune health system.
- Most Millets can be grown on **poorest of soils**. Some in acidic soils, some on saline soils. For example in Rajasthan, **pearl millets** are grown in sandy soils. Finger millets grow well in saline soils.

Way Forward

- Millets can be made a part of **Public Distribution System** and **Midday Meal Scheme** as it will provide poor people and children with nutritious food at economical price and raise their nutritional standards.
- Multipronged strategy must be used to bring more **cropping area** under millet cultivation like providing **Subsidy**, making it more remunerative for farmers by providing the provision of **Minimum support Price (MSP)**.
- Sensitizing consumers about its nutritional benefits.
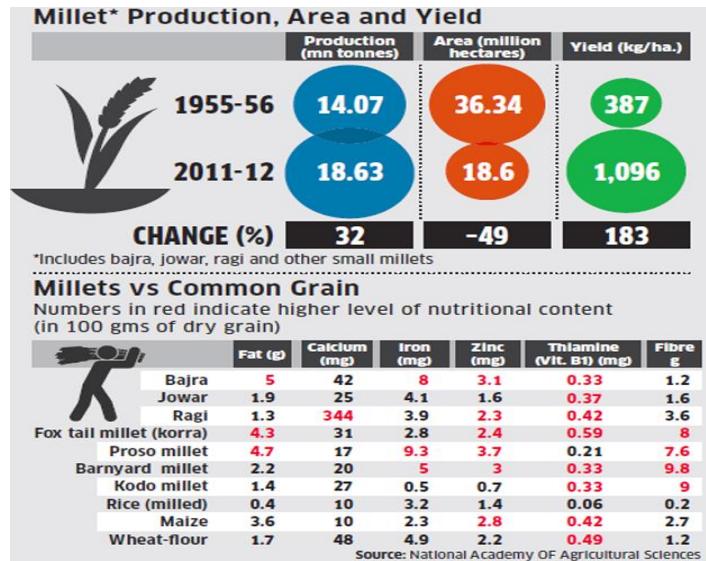
7.8. INDIRA GANDHI MATRITVA SAHYOG YOJANA

Why in News?

- On New Year's Eve, PM Narendra Modi announced that every pregnant woman would get Rs. 6000 for hospital stay, vaccination and nutrition.

What is it?

- This benefit advanced to pregnant woman falls under **Indira Gandhi Matritva Sahyog Yojana (IGMSY)** which was started by the UPA government in **2010.**
- The scheme was started on a pilot basis in 53 districts.
- However, the **National Food Security Act of 2013** made its universal coverage compulsory. Section 4(b) of the National Food Security Act states that every pregnant and lactating women is entitled to maternity benefits of not less than Rs. 6000
- IGMSY originally provided a benefit of Rs. 4000 which was increased to Rs. 6000 with National Food Security Act, 2013. This cash transfer scheme is applicable to pregnant and lactating women of age 19 and above for up to 2 living children.

- All pregnant women are eligible unless they have already received paid leave or maternity benefits from their employers in the private or government sector.

Recent update

- The **Women and Child Development Minstry** has formulated a plan and will be distributing the Rs. 6000 benefits in 3 installments for the first two live births.
- States will bear 40% of the cost while the Centre will provide the rest.
- The centre has allocated Rs. 2700 crore for the implementation of this scheme in budget 2017-18.

Limiting Factors

- Despite the fact that the universal coverage of the scheme has been around for three years, it has not been successfully implemented. This is mainly due to the lack of funds.
- The scheme provides benefits only upto two live births which excludes close to 60 percent of women in the age group of 15-49, according to a study.
- These are mainly tribal and adivasi women who have 3-7 pregnancies on an average which adversely affects their health.

Significance of the Scheme

- Proper implementation of the scheme can positively affect infant mortality rate and death due to pregnancy and childbirth complications.
- This scheme will largely benefit working women especially those working in the unorganised sector.

7.9. DENOTIFIED, NOMADIC AND SEMI-NOMADIC TRIBES

Why in News?

- The **National Commission for Denotified, Nomadic and Semi-nomadic Tribes** has given its report in 2016.
- While some of these communities want recognition as SCs/STs and OBCs, others want recognition as DNTs/NTs.

Background

- During the British colonial rule, if the local government had reason to believe that a gang or a tribe had "addicted to systemtic commission of non-bailable offences" then it was registered as **criminal tribe** under the **Criminbal Tribes Act, 1871**.
- Restrictions were imposed on their movement and adult male members of the community had to report to the police on regular intervals.
- Next came the **Criminal Tribes Act, 1924**. Under this act, the local government may establish reformatory schools and separate criminal tribe children from their parents and guardians and place them in such schools.
- The Ananthsayanam Ayyangar Committee (1949-50) gave a comprehensive report on how CTA worked throughout India.
  - o It listed **116 tribes in British territories and 200 in Princely States**.
  - o It also recommended that the CTA be repealed and a central legislation be established that was applicable to habitual offenders without distinction based on caste, creed and race.
- The CTA was repealed in 1949 and was replaced by the **Habitual Offenders Act, 1951**.
- In 2002, Justice Venkatchaliah Commission recommended for strengthening the programmes for economic and educational development of DNTs. It also recommended constituting a special commission to look into the needs and grievances of the DNTs.
- Consequently, a **National Commission for Denotified Nomadic and Semi-Nomadic Tribes** was constituted in 2005.

Challenges for the Denotified, Nomadic and Semi-nomadic Tribes

- People of this community continue to be stereotyped. A large number of them have been labeled ex-criminal tribes.

- They also face alienation and economic hardships.
- Most of their traditional occupations such as snake charming, street acrobatics and performing with animals have been notified as criminal activity making it difficult for them to earn a livelihood.
- They do not come under any reserved category therefore they do not enjoy reservation offered by the government in educational institutions or government jobs.

Recommendations
- The present situation calls for an urgent need to look away from the past of denotified tribes.
- The community needs to be included in SCs/STs and OBCs so that they can enjoy much needed reservation.
- Grievance redressal committees need to be setup at the state level in order to identify the problems of this community and provide the required aid.

Difference between Scheduled, Nomadic and Semi-nomadic Tribes
- The term **"Scheduled Tribe"** appeared first in the Constitution of India. Article 366 (25) defined them as "such tribes or tribal communities as are deemed under Article 342 to be Scheduled Tribes for the purpose of this Constitution."
- They are called Scheduled because they are included in one of the Schedule of the Constitution.
- They are basically people who lived in tribal areas (mainly forest).
- Nomadic Tribes and Denotified Tribes both are the ones that were regarded as criminal tribes under CTA.
- According to its literally meaning, nomadic tribes are those who wander from place to place.

7.10. UNIVERSAL IMMUNISATION PROGRAMME

Why in News?
- The GoI is set to introduce two new vaccines: **measles-rubella (MR) vaccine and Pneumococcal Conjugate Vaccine (PCV) in the Universal Immunisation Programme (UIP).**
- Also, rotavirus vaccine is being included under UIP in five new states.

Universal Immunisation Programme (UIP)
- **It was first launched 1985 in a phased manner.**
- UIP includes preventive medications that every child born in India is entitled to.
- As of now, the UIP basket includes 10 vaccines which are: **tuberculosis, diphtheria, pertussis (whopping cough), tetanus, poliomyelitis, measles, Hepatitis B, Diarrhoea, Japanese Encephalitis and Pneumonia.**

Measles-Rubella Vaccine
- Measles is a viral infection which mainly affects children and is responsible for child deaths worldwide. Measles vaccine has been known to be quite successful in curbing its spread world over.
- Rubella on the other hand is also a viral infection that is characterised by red rashes.
- Rubella also known as German measles is known to affect approximately 25000 children born in India every year.
- Symptoms include cataract and deafness. It can also affect the heart and brain.
- The measles-rubella vaccine would be introduced in February 2017 in five states and UTs namely Goa, Karnataka, Lakshwadeep, Puducherry and Tamil Nadu.
- Once the MR vaccine is introduced, the monovalent measles vaccine (presently part of UIP) will be discontinued.

Pneumococcal Conjugate (PCV)
- PCV is a mix of several bacteria of pneumococcal family.
- Pneumonia caused by pneumococcal bacteria is one of the most common types.
- Estimates say that pneumonia is responsible for 20 percent of under-5 mortality in India.
- PCV will be introduced in Himachal Pradesh, parts of Uttar Pradesh and Bihar from March 2017.
- Three doses will be administered at one and a half months, three and a half months and nine months.

Rotavirus Vaccine
- Rotavirus vaccine was first included in UIP in April 2006.
- Rotavirus infections are the most common cause of diarrhoea.
- The vaccine is currently being administered in HP, Haryana, Odisha and AP. From February, it will be part of UIP in Assam, Tripura, Rajasthan, MP and TN

7.11. VARISHTHA PENSION BIMA YOJANA (VPBY)

- The cabinet approved the Varishtha Pension Bima Yojana and the scheme will be launched by the Life Insurance Corporation of India from 1 April 2017.

What is it?

- Post demonetisation, banks slashed interest rates on fixed deposits, therefore the government has launched VPBY to safeguard the interests of the senior citizens.
- The scheme has been announced with a guaranteed interest rate of 8 percent for 10 years.
- The difference between the return generated by LIC and the guaranteed 8 percent interest would be compensated through the subsidy given to LIC.
- The scheme will be open for subscription for one year from the date of launch.
- The subscriber can opt for pension on a monthly, quarterly, half yearly and annual basis.
- Senior citizen can invest up to 7.5 lakhs.

Pros

- The biggest plus point of this scheme is that the interest rate is fixed for 10 years.
- Although, competitive schemes with similar or even better interest rate are available but the catch is that interest rates keep fluctuating according to RBI policy.

8. CULTURE

8.1. BUDDHAVANAM PROJECT

Why in News?

- Recently **Ashi Dorji Wangmo Wangchuck**, Queen Mother of Bhutan visited the **Buddhavanam Project** in Nagarjunasagar dam region of Nalgonda district (Telangana).

About Buddhavanam Project

- It is a **Buddhist heritage theme park** of the Telangana State Tourism Development Corporation (TSTDC) which was conceptualized in 2005.
- As per the history, it was a place where **Acharya Nagarjuna** established a university and was the main centre for the propagation of Buddhism in other countries.
- It is first of its kind project in the country having many thematic segments depicting the major events from the life of Buddha.

About Acharya Nagarjuna (Also known as Second Buddha/ Medicine buddha)

- He was a philosopher and founder of **Madhyamaka (Middle Path)** school of **Mahayana Buddhism.**
- He was the most influential Buddhist thinker after Buddha himself.
- He is considered to be one the ancient scholars and teachers of Ayurveda.

8.2. HAKKA PIKKI

Why in news?

- Karnataka govt. decided to permanently rehabilitate the members of Hakki-Pikki community.
- Around 150 persons of the community, majority of them women and children were earlier forcefully evicted from govt. land at Mogerahalli in Srirangapatna following opposition from members of another community.

About Hakki-Pikki community

- This tribe is mainly found in the **southern** part of India and is **semi nomadic** in nature.
- It is said that the tribal community has relations with the **king Rana Pratap** and are from the **Kshatriya clan.**
- These tribes follow rules of **Matriarchy** and **Endogamy** is strictly prohibited.
- Their main occupation is **Hunting** but they are showing more interest in **agriculture** and **floral decoration**.
- They are well conversant in their **local dialect Vahgri**, Kannada, Tamil and Hindi and some also speak Malayalam and Telugu.
- They celebrate various festivals like Diwali, shivaratri, Ugadi, Ganesh chaturthi and practice animal sacrifice.

8.3. KARAI KOLAKKANATHAM

Why in News?

- **Geological Survey of India** has advised the state government to protect fossil deposits of **Karai – Kolakkanatham,** Perambalur district, Karnataka.
- This is the only site in the world where entire **geological succession** is preserved indicating that site remained submerged for prolonged period.
- Fossils found here are about **110 million** years old.
- These fossils are found in **pyramid like structures** and entire shape of animals and other marine species have been preserved in full shape.
- In November 2016, State Tourism Department, on recommendations of GSI, had declared the entire area as **"Geological Heritage Site"**.

> **Geological Survey of India**
> - It is an **attached** office to the **Ministry of Mines.**
> - It was set up in **1851** primarily to find coal deposits for the Railways.
> - Its main function is creation and updation of **national geoscientific information** and **mineral resource assessment.**
> - Its headquarter is in **Kolkata.**

Geological Heritage Site (GHS)

- GSI declares Geological Heritage Sites/National Geological Monuments for **conservation, protection** and **maintenance.**
- GSI or the respective State governments take necessary measures to protect these sites.

8.4. KEMPE GOWDA ERA MANTAPA

Why in News?

- Recently a historic relic, believed to be from **Kempe Gowda** era, called **Mantapa** was unearthed during de-silting work in Hosakerehalli Lake in Bengaluru.
- It is made up of **greyish-black granite.**

Mantapa

- It is a **four-pillared** structure holding together the roof and floor, which are essentially stone slabs.
- It is adorned by **floral carvings** while the rooftop with a depression appears like a cradle.
- It is locally known as **Gangammana Thottilu (the cradle of Ganga).**

Who was Kempe Gowda?

- He was a chieftain under **vijaynagar empire** who ruled most part of Karnataka during 16th century.
- He is considered as the **founder** of Bengaluru city. As per a legend, he built Hosakerehalli lake in 16th century.

8.5. SAVITRIBAI PHULE

Why in News?

Recently **Google** paid tribute to social reformer **Savitribai Phule** on the occasion of her 186th birth anniversary in the form of **doodle.**

About Savitribai Phule

- She was born in Naigaon, Maharashtra on January 3, 1831 in wealthy and influential farmer family.
- Though she was married to Jyotirao Phule at the age of just 9, she was determined to study and was one of the very few indigenous literate women in her era.
- Couple founded India's first school for girls in Pune in 1848 when female education was considered as **taboo** in the then society.
- Couple also opened a care center called **"Balhatya Pratibandhak Griha"** for pregnant rape victims.
- She fought against prevalent social evils like **child marriages**, **child widows**, **Sati practice**, discrimination, unfair treatment and humiliation faced by **Untouchables** etc.
- She opened a clinic in Pune in 1897 for the victims of **bubonic plague** however she succumbed to the disease in same year.
- Two books of her poems were published posthumously - **Kavya Phule** and **Bavan Kashi Subodh Ratnakar**

8.6. TANGALIA WEAVING

Why in News?

- Govt. of India will help **Tangalia weavers** purchasing looms by providing them financial assistance amounting to 90% of the price of looms.

What is Tangalia weaving

- It is a 700-year-old indigenous craft which uses a unique weaving technique comprising themes made up of **'danas'** or **beads** ranging from a few dots to a more elaborate arrangement by using cotton or wool yarn.
- It is **only** practiced by the **Dangasia community** in **Surendranagar district** of Gujarat.
- Tangalia textiles are usually worn as a shawl and wraparound skirt by the women of the **Bharwad shepherd community**.
- Tangalia shawl was given **Geographical Indications** recognition by the Central government in **2009**.

Dangasia community

- The word **Dangasia** has been derived from the word **Dang**, meaning **stick** in the vernacular language, signifying the **stick** used by shepherds to herd their sheep.
- The Dangasias follow **Hinduism**. They are believers in **Chamunda Devi**, a form of the goddess **Parvati** and celebrate Navratri.
- They celebrate all major Hindu festivals like Holi, Diwali, Uttarayan and Janmashtami besides actively participating in other local festivals and fairs.
- They share a symbiotic relation with the **Bharwads**, where the latter provides wool and the former wove garments for them.

8.7. DISRESPECTING HERITAGE

Context

- A recent note by Ministry of Culture suggests amendments to the Ancient Monuments and Archaeological Sites and Remains (Amendments and Validation) Act, 2010.
- It will give legal powers to Central govt. with respect to new construction in protected sites.

Importance of heritage

- Built heritage is a significant public good and is recognized as such in the Constitution's Seventh Schedule.
- It nurtures our collective memories of places and is a significant constituent in the identity of cities.
- It has invaluable potential to contribute to our knowledge of not just history and the arts, but also science and technology.
- Several buildings and sites throughout the country, even entire areas or parts of historic cities, are examples of sustainable development.
- Knowledge gained from such resources can provide constructive ways to address development challenges.
- It also fundamental duty as per the Article 51A(f) of Indian constitution i.e. to value and preserve the rich heritage of our composite culture.

Issues

- If the 2016 bill is cleared by Parliament, such construction could happen in the immediate vicinity of protected properties of national importance.
- Historic structures and archaeological remains are most susceptible to heavy vibrations, chemical effects or mechanical stresses in this zone.
- Giving legal powers to the Central government with respect to new construction in protected sites will suppress existing bodies like the Archaeological Survey of India (ASI) and National Monuments' Authority (NMA).

Proposals in the note: Two of the three projects justified in the proposal have contradictions.

- Construction of elevated road nearby Akbar's tomb
  - ✓ this would visually obliterate the historic structure
  - ✓ Traffic movement and automobile fumes would scar an elaborately painted gateway
  - ✓ Cranes and piles operating in the vicinity will cause excessive vibrations
- Rani-Ki-Vav in Patan, Gujarat is slated to be the site for a railway track.

Union List

Ancient and historical monuments and records, and archaeological sites and remains, declared by or under law made by Parliament to be of national importance

State List

Libraries, museums and other similar institutions controlled or financed by the State; ancient and historical monuments and records other than those declared by or under law made by Parliament to be of national importance.

Heritage vs. development

- This old law originating from colonial period does need review. However, protection without survey and documentation is undesirable.
- Physical planning and urban development can keep heritage value aside.
- Heritage sites end up as the tourism industry's cash cows.
- Conservation of heritage should be seen as a priority to human need and development.

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9. ETHICS

9.1. FAKE NEWS AND MEDIA ETHICS

Why in News?

- Pakistan's Defence Minister threatened Israel with a retaliatory nuclear attack, after a **fake news report** of Israelis alleging use of nuclear weapons against Pakistan if it sent ground troops to Syria.

Issue at hand

- **Fake news** is the **deliberate creation of factually incorrect content to mislead people for gains**
- It is especially on the rise with influence of internet and social media. **It is a condition of "Post-truth"**.
- **Issue of Public v/s private interest** i.e. responsibility of an authority with power to work for public interests and not self-goals.

> **Post truth**
> - It denotes circumstances in which **objective facts are less influential in shaping public opinion than appeals to emotion and personal belief.**
> - It is mostly seen in respect of politics. E.g. Recent American elections.

Ethical Questions involved	What Ought to be done
1. **Right to freedom of expression** v/s **responsibility of generating ethical information.**	✓ Press is the fourth pillar of a democracy. It has the fundamental right to express its views. ✓ But it also is a responsible institution. It **should not compromise its public duties over its private goals**.
2. Fake information is against the **moral duty to develop a scientific temper, humanism and spirit of enquiry and reform.**	✓ Information spread by press reaches a large population. ✓ Therefore information **ought to be objective and of public interest rather than being fake and superstitious**.

Impact of False information

- **Political Impacts**
  - ✓ Fake news **hurts democratic ideals and principles**. E.g. Washington DC pizzeria firing based on fake news of a child trafficking ring in the pizzeria linked to Hillary Clinton.
  - ✓ It can **cause problems in good governance**. E.g. A fake story of GPS tracking chip in the new Indian Rs. 2000 note caused confusion in some people.
- **Economic Impacts**
  - ✓ False information **can cause market failures**. Eg. Some tweets have caused the decline of stocks of some big MNCs.
- **Societal Impacts**
  - ✓ False propaganda and news have been one cause of the **rise of terrorist radicalization**.
  - ✓ It hampers **spirit of common brotherhood and raises intolerance**. Eg. 2012 mass exodus of Assamese from Bangalore on false online threats.
  - ✓ It can **erode the foundation of trust** that underlies the human civilization.

> **Other ethical problems in Media sector**
> - **Cross-media ownership - Corporatisation** across segments like print, radio, TV **creates conflict of interests. It also gives rise to monopolistic practices**. Eg. SEBI probe on Reliance Industries indirect investment in Eenadu TV group createing a cross-media empire.
> - **Paid news** creates biased viewpoints and **propagates false propaganda**. Eg.ECI monitors paid news during elections for fair elections.
> - **Yellow journalism/ sensationalisation of the news** done only to boost viewership. Eg. Live recording of Mumbai terror attacks by media.
> - **Trial by media** interfering in the fair justice delivery. Eg. SC acknowledged that media trial interfered in encounter killings case.

What needs to be done?

- Define fake news legally.
- Heavy punitive measures for whosoever violates the said definition.
- There should be grievance redressal mechanisms and arbitration spaces to resolve issues.
- In UK, **Lord Justice Leveson gave recommendations on media self-regulation like-**
  - ✓ Formation of independent bodies to regulate the content.
  - ✓ Rigorous internal editorial and advertising standards.
  - ✓ Duty of government to protect media freedom.
  - ✓ Whistle blowing hotline for journalists.

- Self-regulation is **important to balance freedom of speech and autonomy of media with the objective content regulation**.
- Digital media literacy among people to increase scrutiny and feedbacks of the content.
- Technical solutions that assess the credibility of information circulating online are also needed.

9.2. ANIMAL RIGHTS VS TRADITIONS

Why in news?
- Supreme Court (SC) stayed Andhra Pradesh High Court's order allowing joint police and district administration teams to seize roosters primed for traditional fights.
- The fights are conducted by farmers as part of the Pongal/Sankranti celebrations in Andhra Pradesh and Tamil Nadu.

Background
- Instances of **animal abuse** in India are on the rise lately. Eg. Killing of Shaktiman Horse, throwing dogs from roof etc.
- Animal Welfare Board of India and PETA have been active proponents of animal rights in recent times.

Issue at hand
- Whether animals have rights of their own or are they subservient to the human rights.
- **"The greatness of a nation and its moral progress can be judged by the way its animals are treated."** - **Mahatama Gandhi**

Ethical questions involved	What ought to be done
1. **Right to promote own culture** v/s promoting **animal's rights.**	✓ Culture should be promoted but not at the behest of animals being tortured.
2. **Moral Duty to promote compassion towards animals**	✓ Humans should show **empathy towards other living being**.
3. Farmers breed animals **as a means of livelihood** and so exercise control over animals for their survival.	✓ **Art 19(1)(g) - Right to avocation –** gives right to choose any occupation. So humans can choose **any means to livelihood**. ✓ But the **ends of the livelihood** should also be justified. ✓ The breeder should ensure that the person buying the animal is not buying to torture it.
4. **Violating the rules and laws like Prevention of Animal Cruelty Act in the name of tradition.**	✓ **Law is universal and promotes equality**. Tradition should not be a reason to violate laws.

Other cases of animal cruelty
- **Circus animals** tortured in name of livelihood.
- SC questioned the caging of exotic birds and advocated their **fundamental right to fly**. SC focuses on **pet animal's rights here**.
- **Animal experimentation, hunting animals** etc. are also an act of cruelty on animals.

Analysis of Animal Rights
- **Arguments why animals rights are not independent**
  - ✓ Animals don't think like the humans do.
  - ✓ Animals were put on earth to **serve human beings**. Eg. Animals seen as a means to livelihood especially in poor economies.
  - ✓ **Under the Convention on Biological Diversity and intangible heritages**, it is customary to leave ancient traditional practices as they are with proper regulation.
  - ✓ The tradition gives an incentive to raise native livestock.
- **Arguments why animals have independent rights**
  - ✓ They have their own conscience and can feel love and pain like humans do.
  - ✓ The humans have a **moral duty of compassion** towards other living beings.
  - ✓ **International community is now becoming considerate on animal rights**. Eg. Catalonia State has banned bullfighting.

> **Judicial decisions on animal rights vs tradition**
> - **Animal Welfare Board of India vs A Nagaraja and others (2014)** - SC struck down the Tamil Nadu Jallikattu law and banned it. It extended Article 21 to include "every species" both animals and humans.
> - **Gauri Maulekhi case of 2014 –** SC banned the illegal transport of cattle to Nepal for cattle sacrifice in Gadhimai festival.
> - SC warned the temple managements of Kerala with criminal prosecution, if **captive elephants** were tortured.
> - Karnataka coastal districts are demanding to lift the ban on 1000 year old traditional sport of **Kambala - the buffalo racing**. Karnataka had banned it after Supreme Court order on Jallikattu.

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- ✓ Animals cannot be exploited by virtue of tradition. If tradition is supreme then even practice of sati was justified.
- ✓ It is **science rather than tradition that promotes biological diversity.**

Way Forward

- A greater regulation of animal cruelty is needed rather than standalone ban that shifts the industry underground. Ban does not solve the root problems. In a multicultural society like India a solution will emerge with a balance between tradition and the animal rights. Awareness programmes can be the first step.

9.3. DEREK PARFIT

Why in news?

- Great philosopher and moral thinker – Derek Parfit, who has written Reasons and Persons (1984), and On What Matters (2011), has passed away.
- His work was significant as his nature of reasons and the objectivity of morality re-established ethics as a central concern for contemporary thinkers.

His thoughts

- **On personal identity: (**very close to Buddhism): He concludes that – identity is not what matters," "What matters is … psychological connectedness and/or psychological continuity, with the right kind of cause."
- **Triple theory:** Support for universal morality: Parfit tried to reconcile three competing theories of morality — one based on the idea of a hypothetical contract (Thomas Hobbes, John Locke, and Jean-Jacques Rousseau), another based entirely on the consequences of action (Utilitarianism, Hedonism, Karma theory etc.,) and yet another based on Kant's conception of duty (Deontology).

> **Derek Parfit's famous thought experiment:**
>
> Parfit asks us to imagine that he is fatally injured in an accident, but his brain is mostly unharmed. His two brothers are also in the accident, and emerge brain-dead, but with otherwise healthy bodies. Doctors then split his healthy brain in half, and implant a half in each of his brothers' bodies.
>
> "There will be two future people, each of whom will have the body of one of my brothers, and will be fully psychologically continuous with me, because he has half of my brain,"
>
> If identity mattered, then this result would be just as bad as death, since both erase his identity. But this clearly isn't as bad as death; his psychological being gets to keep on going, twice! So identity isn't what matters.

- Philosophers of all three schools, he argued, were actually "climbing different sides of the same mountain".
- **Support for Equity**: what matters is *average* well-being, not total.
- **Supported Well off's moral obligation** to give back:
  - ✓ He participated in the effective altruism movement. It argues that people have an obligation to do what they can to improve the world through actions like adopting vegetarianism, donating at least 10 percent of your income to effective charities etc.,
  - ✓ He also argues that: It is the failure of rich people to prevent, much of the suffering and many of the early deaths of the poorest people in the world.
  - ✓ The money that is spent on an evening's entertainment might instead save some poor person from death, blindness, or chronic and severe pain.
  - ✓ It is not your wealth to give: (Close to Indian thought of person is just a 'karta' by whom 'action' is being done, as destined by his 'karma')
  - ✓ He also argues that a person wrongly assumes that it is his wealth to give. This wealth is only legally his. But these poorest people have much stronger moral claims to some of this wealth.
- **Supported multilateral and collective action at world level:**
  - ✓ He argues for the importance of staving off existential risks that threaten the future of humanity, risks like global warming, pandemics, nuclear annihilation etc.,
  - ✓ What now matters most is how we respond to various risks to the survival of humanity. We are creating some of these risks, and discovering how we could respond to these and other risks. If we reduce these risks, and humanity survives the next few centuries, our descendants or successors could end these risks by spreading through this galaxy.
  - ✓ Life can be wonderful as well as terrible, and we shall increasingly have the power to make life good.

9.4. MOLESTATION: BENGALURU CASE STUDY

Why in news?

- Women party-goers were **molested** on New Year's Eve in Bengaluru, India's IT capital despite elaborate security arrangements.

Reasons

- In patriarchal society like India, men are conditioned to think that women are at their disposal and hence treat them as objects that can be used by a man for pleasure.
- The fear of what people at home, the workplace or peer groups might say acts as a wall between the victim and her pursuit of justice.
- Fear of repercussions like assaulters might come back and cause more damage, which could be as severe as acid attacks in some cases, holds women back from reporting cases of abuse.
- Even if a victim musters enough courage to go to the police station and file complaint, they are often discouraged by the indifferent and hostile attitude of police.
- Yet another reason is worrisome and lengthy legal procedures which play a hindrance.
- Even today getting bail is quite easy as the bail amount is often nominal. This brings forth a very lackadaisical attitude among men.
- Lastly, in India having a trend of cult personality, irresponsible statements by the leaders of various political outfits tend to reinforce the power psychology among men

> **Additional information**
>
> - **Indian penal code** have certain specific provisions to deal with crime related to molestation like:
>   - ✓ **IPC section 354** deals with assault on woman with intent to outrage her modesty.
>   - ✓ **IPC section 509** deals with crime related to insult to the modesty of woman.
> - As per 2015 **National Crime records Bureau (NCRB)** data **more than 25%(increase of 0.2% over previous year)** of the total crimes against women in Indian were under IPC sec 354 and **2-3% (decreased by 10.8% compared to 2014)** under IPC sec 509**.

Challenges

The elements of patriarchy are reinforced by:

- Political attitudes for example: Karnataka Home Minister G. Parameshwara's effort to blame the violence on "western culture"
- Media/ Cinema: objectification of women (for ex: item songs etc.,)
- Promoting gender biases (for ex: emphasis on the strength of men and the corresponding emphasis on timidity, fragility and submission of women clearly indicate that violence in any form whether physical, verbal or attitudinal must be accepted by women)
- Economic disempowerment:
  - ✓ Workforce: women appointed at lower salaries, appointments at lower ranks etc.,
  - ✓ Glass ceiling in corporations related to service and manufacturing.
  - ✓ Men disproportionately occupy top leadership positions in politics and government services.
- Structure of traditional family: The traditional family, with men as the 'heads' and women as the "nurturers," is still prevalent. Removing authority and any decision making from women dis-empowers them.
  - ✓ Woman suffers all this because she is taught to remain silent right from the beginning.

Other concerns

- Administrative ethos: for ex: Insensitive police. Empathy, tolerance and compassion towards women and necessary sensitization is required.
- **Social mores:** If a woman wants to seek justice for her, she is frowned upon and viewed contemptuously for infringing traditional norms. For ex: In Bengaluru incident, almost no cases were filed or registered.
- **Moral attitudes:** for ex: judging a woman who drinks, smokes and/or wears skin revealing clothes as immoral and/or looking for men

Solutions: Increasing surveillance and security through more CCTVs, police, mobile apps etc., all are preventive steps. But the real solution lies in changing the mindset of youth (both men and women):

- **Emotional Intelligence**: Teach boys and men how to authentically communicate their emotions and listen empathetically to others. This makes them more sensitive to situation and plight of women.
- **Tolerance and inclusiveness**: should be respected especially in regard to women who are living by western standards.
- **Implement comprehensive sex education**: More with knowledge and value of women's consent, contraception, and sex in general, understand what rape actually is then there is much more potential for healthy relationships.
  - ✓ Information and Education Campaigns.
  - ✓ Our society (For ex: in various movies, young men stalking women) to make them fall in love is quite accepted. Because of lack of consent
- Create collective accountability systems for handling sexual violence.
  - ✓ Naming and Shaming method for serious sexual offenders
  - ✓ Community policing

> **To change attitudes, the core attributes of patriarchy have to be targeted:**
> - Holds up the traditional male qualities as central, while other qualities are considered subordinate.
> - Dualistic and gendered thinking of roles. (For ex: till recently Indian Armed forces did not allow women in combat roles)
> - Protection of traditional patriarchal social structures. (For ex: through Khap Panchayats, moral policing, love jihad etc.)
> - Men believing they should be silent, instead of challenging other men on patriarchal and sexist ideas/actions.

- Train men and foster the attitude that men should be proactive in addressing patriarchy. Men need to challenge other men on their patriarchal and sexist ideas/actions.
- Change family's mindset by empowering women. A boy who sees the daily that no respect is given to his mother, may learn that women need not deserve equal respect. This can only be changed by educational, social (for ex: SHGs like DWACRA) and political empowerment.
- It is the youth that has the onus to build a global, progressive, inclusive and tolerant society.

10. ALSO IN NEWS

10.1. URBANIZATION AND ILLEGAL COLONIES

Why in News?
- The **Delhi High Court** rejected a plea by an unauthorized colony for regularization.
- The Court noted that legalizing unauthorized colonies in the past has encouraged encroachers.
- One of the main reasons of these illegal colonies being created is because of lack of proper settlement for new migrants coming to the city.

Challenges Posed By Illegal Colonies
- It affects urban planning and makes it difficult to provide proper drainage, sewage system, and water supply.
- As the construction of houses have not taken place under a set pattern (such as the grid system), therefore construction of proper roads is very difficult.
- Lack of proper civic facilities results in spread of diseases like malaria, tuberculosis, and diarrhea.
- Illegal colonies upsets the city's master plan regulation.

10.2. ORDINANCE TO LIFT BAN ON JALLIKATTU ISSUE

- Union Home Ministry gave its approval to draft ordinance proposed by the Tamil Nadu government to lift ban on Jallikattu which got presidential assent.
- Under the Constitution, the Governor can promulgate ordinances only on those subjects on which the state legislature is competent to make laws.
- Prevention of cruelty to animals is in Concurrent List and the Parliament has enacted Prevention to Cruelty to Animals Act, 1960 under this item.
- The proposed ordinance sought to amend this Act, that's why it needed approval of the President.

10.3. NORTH EAST TOURISM DEVELOPMENT COUNCIL (NETDC)

- Union Government has formed the NETDC in Public Private Partnership Mode under the **Ministry of Development of North East Region.**
- First time such tourism agency has been formed exclusively devoted to particular region of country.
- It will act as a **common institutional platform** facilitating development of tourism industry through effective participation of all stakeholders.
- Few others recent initiative with regard to **North east** are:
  - ✓ Setting up of **"Venture Fund"** as initial capital assistance for any young entrepreneur or start-up who wishes to launch an establishment or venture in the North-Eastern region.
  - ✓ Setting up of **"Dr A.P.J. Abdul Kalam Centre for Policy Research & Analysis"** at the Indian Institute of Management (IIM), Shillong. This Centre will facilitate research and analysis for states of North-east region.

10.4. CORRUPTION PERCEPTION INDEX (CPI)

- Recently in a report published by Transparency International placed India at **79th / 168** countries.
- **In CPI 2015-India was placed at 76th position out of 168** countries with a score of 38/100 improving from its position of 85 and 94 in 2014.
- **Presently India is places at 79th position** in **2016** with a score of 40.
- Denmark, New Zealand and Finland top the rankings of least corrupt.
- Somalia, Sudan and North Korea are the worst performing countries.

About the Corruption Perception Index:
- The Corruption Perception Index is being published since 1995 by Transparency International.
- The parameters for the index ranking are functioning of public institutions like police and judiciary, press freedom, access to information about public expenditure, stronger standards of integrity for public official.

10.5. PLACES OF WORSHIP ON PUBLIC LAND

Why in news?

- The Supreme Court has decided to deal with the question whether it is right for a secular government to grant public land for construction of religious places of worship.
- In this context, the SC ordered to hear all pending cases related to grant of public lands for the construction of religious places of worship, be it temples, mosques, churches, gurudwaras, synagogues, etc. together.

Constitutional Provisions and Supreme Court Judgements

- The Preamble declares that India is a secular state.
- Article 25-28 grant freedom of religion and form the basis for a secular state.
- The SC in 2009 had placed a ban on construction of places of worship at public places till the time SC gives its final verdict on the issue.
- The Supreme Court in S R Bommai case held secularism as a basic feature of the Constitution of India.
- In this case, the SC held that these constitutional provisions by implication prohibit the establishment of a theocratic State and prevent the State either identifying itself with or favouring any particular religion or religious sect or denomination.

10.6. EIGHTH SCHEDULE OF CONSTITUTION

Why in news?

A group of Hindi Professors has written to the Prime Minster to not add dialects of Hindi like Bhojpuri and Rajasthani to the Eighth Schedule of the Constitution.

About Eighth Schedule

- Eighth Schedule of the Constitution contains 22 languages. 14 languages were initially in the Constitution.
- Sindhi language was added in 1967. Konkani, Nepali and Manipuri were added in 1992.
- Bodo, Dogri, Maithili and Santhali were added in 2004.
- At present, there is demand for at least 38 more languages in the Eighth Schedule.
- There is "**no established set of criteria**" for inclusion of languages in the Eighth schedule.
- **Sitakant Mohapatra Committee** was set up to evolve a set of objective criteria for inclusion of more languages in the Eighth Schedule which submitted its report in 2004.
- The above report is under consideration of the Central Government.

10.7. RIGHT TO INFORMATION (RTI) COMPLIANCE RATE

Why in news?

- As per the **Central Information Commission (CIC) Report 2015-16**, **94%** of central ministries and departments have provided details about RTI Act implementation.
- This is the **first time** since the rollout of RTI in 2005-06 that compliance rate of public authorities has been **more than 90%.**
- Such high compliance shows that govt. is moving towards establishing a transparent and corruption free regime.

YEAR; PERCENTAGE OF MINISTRIES REPORTING RTI STATISTICS			
2005-06	89.23%	2011-12	68%
2006-07	83%	2012-13	79%
2007-08	86.53%	2013-14	73%
2008-09	86.33%	2014-15	75.27%
2009-10	77.26%	2015-16	94%
2010-11	67.5%		

Background

- RTI was enacted by parliament in 2005 to **empower citizens**, promote **accountability** and **transparency** in the working of the government and contain **corruption**.
- As per the RTI Act, every year **all public authorities** have to provide information regarding:
  - ✓ Number of RTI applications received, applications disposed of and applications still pending.

About CIC
- It is an independent body constituted under the RTI Act. It is **a statutory body.**
- The jurisdiction of the Commission extends over **all Central Public Authorities**.
- It is the **final appellate authority** as per RTI Act 2005 and its decisions are **final** and **binding**.

- ✓ Number of applications rejected and ground for rejection.
- ✓ Number of first appeals filed.
- However over the years public authorities have been stubbornly reluctant to submit their RTI statistics reaching as low as **67.5%** in 2010-11 who followed the rule.

Recent Steps taken by CIC

- It had put up a system in which every public authority have to register with CIC and provide the statistics.
- Regular follow up of the authorities was done to ensure submission.
- CIC started the policy of **naming and shaming** the authorities in their annual report who fail to comply.

10.8. LIEUTENANT GOVERNOR POWERS IN UT

Why in News?

- The powers of the Lieutenant Governor are being debated after LG of Puducherry made a statement that she could choose to overlook the legislature depending on circumstances.

> - The UT of Puducherry is guided by the **Union Territories Act, 1963**.
> - The UT of Delhi is governed by the Government **of National Capital Territory of Delhi Act, 1991** and the **Transaction of Business of the Government of National Capital of Delhi Rules, 1993.**

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 like the Governor.
- The administrator may be designated as **Lieutenant Governor, Chief Commissioner or Administrator.**
- The powers and functions of the Administrator of a UT are defined under **Article 239 and 239AA of the Indian Constitution.**
- The UTs of Delhi and Puducherry have been provided with a legislative assembly and Council of Ministers. Therefore the Administrators of these two UTs are meant to act upon the aid and advice of the Chief Minister and his Council of Ministers.

10.9. TAX EXEMPTION FOR POLITICAL PARTIES

Why in News?

- The Supreme Court dismissed a petition seeking to lift "100 percent tax exemption" given to political parties.

What is it?

- A political party registered under with the Election Commission under **Section 29 of Representation of the People Act, 1951** is exempted from taxation as long as it files its income tax returns every year.
- According to the **Section 13A of the I-T Act, 1961**, a political party must maintain records of all its earnings including voluntary contributions to be eligible for this exemption.
- A writ petition was filed by advocate M N Sharma challenging the constitutionality of Section 13A of I-T Act of 1961 and Section 29 of Representation of People Act, 1951.
- The petition sought an answer as to why ordinary persons have to pay tax while political parties don't.
- Supreme Court has dismissed the petition saying that political parties need funds to function.
- The matter came to light when political parties were exempted from taxation on deposit of demonetized notes in their respective bank accounts.

10.10. NEWS BROADCAST BY PRIVATE FM RADIOS: SS

Why in news?

- A PIL filed before the SC accuses the government of retaining sole control over dissemination of news though radio broadcasting was thrown open to the private sector in 1999.
- The Supreme Court has asked the Centre to file its response in four weeks on whether the private FM radio stations and community radio services can broadcast their own news.
- Presently FM and community radio stations can only re-transmit unedited AIR news.

Government control

- Policy Guidelines and the Grant of Permission Agreements (GOPA) prohibit private FM radio stations and community radio stations from broadcasting their own news and current affairs programmes.
- There is **monopoly** of the Prasar Bharati Corporation, which owns and operates All India Radio, over news broadcasting and current affairs programmes.

> **Prasar Bharati Corporation**
> - It is the public service broadcaster of India established as an autonomous organization through an Act of the Parliament.
> - It functions through its two arms- Doordarshan and AIR.

Arguments against

- These guidelines violate the fundamental right of freedom of speech and expression guaranteed under Article 19(1) (a) of the Constitution.
- The government has permitted private television channels to broadcast news but have barred FM radio and community radio services from airing news and current affairs programmes. The difference between the two is **arbitrary**.

Arguments for Prohibition

- Given the diversity and internal security concerns of India, allowing the private radio stations to broadcast news and current affairs programs has a "lot of security implications"
- Radio has a different audience and different kind of reach.

10.11. COMMITTEE FOR NATIONAL SPORTS CODE

Why in News?

- With Supreme Court pressurizing the BCCI to adopt the recommendations of the Lodha Committee, the demand for revision of **National Sports Code** for other sport bodies is picking up.
- Sports bodies in India are largely run by political strongmen rather than former athletes unlike other sports bodies around the world.
- They are inefficient as sports federations and marred with charges of corruption.
- The GoI has constituted a nine-member committee in January 2017 headed by Sports Secretary to draft **National Sports Code** which will be applicable across all disciplines.
- The committee is required to submit the report within one month.

Few suggestions for Better Sports Governance

- Minimal or no participation of political entities in any sport's governing body so as to ensure unbiased administration.
- Formation of a players association as part of a grievance redressal mechanism.
- Inclusion of majority sportspersons as part of any sports federation. This will ensure proper identification of the needs and issues of that particular sport.
- Transparency in terms of allocation and utilization of funds.

10.12. TARGET OLYMPIC PODIUM SCHEME

Why in news?

The Union Ministry of Youth Affairs and Sports has reconstituted TOP committee to identify and support potential medal prospects for 2020 and 2024 Olympic Games.

TOP (Target Olympic Podium) Scheme

- The earlier scheme was formulated within overall ambit of National Sports Development Fund (NSDF) with the objective of identifying and supporting potential medal prospects for 2016 and 2020 Olympic Games.
- Under the scheme the selected athletes are provided financial assistance for their customized training at Institutes having world class facilities and other necessary support.
- Benchmark for selection of athletes under the scheme is in relation to international standards.
- Committee will decide its procedures and can invite subject experts when required. The Initial tenure of the committee will be one year from the date of notification.

10.13. INDIA-RWANDA

Why in news?

Mr. Paul Kagame, President of Rwanda paid a visit to India.

During the visit the following documents were issued/exchanged

- Declaration of Strategic Partnership between India and Rwanda.
- Signing of Framework Agreement on International Solar Alliance by Republic of Rwanda.
- MoU between Rwanda Police and Gujarat Forensic Sciences University

The following announcements were made

- Grant of US$ 2 million of medicines and cash grant of US$ 1 million for purchase of medical equipment.
- GoI assistance for Line of Credit of US$ 81 million for a road project.
- Commencement of direct flights between Kigali and Mumbai by Rwand Air.

> **INDIA-AFRICA**
>
> India-Africa trade was almost $70 billion in 2014-15 and Indian investments into Africa in the past decade amounted to $30-35 billion.
>
> Compare to India, china has invested around to $200 billion in large infrastructure projects like roads, railways, airport and government buildings.

10.14. OVERSEAS CITIZENSHIP OF INDIA CARD

Why in News?
- The GoI has issued directives for procuring an OCI (Overseas Citizenship of India) card.

What is OCI?
- According to the directives issued by the GoI, a foreign national can apply for an OCI card if
  - ✓ who was a citizen of India at the time of, or at any time after 26th January,1950; or
  - ✓ who was eligible to become a citizen of India on 26th January, 1950; or
  - ✓ who belonged to a territory that became part of India after 15th August, 1947; or
  - ✓ who is a child or a grandchild or great grandchild of such a citizen; or
  - ✓ who is a minor child of such persons mentioned above; or
  - ✓ who is a minor child whose both parents are citizen of India or one parent is citizen of India.
- Apart from the above clauses, spouse of foreign origin of a citizen of India or an OCI cardholder whose marriage has been registered and subsisted for not less than two years immediately preceding the presentation of application is eligible for an OCI card.
- Also, no person whose parents, grandparents or great grandparents is or has been the citizen or Pakistan , Bangladesh or any other country as the government may notify is eligible for the OCI card.
- OCI card is not a citizenship card and does not offer dual citizenship/nationality.
- An OCI card holder **does not have voting rights in India, nor can contest any elections or hold any constitutional office**.
- He cannot buy agricultural land, however, he can inherit ancestral property.
- OCI facilitates visa-free travel, rights of residency and hassle free participation in business and educational activities.
- The OCI scheme was launched in 2005 and was merged with **PIO (Person of Indian Origin) scheme in 2015.**

10.15. PASSPORT SEVA KENDRA: UNIQUE INITIATIVE

Why in News?

MEA has collaborated with Department of Posts to open 650 Post Office PSKs at district level across the country to meet the growing demand for passports.

- Germany stands at the top with a visa-free score of 157.
- While Pakistan and China rank 94 and 66 respectively.

How It Works

- Applicants can now schedule an appointment online and then visit the designated POPSK to complete the formalities (Head Post Office to work as POPSK).
- It will help in meeting the great demand for passports (around 2 cr/year and 3rd largest in world after China and USA).

- There are only 89 PSKs in country operating under 37 regional passport offices
- The **first two** POPSK will be opened at **Mysuru** in Karnataka and at **Dahod in Gujarat** on pilot basis
- The Indian passport has been ranked 78 in a global ranking of the world's most powerful passports with visa-free score of 46.

10.16. PLACE OF EFFECTIVE MANAGEMENT (POEM)

Why in News?

- Recently the **Central Board of Direct Taxes (CBDT) (Ministry of Finance)** released the final guidelines for determination of Place of Effective Management (POEM) for business in India.
- The Guidelines provide **a two-step approval process** in which the tax officer must seek the prior approval from a senior tax officer and approval of a three-senior officer board.

About POEM

- **Place of Effective Management is broadly defined as the place where the management decisions are taken rather than the place where these decisions are implemented.**
- The new guidelines, which will be effective from beginning of financial year 2016-17, **shall not apply to companies having turnover or gross receipts of Rs 50 crore or less in a financial year** and are aimed at reining in tax evasion by shell companies.
- The guidelines are not intended to cover foreign companies or to tax their global income, merely on the ground of presence of permanent establishment or business connection in India.
- **Impact of POEM guidelines:** It will help as an anti-avoidance measure and is thought to bring the passive income of foreign subsidiaries of domestic companies and Indian subsidiaries of foreign companies under tax net.

10.17. HOUSEHOLD ASSETS AND INDEBTEDNESS

Why in News?

- NSSO's 70th Round Survey on **Household Assets and Indebtedness** released in December 2016 throws light on growing credit uptake and increasing household debt.
- An analysis of NSSO data from 2002-12 shows a phenomenal growth in credit uptake and resultant debt burden.
- The amount of debt (AOD) has increased from Rs 7,539 for rural areas and Rs 11,771 for urban areas in 2003 to Rs 1.03 lakh and Rs 3.78 lakh respectively.
- The data also highlights how credit uptake as a percentage of assets has increased both in rural and urban households and was highest among Scheduled castes in urban areas.

> **NSSO (National Sample Survey Organisation)**
>
> - It is the focal agency of the government for collection of statistical data in diverse fields on All India Basis.
> - It conducts large-scale sample surveys on various socio-economic subjects.
> - The body was established as National Sample Survey Directorate in 1950 under the Ministry of Finance.
> - It is headed by a Director General and currently under the **Ministry of Statistics and Programme Implementation**.

Takeaways

- Increased credit uptake by the SC and ST community shows that they are catching up with other communities when it comes to consumption and maintaining a particular standard of living.
- The analysis shows that the bulk of the money borrowed was spent on meeting household expenses – 60% in rural areas and 81% in urban areas.
- However, overall increase in credit uptake for meeting household expenditure is a worrying aspect. Economists relate high levels of household debt (measured as a ratio of household debt to GDP) to lower economic growth.
- A large part of economic output would be due to consumption (when more money is spent on meeting household needs) which may lead to increase in imports thereby putting pressure on current account deficit.

10.18. PROJECT DISHA

Why in News?

- The Airports Authority of India (AAI) is **using social media platform WhatsApp to issue directives to airports for improving customer service.**

What is Project Disha?

- AAI unveiled **Project DISHA – Driving Improvement in Service and Hospitality at Airports** – last year to improve customer service.
- It was **aimed at** -
  - ✓ Improving customer convenience
  - ✓ Improving airport facilities such as toilets,
  - ✓ Improving navigation
  - ✓ Offering best and affordable food and beverages.
- The **project is being implemented at 10 airports** – Kolkata, Chennai, Lucknow, Varanasi, Bhubaneswar, Pune, Goa, Guwahati, Coimbatore and Thiruvananthapuram.

Significance of the project

- Project Disha will reduce queuing time and simplify procedures.
- It will increase the competitiveness among the different transport sectors like air and rail.
- It would eventually lead to a better public transport.
- It is also an innovative use of social media which will help improve e-governance.
- It also improves the customer satisfaction in line with our recent Civil Aviation Policy.

(For civil aviation policy please refer the Current Affairs June 2016 material of Vision IAS)

10.19. GROUNDWATER IN TAMIL NADU: A CASE STUDY

Central Ground Water Board (CGWB) recently warned Tamil Nadu of imminent water crises in state unless remedial measures are taken immediately.

Central Ground Water Board
- Established in **1970**, it is a **subordinate office** of the Ministry of Water Resources, Government of India.
- Being a **national apex agency** it is responsible for providing scientific inputs for management, exploration, monitoring, assessment, augmentation and regulation of ground water resources of the country.

10.20. FARMER SUICIDES DATA

- National Crime Records Bureau (NCRB) data shows that **more than 72% of farmers who committed suicide in 2015 had less than two hectares of land (small farmers).**
- The same report shows that **marginal farmers made up 27.4% of suicides.**
- The picture gets grimmer because the no. of farmer suicides are increasing on a shrinking farmer base i.e. total farmer count has been falling.
- Some of the worst affected states are Maharashtra, MP, Karnataka, Andhra Pradesh, Chattisgarh and Punjab.
- According to one estimate, close to three lakh farmers have committed suicide since 1995.
- The actual number may be higher if we disregard the definition of farmer considered here.

10.21. JEEVAN REKHA: E-HEALTH PROJECT

Why in news

- Recently Kerala government launched the **World Bank** aided **e-health project** called **JEEVAN REKHA.**

About the project

- This is first of its kind initiative in the country. It has two components –**public health component** and **hospital automation module**.

- Main aim of the project is to create **integrated healthcare cloud** that will contain the health records of all its citizens in electronic form.
- Public health component envisage the development of **Electronic health records (EHR)** of the population while hospital automation module envisage the **digitization** of all government hospitals.
- System will automatically provide a **unique identification number** for any person who will access the healthcare system and also store his health record in electronic form **(EHR)** in central server.
- It has a privacy clause to ensure that patient health records are not leaked in public domain.

10.22. INDIA'S FIRST INTERNATIONAL STOCK EXCHANGE

- India's first international exchange – **India INX** at the **International Financial Service Centre (IFSC)** of **GIFT (Gujarat International Financial Tech) City** was recently inaugurated **Vibrant Gujarat Global Summit 2017.**
- **India INX – a subsidiary of Bombay Stock Exchange** is touted to be the world's most advanced technology platforms having an order response time of 4 micro seconds.
- This international exchange will operate 22 hours allowing international investors and NRIs to trade conveniently from anywhere across the world.
- INX will initially trade in equity derivatives, currency derivatives and commodity derivatives which will include index and stocks. It will offer depository receipts and bonds later.

10.23. AROGYA RAKSHA FOR ALL

Why in news

- Andhra Pradesh government has launched a new health scheme called **"Arogya Raksha scheme".**
- It will provide medical insurance to people who are not covered under any of the existing health schemes of the state government.
- A.P. can now claim to be the **first State** in true sense to fulfill the **health for all vision** of **WHO**.

Features of the scheme

- It is a **Universal Health Coverage** scheme that will be provided to **Above Poverty Level** families.
- Every individual in the family will be able to get the medical insurance coverage for a premium as low as **1200 per year**. The health insurance cover is offered up to **2 lakh.**
- Several government and private hospitals are roped in to provide treatment for **1044** diseases under secondary and tertiary care deploying **end to end cashless system.**
- Students of medicine, psychology, nursing and home sciences will have to visit villages as part of **Swasthya Vidya Vahini scheme** and prepare a disease profile of each individual so that hospital can treat them better.

10.24. "PINK" INITIATIVES IN KERELA

Why in news?

- Inspired by Pink taxis driven by women in Kerala's cities, **Kerala State Road Transport Corporation (KSRTC)** will roll out **Pink-Coloured Buses** exclusively for women in Thiruvanantpuram.
- Both the Bus drivers and Conductors of these buses will be women.
- Aim is to provide safe and comfortable public transportation to women especially during peak hours when buses are overcrowded.
- Earlier, state government had launched the **"She Taxi"** service in 2013 under the **Gender Park initiative** to provide safe journey to women through cabs driven by women.

Gender Park Initiative

- Located in Kozhikhode, it is an innovative initiative of the Department of Social Justice, Government of Kerala.
- Being first of its kind in the world it aims to become the premier convergence point for gender related activities in the region.
- Apart from **She taxi service** other initiative taken under **Gender Park** are:
  - ✓ **The International Institute for Gender and Development (IIGD):** It is dedicated to carry out high quality research, design effective capacity development program and provide innovative, practical recommendation to policymakers and public to foster gender equality.
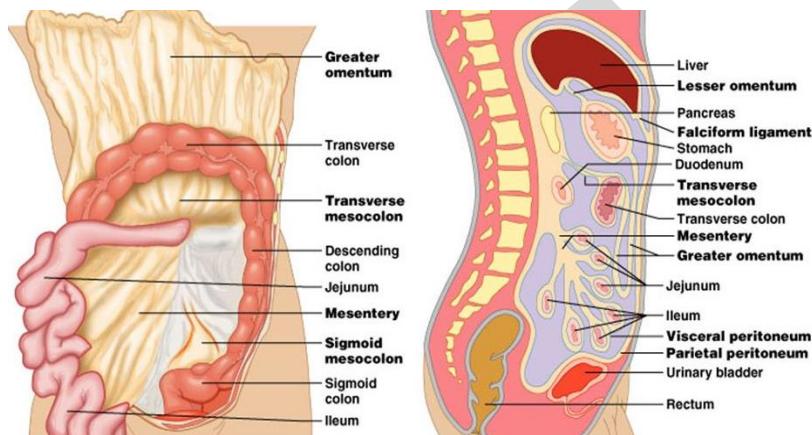
- ✓ **International Conference on Gender Equality (ICGE):** Park hosts a biennial conference bringing scholars, practitioners, policy makers and professionals from around the world to a common platform to explore obstacles to gender-just development.

Additional Information
- Last year Kerala introduced **Pink Police Patrol (**also known as **Pink Beat Patrol) team** for enhancing the safety for women and children in public places. It includes specially trained women police personnel only.
- Greater Hyderabad Municipal Corporation (GHMC) has introduced unique and modern electronic toilets (e-toilets) for women called **"She toilets"**. These have smart and eco-friendly lighting and flushing systems.

10.25. NEW HUMAN ORGAN FOUND: MESENTERY

- A new human organ has been classified by Ireland scientists, known as the **Mesentery**.
- It's a double fold of peritoneum - the lining of the abdominal cavity - that attaches our intestine to the wall of our abdomen, and keeps everything locked in place.
- This new organ is found in our digestive systems, and earlier thought to be made up of fragmented, separate structures. But recent research has shown that it's actually a one continuous organ.
- It carries blood and lymphatic fluid between the intestine and the rest of the body. It also maintains the position of the intestine so that it's connected with the abdominal wall without being in direct contact.
- Its reclassification will help in better understanding about what kind of role does it play in abdominal and digestive diseases which could further lead to less invasive surgeries, fewer complications, faster patient recovery and lower overall costs.

10.26. THE GREAT RED SPOT

NASA has released a new view of a crescent Jupiter which shows the iconic Great Red Spot, along with a series of storms shaped oval known as the 'string of pearls'.

What is Great Red Spot?

- The Great Red Spot is a giant, spinning and persistent storm in Jupiter's atmosphere.
- It is like a hurricane on Earth, and is more than twice the size of our planet and is observed since 400 years.
- These are found in southern hemisphere of Jupiter.

String of Pearls
These are massive counterclockwise rotating storms that appear as white ovals in Jupiter's southern hemisphere. Since 1986, these white ovals have varied in number from six to nine. There are currently eight white ovals visible.
JUNO
Juno is a NASA space probe orbiting Jupiter to measure its composition, gravity field, magnetic field.

10.27. LAUNCH OF AGNI IV MISSILE

India successfully conducted the test firing of its indigenous strategic **ballistic** missile, Agni IV from **Dr. Abdul Kalam** Island formerly known as **Wheeler Island** off Odisha coast.

About Agni IV
- This nuclear capable missile has a strike range of 4000 Km.
- It is two stage, surface to surface missile with both stage powered by solid propellants.
- The missile has the capacity to carry a one-tonne nuclear warhead.
- It is equipped with **Ring Laser Gyro-based Inertial navigation** system and has features to correct and guide itself for in-flight disturbances
- Before this Agni-IV has undergone five successful flight tests over the course of five years.

10.28. HYPERBILIRUBINEMIA

- Researchers from IIT Kharagpur developed a technology that uses thumbprint to detect **Hyperbilirubinemia.**
- Hyperbilirubinemia is a condition when there is too much bilirubin in the blood and turns sclera of eye, urine and even skin yellow.
- It is commonly seen in people and newborns suffering with jaundice when the bilirubin concentration in the blood typically exceeds 12 ppm in adults and 50 ppm in a newborn.
- Researchers have used Luminescence property of Gold Nanoclusters which are extremely sensitive to presence of molecules in the environment.
- When a person has jaundice, bilirubin gets deposited on the surface of skin. So when she presses the thumb on gold nanocluster coated membrane having copper deposited on its surface, bilirubin forms a complex with copper and restores the luminescence curtailed by copper.

> Manja threads are threads used in kite flying.
>
> They are made sharp by coating threads with glass powder, metallic powder.

10.29. MARS ICE HOME

- NASA scientists have suggested an ingenious concept of constructing a sustainable habitation on red planet for astronauts using planet's own water ice called **Mars Ice Home.**
- It will be large inflatable torus, a shape similar to an inner tube that will be surrounded by a shell of **ice.**
- To control temperature inside the Ice home, layer of **carbon dioxide gas**, also available on Mars, would be used to provide **insulation** between the living space and ice layer.
- This concept balances the need to provide protection from radiation, without the drawbacks of an underground habitat that would require heavy robotic equipment to be transported from earth.

10.30. COASTAL ZONE REGULATION

The **National Green Tribunal (NGT)** has upheld the cancellation of CRZ clearance given by the **Ministry of Environment, Forests and Climate Change (MoEF & CC**) to Rajakkamangalam Thurai Fishing Harbour Pvt Ltd.

Coastal Regulation Zone (CRZ)
- MoEF issued a notification in 1991, under the EPA, 1986 for regulation of activities in the coastal area.
- The notification defined the "high tide line", "coastal regulation zone" and also listed the activities restricted under this area.
- According to the notification, coastal land up to 500m from the high tide line and and a stage of 100m along banks of creeks, estuaries, backwater and rivers subject to tidal fluctuations will be called CRZ.
- The CRZ was divided into four categories CRZ (1-4) as per permitted use of land.
- Last amendment to the notification was in 2011.

10.31. CHENNAI METRO BIKE RENTAL SCHEME

- Chennai Metro Rail has started renting out bicycles in its stations and hopes to eventually join the global movement to get enough wheels on the road to reduce traffic congestion.
- The commuter has to pay a refundable deposit of Rs. 3000. They don't have to pay a daily fee.
- The project though earlier started in Bangalore and Delhi was not very successful but this rental scheme is very successful in cities like Paris, Shanghai, London, Huangzhou, etc.
- If successful can be implemented in other metro cities of India which can help in bringing last mile connectivity and decreasing carbon footprint along with health benefits to individuals.

10.32. BAN ON MANJA THREADS

- **Supreme Court** has refused to lift the ban on **"manja threads"** imposed by NGT in 2016.
- NGT banned "manja threads" up till Feb 2016 after a petition was filed by the **People for Ethical Treatment of Animals (PETA).**
- The ban applied to nylon, cotton and Chinese manja coated with glass.
- PETA in its petition had said that manja is a threat to environment as it harms birds, animals and humans.

- PETA had also said that minor children were engaged by the cottage industry in production of manja posing a serious threat to their health as they inhale harmful substances.
- The Delhi government also imposed a ban on the production, storage and use of Chinese manja after it became synonymous as the killer thread, killing 6 people in August 2016.

10.33. ORPHAN DRUG

- Delhi High Court directed the Delhi government to provide free enzyme therapy to a six year old child suffering from Gaucher's diseases at the All India Institute of Medical Sciences in 2013.
- Orphan Drugs are **specialized drugs developed to treat rare diseases**. There are as many as 7000 rare diseases in the world.

Current Situation

- Countries all over the world have specific orphan drug policies to boost R&D and production. US passed its Orphan Drug Act in 1983. Japan, Australia and the European Union have enacted laws similar laws as well.
- These laws offer incentives such as shorter clinical trials and tax breaks to pharmaceutical companies to carry out R&D and find a cure for rare diseases.
- Karnataka became the first state to launch a **Rare Disease and Orphan Drug Policy** which suggested implementation of preventive and carrier testing to reduce unnatural deaths dues to rare diseases.

10.34. SERVICE CHARGE OPTIONAL

- **Department of Consumer Affairs (DCA)** has recently announced that **Service charges** in Hotels/Restaurants are **voluntary** and consumer dissatisfied with the service can have it waived off.
- DCA said that making service charge compulsory is an **unfair trade practice** under **Consumer Protection Act of 1986 (CPA).**
- It even asked state governments to create awareness among companies, hotels and restaurants in states regarding **unfair trade practice** provision of Act.
- It also directed hotels/ restaurants to display information that **"service charge is discretionary"**.